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Part 3: Range 1 and Range 2 Interworking operation  
with other radios  
(3GPP TS 38.101-3 version 16.24.0 Release 16)**



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# Contents

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| Intellectual Property Rights .....                                        | 2  |
| Legal Notice .....                                                        | 2  |
| Modal verbs terminology.....                                              | 2  |
| Foreword.....                                                             | 12 |
| 1 Scope .....                                                             | 14 |
| 2 References .....                                                        | 14 |
| 3 Definitions, symbols and abbreviations .....                            | 15 |
| 3.1 Definitions .....                                                     | 15 |
| 3.2 Symbols.....                                                          | 15 |
| 3.3 Abbreviations .....                                                   | 15 |
| 4 General .....                                                           | 16 |
| 4.1 Relationship between minimum requirements and test requirements ..... | 16 |
| 4.2 Applicability of minimum requirements .....                           | 17 |
| 4.3 Specification suffix information.....                                 | 18 |
| 5 Operating bands and channel arrangement.....                            | 18 |
| 5.1 General .....                                                         | 18 |
| 5.2 Operating bands.....                                                  | 18 |
| 5.2A Operating bands for CA .....                                         | 19 |
| 5.2A.1 Inter-band CA between FR1 and FR2.....                             | 19 |
| 5.2B Operating bands for DC .....                                         | 20 |
| 5.2B.1 General.....                                                       | 20 |
| 5.2B.2 Void .....                                                         | 20 |
| 5.2B.3 Void .....                                                         | 20 |
| 5.2B.4 Void .....                                                         | 20 |
| 5.2B.5 Void .....                                                         | 20 |
| 5.2B.6 Void .....                                                         | 20 |
| 5.2B.7 Void .....                                                         | 20 |
| 5.2E Operating bands for V2X .....                                        | 20 |
| 5.2E.1 Intra-band V2X bands.....                                          | 20 |
| 5.2E.2 Inter-band V2X bands.....                                          | 20 |
| 5.3 UE Channel bandwidth .....                                            | 21 |
| 5.3A UE Channel bandwidth for CA .....                                    | 21 |
| 5.3A.1 Inter-band CA between FR1 and FR2.....                             | 21 |
| 5.3B UE Channel bandwidth for DC .....                                    | 21 |
| 5.3B.0 General.....                                                       | 21 |
| 5.3B.1 Intra-band EN-DC in FR1.....                                       | 21 |
| 5.3B.1.1 General .....                                                    | 21 |
| 5.3B.1.2 BCS for Intra-band contiguous EN-DC .....                        | 22 |
| 5.3B.1.3 BCS for Intra-band non-contiguous EN-DC .....                    | 24 |
| 5.3C Void.....                                                            | 27 |
| 5.3D Void.....                                                            | 27 |
| 5.3E UE Channel bandwidth for V2X .....                                   | 27 |
| 5.3E.0 General.....                                                       | 27 |
| 5.3E.1 Intra-band contiguous V2X in FR1.....                              | 27 |
| 5.3E.2 Intra-band non-contiguous V2X in FR1 .....                         | 28 |
| 5.3E.3 Inter-band V2X in FR1 .....                                        | 28 |
| 5.4 Void.....                                                             | 28 |
| 5.4A Channel arrangement for CA.....                                      | 28 |
| 5.4B Channel arrangement for DC.....                                      | 28 |
| 5.4B.0 General.....                                                       | 28 |
| 5.4B.1 Channel spacing for intra-band EN-DC carriers.....                 | 29 |
| 5.5 Configuration .....                                                   | 30 |
| 5.5A Configuration for CA .....                                           | 30 |

|            |                                                                          |     |
|------------|--------------------------------------------------------------------------|-----|
| 5.5A.1     | Inter-band CA configurations between FR1 and FR2 .....                   | 30  |
| 5.5B       | Configuration for DC .....                                               | 63  |
| 5.5B.1     | General.....                                                             | 63  |
| 5.5B.2     | Intra-band contiguous EN-DC .....                                        | 63  |
| 5.5B.3     | Intra-band non-contiguous EN-DC.....                                     | 64  |
| 5.5B.4     | Inter-band EN-DC within FR1.....                                         | 65  |
| 5.5B.4.1   | Inter-band EN-DC configurations within FR1 (two bands) .....             | 65  |
| 5.5B.4.2   | Inter-band EN-DC configurations within FR1 (three bands) .....           | 71  |
| 5.5B.4.3   | Inter-band EN-DC configurations within FR1 (four bands) .....            | 91  |
| 5.5B.4.4   | Inter-band EN-DC configurations within FR1 (five bands).....             | 109 |
| 5.5B.4.5   | Inter-band EN-DC configurations within FR1 (six bands) .....             | 115 |
| 5.5B.4a    | Inter-band NE-DC within FR1.....                                         | 116 |
| 5.5B.4a.1  | Inter-band NE-DC configurations within FR1 (two bands) .....             | 116 |
| 5.5B.5     | Inter-band EN-DC including FR2.....                                      | 117 |
| 5.5B.5.1   | Inter-band EN-DC configurations including FR2 (two bands) .....          | 117 |
| 5.5B.5.2   | Inter-band EN-DC configurations including FR2 (three bands) .....        | 133 |
| 5.5B.5.3   | Inter-band EN-DC configurations including FR2 (four bands).....          | 153 |
| 5.5B.5.4   | Inter-band EN-DC configurations including FR2 (five bands) .....         | 166 |
| 5.5B.5.5   | Void.....                                                                | 170 |
| 5.5B.6     | Inter-band EN-DC including FR1 and FR2 .....                             | 170 |
| 5.5B.6.1   | Void.....                                                                | 170 |
| 5.5B.6.2   | Inter-band EN-DC configurations including FR1 and FR2 (three bands)..... | 170 |
| 5.5B.6.3   | Inter-band EN-DC configurations including FR1 and FR2 (four bands) ..... | 178 |
| 5.5B.6.4   | Inter-band EN-DC configurations including FR1 and FR2 (five bands) ..... | 194 |
| 5.5B.6.5   | Inter-band EN-DC configurations including FR1 and FR2 (six bands) .....  | 206 |
| 5.5B.7     | Inter-band NR-DC between FR1 and FR2.....                                | 209 |
| 5.5B.7.0   | General .....                                                            | 209 |
| 5.5B.7.1   | Inter-band NR-DC configurations between FR1 and FR2 (two bands) .....    | 210 |
| 5.5B.7.2   | Inter-band NR-DC configurations between FR1 and FR2 (three bands) .....  | 211 |
| 5.5C       | Void.....                                                                | 212 |
| 5.5D       | Void.....                                                                | 212 |
| 5.5E       | Configuration for V2X operation .....                                    | 212 |
| 5.5E.1     | General.....                                                             | 212 |
| 5.5E.2     | Intra-band contiguous V2X operation in FR1.....                          | 212 |
| 5.5E.3     | Intra-band non-contiguous V2X operation in FR1 .....                     | 212 |
| 5.5E.4     | Inter-band V2X operation in FR1 .....                                    | 213 |
| 5.5E.4.1   | Inter-band V2X configurations within FR1 (two bands).....                | 213 |
| 6          | Transmitter characteristics .....                                        | 214 |
| 6.1        | General .....                                                            | 214 |
| 6.2        | Void.....                                                                | 214 |
| 6.2A       | Transmitter power for CA .....                                           | 214 |
| 6.2A.1     | UE maximum output power for CA.....                                      | 214 |
| 6.2A.1.1   | Inter-band CA between FR1 and FR2.....                                   | 214 |
| 6.2A.2     | UE maximum output power reduction for CA.....                            | 214 |
| 6.2A.2.1   | Inter-band CA between FR1 and FR2 .....                                  | 214 |
| 6.2A.3     | UE additional maximum output power reduction for CA.....                 | 214 |
| 6.2A.4     | Configured output power for CA .....                                     | 214 |
| 6.2A.4.1   | Configured output power level.....                                       | 214 |
| 6.2A.4.2   | $\Delta T_{IB,c}$ for CA .....                                           | 215 |
| 6.2A.4.2.1 | $\Delta T_{IB,c}$ for Inter-band CA between FR1 and FR2 .....            | 215 |
| 6.2B       | Transmitter power for DC .....                                           | 215 |
| 6.2B.1     | UE maximum output power for DC.....                                      | 215 |
| 6.2B.1.1   | Intra-band contiguous EN-DC .....                                        | 215 |
| 6.2B.1.2   | Intra-band non-contiguous EN-DC .....                                    | 217 |
| 6.2B.1.3   | Inter-band EN-DC within FR1 .....                                        | 218 |
| 6.2B.1.3a  | Inter-band NE-DC within FR1 .....                                        | 223 |
| 6.2B.1.4   | Inter-band EN-DC including FR2 .....                                     | 223 |
| 6.2B.1.5   | Inter-band EN-DC including both FR1 and FR2 .....                        | 223 |
| 6.2B.2     | UE maximum output power reduction for DC.....                            | 223 |
| 6.2B.2.0   | General .....                                                            | 223 |
| 6.2B.2.1   | Intra-band contiguous EN-DC .....                                        | 224 |

|              |                                                                 |     |
|--------------|-----------------------------------------------------------------|-----|
| 6.2B.2.1.1   | General .....                                                   | 224 |
| 6.2B.2.1.2   | MPR for power class 3 and power class 2 .....                   | 224 |
| 6.2B.2.2     | Intra-band non-contiguous EN-DC .....                           | 225 |
| 6.2B.2.2.1   | General .....                                                   | 225 |
| 6.2B.2.2.2   | MPR for power class 3 and power class 2 .....                   | 226 |
| 6.2B.2.3     | Inter-band EN-DC within FR1 .....                               | 226 |
| 6.2B.2.3a    | Inter-band NE-DC within FR1 .....                               | 226 |
| 6.2B.2.4     | Inter-band EN-DC including FR2 .....                            | 226 |
| 6.2B.2.5     | Inter-band EN-DC including both FR1 and FR2 .....               | 227 |
| 6.2B.3       | UE additional maximum output power reduction for EN-DC .....    | 227 |
| 6.2B.3.1     | Intra-band contiguous EN-DC .....                               | 227 |
| 6.2B.3.1.0   | General .....                                                   | 227 |
| 6.2B.3.1.1   | A-MPR for DC_(n)71AA .....                                      | 227 |
| 6.2B.3.1.2   | A-MPR for NS_04 .....                                           | 228 |
| 6.2B.3.2     | Intra-band non-contiguous EN-DC .....                           | 231 |
| 6.2B.3.2.0   | General .....                                                   | 231 |
| 6.2B.3.2.1   | A-MPR for NS_04 .....                                           | 231 |
| 6.2B.3.3     | Inter-band EN-DC within FR1 .....                               | 233 |
| 6.2B.3.3A    | Inter-band NE-DC within FR1 .....                               | 235 |
| 6.2B.3.4     | Inter-band EN-DC including FR2 .....                            | 235 |
| 6.2B.3.5     | Inter-band EN-DC including both FR1 and FR2 .....               | 235 |
| 6.2B.4       | Configured output power for DC .....                            | 235 |
| 6.2B.4.1     | Configured output power level .....                             | 235 |
| 6.2B.4.1.1   | Intra-band contiguous EN-DC .....                               | 235 |
| 6.2B.4.1.2   | Intra-band non-contiguous EN-DC .....                           | 240 |
| 6.2B.4.1.3a  | Inter-band NE-DC within FR1 .....                               | 244 |
| 6.2B.4.1.4   | Inter-band EN-DC including FR2 .....                            | 248 |
| 6.2B.4.1.5   | Inter-band EN-DC including both FR1 and FR2 .....               | 248 |
| 6.2B.4.2     | $\Delta T_{IB,c}$ for DC .....                                  | 248 |
| 6.2B.4.2.0   | General .....                                                   | 248 |
| 6.2B.4.2.1   | Intra-band contiguous EN-DC .....                               | 248 |
| 6.2B.4.2.2   | Intra-band non-contiguous EN-DC .....                           | 248 |
| 6.2B.4.2.3   | Inter-band EN-DC within FR1 .....                               | 248 |
| 6.2B.4.2.3.1 | $\Delta T_{IB,c}$ for EN-DC two bands .....                     | 248 |
| 6.2B.4.2.3.2 | $\Delta T_{IB,c}$ for EN-DC three bands .....                   | 254 |
| 6.2B.4.2.3.3 | $\Delta T_{IB,c}$ for EN-DC four bands .....                    | 272 |
| 6.2B.4.2.3.4 | $\Delta T_{IB,c}$ for EN-DC five bands .....                    | 288 |
| 6.2B.4.2.3.5 | $\Delta T_{IB,c}$ for EN-DC six bands .....                     | 294 |
| 6.2B.4.2.3a  | Inter-band NE-DC within FR1 .....                               | 294 |
| 6.2B.4.2.4   | Inter-band EN-DC including FR2 .....                            | 295 |
| 6.2B.4.2.4.1 | $\Delta T_{IB,c}$ for EN-DC two bands .....                     | 295 |
| 6.2B.4.2.4.2 | $\Delta T_{IB,c}$ for EN-DC three bands .....                   | 295 |
| 6.2B.4.2.4.3 | $\Delta T_{IB,c}$ for EN-DC four bands .....                    | 295 |
| 6.2B.4.2.4.4 | $\Delta T_{IB,c}$ for EN-DC five bands .....                    | 295 |
| 6.2B.4.2.4.5 | Void .....                                                      | 295 |
| 6.2B.4.2.5   | Inter-band EN-DC including both FR1 and FR2 .....               | 295 |
| 6.2B.4.2.5.1 | $\Delta T_{IB,c}$ for EN-DC three bands .....                   | 295 |
| 6.2B.4.2.5.2 | $\Delta T_{IB,c}$ for EN-DC four bands .....                    | 295 |
| 6.2B.4.2.5.3 | $\Delta T_{IB,c}$ for EN-DC five bands .....                    | 295 |
| 6.2B.4.2.5.4 | $\Delta T_{IB,c}$ for EN-DC six bands .....                     | 296 |
| 6.2B.5       | Configured output power for NR-DC .....                         | 296 |
| 6.2B.5.1     | Configured output power level .....                             | 296 |
| 6.2B.5.1.1   | Inter-band NR-DC between FR1 and FR2 .....                      | 296 |
| 6.2E         | Transmitter power for V2X in FR1 .....                          | 296 |
| 6.2E.1       | UE maximum output power for V2X .....                           | 296 |
| 6.2E.1.1     | UE maximum output power for Intra-band contiguous V2X .....     | 296 |
| 6.2E.1.2     | UE maximum output power for Intra-band non-contiguous V2X ..... | 296 |
| 6.2E.1.3     | UE maximum output power for Inter-band V2X .....                | 296 |
| 6.2E.2       | UE maximum output power reduction for V2X .....                 | 297 |
| 6.2E.2.1     | UE maximum output power reduction for Intra-band V2X .....      | 297 |
| 6.2E.2.2     | UE maximum output power reduction for Inter-band V2X .....      | 297 |
| 6.2E.3       | UE additional maximum output power reduction for V2X .....      | 297 |

|              |                                                                                      |     |
|--------------|--------------------------------------------------------------------------------------|-----|
| 6.2E.3.1     | UE additional maximum output power reduction for Intra-band V2X .....                | 297 |
| 6.2E.3.2     | UE additional maximum output power reduction for Inter-band V2X .....                | 297 |
| 6.2E.4       | Configured output power for V2X.....                                                 | 297 |
| 6.2E.4.1     | UE configured output power for Intra-band V2X .....                                  | 297 |
| 6.2E.4.2     | UE configured output power for Inter-band V2X .....                                  | 297 |
| 6.3          | Output power dynamics.....                                                           | 298 |
| 6.3A         | Output power dynamics for CA .....                                                   | 299 |
| 6.3B         | Output power dynamics for DC .....                                                   | 299 |
| 6.3B.0       | General.....                                                                         | 299 |
| 6.3B.1       | Output power dynamics for EN-DC with UL sharing from UE perspective .....            | 299 |
| 6.3B.1.1     | E-UTRA and NR switching time mask for TDM based UL sharing from UE perspective ..... | 299 |
| 6.3B.1a      | (Void).....                                                                          | 300 |
| 6.3B.2       | Output power dynamics for intra-band EN-DC without dual PA capability .....          | 300 |
| 6.3B.3       | Output power dynamics for intra-band EN-DC with dual PA capability .....             | 301 |
| 6.3B.4       | Output power dynamics for switching between two uplink carriers.....                 | 302 |
| 6.3B.4.1     | E-UTRA and NR switching time mask between two uplink carriers.....                   | 302 |
| 6.3B.5       | Output power dynamics for inter-band EN-DC .....                                     | 303 |
| 6.3E         | Output power dynamics for V2X .....                                                  | 303 |
| 6.3E.1       | General.....                                                                         | 303 |
| 6.3E.2       | Output power dynamics for intra-band V2X operation .....                             | 304 |
| 6.3E.3       | Output power dynamics for inter-band V2X con-current operation .....                 | 304 |
| 6.4          | Void.....                                                                            | 304 |
| 6.4A         | Transmit signal quality for CA.....                                                  | 304 |
| 6.4A.1       | Frequency error for CA.....                                                          | 304 |
| 6.4A.2       | Transmit modulation quality for CA.....                                              | 304 |
| 6.4B         | Transmit signal quality for DC.....                                                  | 304 |
| 6.4B.2       | Transmit modulation quality for DC.....                                              | 305 |
| 6.4B.2.1     | Transmit modulation quality for Intra-band contiguous EN-DC .....                    | 305 |
| 6.4B.2.1.1   | Error Vector Magnitude.....                                                          | 305 |
| 6.4B.2.1.2   | Carrier leakage.....                                                                 | 305 |
| 6.4B.2.1.3   | In-band emissions .....                                                              | 305 |
| 6.4B.2.2     | Transmit modulation quality for Intra-band non-contiguous EN-DC .....                | 306 |
| 6.4B.2.2.1   | Error Vector Magnitude.....                                                          | 306 |
| 6.4B.2.2.2   | Carrier leakage.....                                                                 | 306 |
| 6.4B.2.2.3   | In-band emissions .....                                                              | 306 |
| 6.4B.2.3a    | Transmit modulation quality for Inter-band NE-DC within FR1 .....                    | 306 |
| 6.4B.2.4     | Transmit modulation quality for Inter-band EN-DC including FR2 .....                 | 306 |
| 6.4B.2.5     | Transmit modulation quality for inter-band EN-DC including both FR1 and FR2.....     | 306 |
| 6.4E         | Transmit signal quality for V2X operation in FR1.....                                | 307 |
| 6.4E.1       | Frequency error for V2X .....                                                        | 307 |
| 6.4E.2       | Transmit modulation quality for V2X.....                                             | 307 |
| 6.4E.2.1     | Transmit modulation quality for Intra-band V2X .....                                 | 307 |
| 6.4E.2.2.1   | Error Vector Magnitude.....                                                          | 307 |
| 6.4E.2.2.2   | Carrier leakage.....                                                                 | 307 |
| 6.4E.2.2.3   | In-band emissions .....                                                              | 307 |
| 6.4E.2.2     | Transmit modulation quality for Inter-band V2X .....                                 | 307 |
| 6.5          | Void.....                                                                            | 307 |
| 6.5A         | Output RF spectrum emissions for CA.....                                             | 307 |
| 6.5A.1       | Occupied bandwidth for CA .....                                                      | 307 |
| 6.5A.2       | Out-of-band emissions for CA.....                                                    | 308 |
| 6.5A.3       | Spurious emissions for CA .....                                                      | 308 |
| 6.5A.3.1     | Inter-band CA between FR1 and FR2.....                                               | 308 |
| 6.5A.4       | Transmit intermodulation for CA .....                                                | 308 |
| 6.5B         | Output RF spectrum emissions for DC.....                                             | 308 |
| 6.5B.1       | Occupied bandwidth for EN-DC .....                                                   | 308 |
| 6.5B.1.4     | Inter-band EN-DC including FR2 .....                                                 | 308 |
| 6.5B.1.5     | Inter-band EN-DC including both FR1 and FR2 .....                                    | 308 |
| 6.5B.2       | Out-of-band emissions for DC.....                                                    | 309 |
| 6.5B.2.1     | Intra-band contiguous EN-DC .....                                                    | 309 |
| 6.5B.2.1.1   | Spectrum emissions mask.....                                                         | 309 |
| 6.5B.2.1.2   | Additional spectrum emissions mask .....                                             | 309 |
| 6.5B.2.1.2.1 | Requirements for network signalled value "NS_35" .....                               | 309 |

|              |                                                             |     |
|--------------|-------------------------------------------------------------|-----|
| 6.5B.2.1.2.2 | Requirements for network signalled value "NS_04" .....      | 309 |
| 6.5B.2.1.3   | Adjacent channel leakage ratio.....                         | 310 |
| 6.5B.2.2     | Intra-band non-contiguous EN-DC .....                       | 310 |
| 6.5B.2.2.1   | Spectrum emissions mask.....                                | 310 |
| 6.5B.2.2.2   | Additional spectrum emissions mask .....                    | 311 |
| 6.5B.2.2.3   | Adjacent channel leakage ratio.....                         | 311 |
| 6.5B.2.3     | Inter-band EN-DC within FR1 .....                           | 311 |
| 6.5B.2.3a    | (Void).....                                                 | 311 |
| 6.5B.2.4     | Inter-band EN-DC including FR2 .....                        | 311 |
| 6.5B.2.5     | Inter-band EN-DC including both FR1 and FR2 .....           | 311 |
| 6.5B.3       | Spurious emissions for DC .....                             | 311 |
| 6.5B.3.1     | Intra-band contiguous EN-DC .....                           | 311 |
| 6.5B.3.1.1   | General spurious emissions .....                            | 311 |
| 6.5B.3.1.2   | Spurious emission band UE co-existence.....                 | 311 |
| 6.5B.3.2     | Intra-band non-contiguous EN-DC .....                       | 312 |
| 6.5B.3.2.1   | General spurious emissions .....                            | 312 |
| 6.5B.3.2.2   | Spurious emission band UE co-existence.....                 | 312 |
| 6.5B.3.3     | Inter-band EN-DC within FR1 .....                           | 313 |
| 6.5B.3.3.2   | Spurious emission band UE co-existence.....                 | 314 |
| 6.5B.3.3a    | Inter-band NE-DC within FR1 .....                           | 320 |
| 6.5B.3.3a.1  | (Void) .....                                                | 320 |
| 6.5B.3.3a.2  | Spurious emission band UE co-existence.....                 | 320 |
| 6.5B.3.4     | Inter-band EN-DC including FR2 .....                        | 320 |
| 6.5B.3.4.0   | General spurious emission .....                             | 320 |
| 6.5B.3.4.1   | Spurious emission band UE co-existence.....                 | 320 |
| 6.5B.3.5     | Inter-band EN-DC including both FR1 and FR2 .....           | 320 |
| 6.5B.3.5.0   | General spurious emission .....                             | 320 |
| 6.5B.3.5.1   | Spurious emission band UE co-existence.....                 | 320 |
| 6.5B.4       | Additional spurious emissions.....                          | 321 |
| 6.5B.4.1     | General .....                                               | 321 |
| 6.5B.4.1.1   | Void.....                                                   | 321 |
| 6.5B.4.2     | Intra-band contiguous EN-DC .....                           | 321 |
| 6.5B.4.2.1   | Minimum requirement (network signalled value "NS_04") ..... | 321 |
| 6.5B.4.3     | Intra-band non-contiguous EN-DC .....                       | 321 |
| 6.5B.4.3.1   | Minimum requirement (network signalled value "NS_04") ..... | 321 |
| 6.5B.4.4     | Inter-band EN-DC within FR1 .....                           | 322 |
| 6.5B.4.4a    | Inter-band NE-DC within FR1 .....                           | 322 |
| 6.5B.4.5     | Inter-band EN-DC including FR2 .....                        | 322 |
| 6.5B.4.6     | Inter-band EN-DC including both FR1 and FR2 .....           | 322 |
| 6.5B.5       | Transmit intermodulation for DC .....                       | 322 |
| 6.5B.5.1     | Intra-band contiguous EN-DC .....                           | 322 |
| 6.5B.5.2     | Intra-band non-contiguous EN-DC .....                       | 322 |
| 6.5B.5.3     | Inter-band EN-DC within FR1 .....                           | 322 |
| 6.5B.5.3a    | (Void).....                                                 | 322 |
| 6.5B.5.4     | Inter-band EN-DC including FR2 .....                        | 322 |
| 6.5B.5.5     | Inter-band EN-DC including both FR1 and FR2 .....           | 322 |
| 6.5E         | Output RF spectrum emissions for V2X operation in FR1 ..... | 323 |
| 6.5E.1       | Occupied bandwidth .....                                    | 323 |
| 6.5E.1.1     | Intra-band V2X .....                                        | 323 |
| 6.5E.1.2     | inter-band V2X con-current operation .....                  | 323 |
| 6.5E.2       | Out-of-band emissions.....                                  | 323 |
| 6.5E.2.1     | Intra-band V2X .....                                        | 323 |
| 6.5E.2.2     | Inter-band V2X con-current operation.....                   | 323 |
| 6.5E.3       | Spurious emissions .....                                    | 323 |
| 6.5E.3.1     | Intra-band V2X .....                                        | 323 |
| 6.5E.3.1.1   | General spurious emissions .....                            | 323 |
| 6.5E.3.1.2   | Spurious emission band UE co-existence.....                 | 323 |
| 6.5E.3.2     | Inter-band V2X con-current operation.....                   | 323 |
| 6.5E.3.2.1   | General spurious emissions .....                            | 323 |
| 6.5E.3.2.2   | Spurious emission band UE co-existence.....                 | 324 |
| 6.5E.4       | Transmit intermodulation .....                              | 324 |
| 6.5E.4.1     | Intra-band V2X .....                                        | 324 |

|              |                                                                                                                                                                      |     |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 6.5E.4.2     | Inter-band V2X con-current operation .....                                                                                                                           | 324 |
| 6.6B         | Beam correspondence for DC .....                                                                                                                                     | 325 |
| 6.6B.1       | Void .....                                                                                                                                                           | 325 |
| 6.6B.2       | Void .....                                                                                                                                                           | 325 |
| 6.6B.3       | Void .....                                                                                                                                                           | 325 |
| 6.6B.4       | Inter-band EN-DC including FR2 .....                                                                                                                                 | 325 |
| 6.6B.5       | Inter-band EN-DC including both FR1 and FR2 .....                                                                                                                    | 325 |
| 7            | Receiver characteristics .....                                                                                                                                       | 325 |
| 7.1          | General .....                                                                                                                                                        | 325 |
| 7.2          | Void .....                                                                                                                                                           | 326 |
| 7.3          | Void .....                                                                                                                                                           | 326 |
| 7.3A         | Reference sensitivity for CA .....                                                                                                                                   | 326 |
| 7.3A.1       | General .....                                                                                                                                                        | 326 |
| 7.3A.2       | Reference sensitivity power level for CA .....                                                                                                                       | 327 |
| 7.3A.3       | $\Delta R_{IB,c}$ for CA .....                                                                                                                                       | 327 |
| 7.3A.3.1     | $\Delta R_{IB,c}$ for Inter-band CA between FR1 and FR2 .....                                                                                                        | 327 |
| 7.3A.4       | Void .....                                                                                                                                                           | 327 |
| 7.3B         | Reference sensitivity level for DC .....                                                                                                                             | 327 |
| 7.3B.1       | General .....                                                                                                                                                        | 327 |
| 7.3B.2       | Reference sensitivity for DC .....                                                                                                                                   | 328 |
| 7.3B.2.1     | Intra-band contiguous EN-DC .....                                                                                                                                    | 328 |
| 7.3B.2.2     | Intra-band non-contiguous EN-DC .....                                                                                                                                | 329 |
| 7.3B.2.3     | Inter-band EN-DC within FR1 .....                                                                                                                                    | 329 |
| 7.3B.2.3.0   | General .....                                                                                                                                                        | 329 |
| 7.3B.2.3.1   | Reference sensitivity exceptions due to UL harmonic interference for EN-DC in NR FR1 .....                                                                           | 330 |
| 7.3B.2.3.2   | Reference sensitivity exceptions due to receiver harmonic mixing for EN-DC in NR FR1 .....                                                                           | 335 |
| 7.3B.2.3.3   | Void .....                                                                                                                                                           | 336 |
| 7.3B.2.3.4   | Reference sensitivity exceptions due to cross band isolation for EN-DC in NR FR1 .....                                                                               | 336 |
| 7.3B.2.3.5   | MSD for intermodulation interference due to dual uplink operation for EN-DC in NR FR1 .....                                                                          | 340 |
| 7.3B.2.3.5.1 | MSD test points for intermodulation interference due to dual uplink operation for PC3<br>EN-DC in NR FR1 involving two bands .....                                   | 340 |
| 7.3B.2.3.5.2 | MSD test points for intermodulation interference due to dual uplink operation for EN-DC<br>in NR FR1 involving three bands .....                                     | 345 |
| 7.3B.2.3.5.3 | Void .....                                                                                                                                                           | 367 |
| 7.3B.2.3.5.4 | MSD test points for intermodulation interference due to dual uplink operation for EN-DC<br>in NR FR1 involving four bands .....                                      | 367 |
| 7.3B.2.3.6   | Reference sensitivity exceptions due to Tx non-linearity interference in 1 <sup>st</sup> or 2 <sup>nd</sup> adjacent<br>channel of UL band for EN-DC in NR FR1 ..... | 368 |
| 7.3B.2.3a    | Inter-band NE-DC within FR1 .....                                                                                                                                    | 369 |
| 7.3B.2.3a.0  | General .....                                                                                                                                                        | 369 |
| 7.3B.2.3a.1  | Reference sensitivity exceptions due to UL harmonic interference for NE-DC in NR FR1 .....                                                                           | 369 |
| 7.3B.2.4     | Inter-band EN-DC including FR2 .....                                                                                                                                 | 369 |
| 7.3B.2.4.1   | Void .....                                                                                                                                                           | 369 |
| 7.3B.2.5     | Inter-band EN-DC including both FR1 and FR2 .....                                                                                                                    | 369 |
| 7.3B.2.5.1   | Reference sensitivity exceptions due to UL harmonic interference for EN-DC including both<br>FR1 and FR2 .....                                                       | 369 |
| 7.3B.3       | $\Delta R_{IB,c}$ , $\Delta R_{IBNC}$ for DC .....                                                                                                                   | 369 |
| 7.3B.3.0     | General .....                                                                                                                                                        | 369 |
| 7.3B.3.1     | Intra-band contiguous EN-DC .....                                                                                                                                    | 370 |
| 7.3B.3.2     | Intra-band non-contiguous EN-DC .....                                                                                                                                | 370 |
| 7.3B.3.3     | Inter-band EN-DC within FR1 .....                                                                                                                                    | 373 |
| 7.3B.3.3.1   | $\Delta R_{IB,c}$ for EN-DC in two bands .....                                                                                                                       | 373 |
| 7.3B.3.3.2   | $\Delta R_{IB,c}$ for EN-DC three bands .....                                                                                                                        | 375 |
| 7.3B.3.3.3   | $\Delta R_{IB,c}$ for EN-DC four bands .....                                                                                                                         | 385 |
| 7.3B.3.3.4   | $\Delta R_{IB,c}$ for EN-DC five bands .....                                                                                                                         | 396 |
| 7.3B.3.3.5   | $\Delta R_{IB,c}$ for EN-DC six bands .....                                                                                                                          | 401 |
| 7.3B.3.3a    | (Void) .....                                                                                                                                                         | 401 |
| 7.3B.3.4     | Inter-band EN-DC including FR2 .....                                                                                                                                 | 401 |
| 7.3B.3.4.1   | $\Delta R_{IB,c}$ for EN-DC in two bands .....                                                                                                                       | 401 |
| 7.3B.3.4.2   | $\Delta R_{IB,c}$ for EN-DC three bands .....                                                                                                                        | 401 |
| 7.3B.3.4.3   | $\Delta R_{IB,c}$ for EN-DC four bands .....                                                                                                                         | 402 |

|            |                                                                  |     |
|------------|------------------------------------------------------------------|-----|
| 7.3B.3.4.4 | $\Delta R_{IB,c}$ for EN-DC five bands .....                     | 402 |
| 7.3B.3.4.5 | Void .....                                                       | 402 |
| 7.3B.3.5   | Inter-band EN-DC including both FR1 and FR2 .....                | 402 |
| 7.3B.3.5.2 | $\Delta R_{IB,c}$ for EN-DC three bands .....                    | 402 |
| 7.3B.3.5.3 | $\Delta R_{IB,c}$ for EN-DC four bands .....                     | 402 |
| 7.3B.3.5.4 | $\Delta R_{IB,c}$ for EN-DC five bands .....                     | 402 |
| 7.3B.3.5.5 | $\Delta R_{IB,c}$ for EN-DC six bands .....                      | 402 |
| 7.3E       | Reference sensitivity for V2X operation in FR1 .....             | 402 |
| 7.3E.1     | General .....                                                    | 402 |
| 7.3E.2     | Reference sensitivity for V2X .....                              | 403 |
| 7.3E.2.1   | Intra-band contiguous V2X .....                                  | 403 |
| 7.3E.2.2   | Intra-band non-contiguous V2X .....                              | 403 |
| 7.3E.2.3   | Inter-band V2X con-current operation .....                       | 403 |
| 7.3E.2.3.0 | General .....                                                    | 403 |
| 7.3E.2.3.1 | Reference sensitivity exception due to UL harmonic problem ..... | 404 |
| 7.4        | Void .....                                                       | 405 |
| 7.4A       | Maximum input level for CA .....                                 | 405 |
| 7.4B       | Maximum input level for DC in FR1 .....                          | 405 |
| 7.4B.1     | Intra-band contiguous EN-DC in FR1 .....                         | 405 |
| 7.4B.2     | Intra-band non-contiguous EN-DC in FR1 .....                     | 405 |
| 7.4B.3     | Inter-band EN-DC within FR1 .....                                | 405 |
| 7.4B.3a    | (Void) .....                                                     | 405 |
| 7.4E       | Maximum input level for V2X operation in FR1 .....               | 405 |
| 7.5        | Void .....                                                       | 406 |
| 7.5A       | Adjacent channel selectivity for CA .....                        | 406 |
| 7.5B       | Adjacent channel selectivity for DC in FR1 .....                 | 406 |
| 7.5B.1     | Intra-band contiguous EN-DC in FR1 .....                         | 406 |
| 7.5B.2     | Intra-band non-contiguous EN-DC in FR1 .....                     | 406 |
| 7.5B.3     | Inter-band EN-DC within FR1 .....                                | 407 |
| 7.5B.3a    | (Void) .....                                                     | 407 |
| 7.5E       | Adjacent channel selectivity for V2X operation in FR1 .....      | 408 |
| 7.6        | Void .....                                                       | 408 |
| 7.6A       | Blocking characteristics for CA .....                            | 408 |
| 7.6B       | Blocking characteristics for DC in FR1 .....                     | 408 |
| 7.6B.1     | General .....                                                    | 408 |
| 7.6B.2     | In-band blocking for DC in FR1 .....                             | 408 |
| 7.6B.2.1   | Intra-band contiguous EN-DC in FR1 .....                         | 408 |
| 7.6B.2.2   | Intra-band non-contiguous EN-DC in FR1 .....                     | 408 |
| 7.6B.2.3   | Inter-band EN-DC within FR1 .....                                | 409 |
| 7.6B.2.3a  | (Void) .....                                                     | 409 |
| 7.6B.2.4   | Inter-band EN-DC including FR2 .....                             | 409 |
| 7.6B.2.5   | Inter-band EN-DC including both FR1 and FR2 .....                | 409 |
| 7.6B.2.6   | Void .....                                                       | 409 |
| 7.6B.3     | Out-of-band blocking for DC in FR1 .....                         | 409 |
| 7.6B.3.1   | Intra-band contiguous EN-DC in FR1 .....                         | 409 |
| 7.6B.3.2   | Intra-band non-contiguous EN-DC in FR1 .....                     | 409 |
| 7.6B.3.3   | Inter-band EN-DC within FR1 .....                                | 410 |
| 7.6B.3.3a  | (Void) .....                                                     | 411 |
| 7.6B.4     | Narrow band blocking for DC in FR1 .....                         | 411 |
| 7.6B.4.1   | Intra-band contiguous EN-DC in FR1 .....                         | 411 |
| 7.6B.4.2   | Intra-band non-contiguous EN-DC in FR1 .....                     | 411 |
| 7.6B.4.3   | Inter-band EN-DC within FR1 .....                                | 411 |
| 7.6B.4.3a  | (Void) .....                                                     | 412 |
| 7.6E       | Blocking characteristics for V2X in FR1 .....                    | 412 |
| 7.7        | Void .....                                                       | 412 |
| 7.7A       | Spurious response for CA .....                                   | 412 |
| 7.7B       | Spurious response for DC in FR1 .....                            | 412 |
| 7.7B.1     | Intra-band contiguous EN-DC in FR1 .....                         | 412 |
| 7.7B.2     | Intra-band non-contiguous EN-DC in FR1 .....                     | 412 |
| 7.7B.3     | Inter-band EN-DC within FR1 .....                                | 413 |
| 7.7E       | Spurious response for V2X in FR1 .....                           | 413 |
| 7.8        | Void .....                                                       | 413 |

|                             |                                                                |            |
|-----------------------------|----------------------------------------------------------------|------------|
| 7.8A                        | Intermodulation characteristics for CA .....                   | 413        |
| 7.8B                        | Intermodulation characteristics for DC in FR1 .....            | 414        |
| 7.8B.1                      | General.....                                                   | 414        |
| 7.8B.2                      | Wide band Intermodulation .....                                | 414        |
| 7.8B.2.1                    | Intra-band contiguous EN-DC in FR1.....                        | 414        |
| 7.8B.2.2                    | Intra-band non-contiguous EN-DC in FR1 .....                   | 414        |
| 7.8B.2.3                    | Inter-band EN-DC within FR1 .....                              | 414        |
| 7.8B.2.3a                   | (Void).....                                                    | 414        |
| 7.8E                        | Intermodulation characteristics for V2X operation in FR1 ..... | 415        |
| 7.9                         | Void.....                                                      | 415        |
| 7.9A                        | Spurious emissions for CA.....                                 | 415        |
| 7.9B                        | Spurious emissions for DC in FR1 .....                         | 415        |
| 7.9B.1                      | Intra-band contiguous EN-DC in FR1 .....                       | 415        |
| 7.9B.2                      | Intra-band non-contiguous EN-DC in FR1 .....                   | 415        |
| 7.9B.3                      | Inter-band EN-DC within FR1.....                               | 415        |
| 7.9B.3a                     | (Void).....                                                    | 415        |
| 7.10                        | Void.....                                                      | 416        |
| 7.10A                       | Void.....                                                      | 416        |
| 7.10B                       | power imbalance for DC .....                                   | 416        |
| 7.10B.1                     | General.....                                                   | 416        |
| 7.10B.2                     | Void .....                                                     | 416        |
| 7.10B.3                     | Inter-band EN-DC within FR1.....                               | 416        |
| <b>Annex A (normative):</b> | <b>Measurement channels .....</b>                              | <b>418</b> |
| A.1                         | General .....                                                  | 418        |
| A.2                         | UL reference measurement channels for E-UTRA TDD Config 2..... | 418        |
| A.2.1                       | General .....                                                  | 418        |
| A.2.2                       | Reference measurement channels for E-UTRA .....                | 418        |
| A.2.2.1                     | Full RB allocation.....                                        | 418        |
| A.2.2.1.1                   | QPSK .....                                                     | 418        |
| A.2.2.1.2                   | 16-QAM.....                                                    | 419        |
| A.2.2.1.3                   | 64-QAM.....                                                    | 419        |
| A.2.2.1.4                   | 256 QAM .....                                                  | 420        |
| A.2.2.2                     | Partial RB allocation.....                                     | 421        |
| A.2.2.2.1                   | QPSK .....                                                     | 421        |
| A.2.2.2.2                   | 16-QAM.....                                                    | 422        |
| A.2.2.2.3                   | 64-QAM.....                                                    | 423        |
| A.2.2.2.4                   | 256 QAM .....                                                  | 425        |
| A.3                         | DL reference measurement channels for E-UTRA .....             | 427        |
| A.3.1                       | General .....                                                  | 427        |
| A.3.1.1                     | QPSK.....                                                      | 427        |
| A.3.1.2                     | 64-QAM.....                                                    | 428        |
| A.3.1.3                     | 256-QAM.....                                                   | 429        |
| <b>Annex B:</b>             | <b>Void .....</b>                                              | <b>430</b> |
| <b>Annex C:</b>             | <b>Void .....</b>                                              | <b>431</b> |
| <b>Annex D:</b>             | <b>Void .....</b>                                              | <b>432</b> |
| <b>Annex E:</b>             | <b>Void .....</b>                                              | <b>433</b> |
| <b>Annex F:</b>             | <b>Void .....</b>                                              | <b>434</b> |
| <b>Annex G:</b>             | <b>Void .....</b>                                              | <b>435</b> |
| <b>Annex H (normative):</b> | <b>Modified MPR behavior.....</b>                              | <b>436</b> |
| <b>Annex I (normative):</b> | <b>Dual uplink interferer .....</b>                            | <b>437</b> |
| <b>Annex J:</b>             | <b>Void .....</b>                                              | <b>438</b> |

|                               |                             |            |
|-------------------------------|-----------------------------|------------|
| <b>Annex K:</b>               | <b>Void .....</b>           | <b>439</b> |
| <b>Annex L (informative):</b> | <b>Change history .....</b> | <b>440</b> |
| History .....                 |                             | 452        |

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## Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

In the present document, modal verbs have the following meanings:

- |                  |                                                         |
|------------------|---------------------------------------------------------|
| <b>shall</b>     | indicates a mandatory requirement to do something       |
| <b>shall not</b> | indicates an interdiction (prohibition) to do something |

The constructions "shall" and "shall not" are confined to the context of normative provisions, and do not appear in Technical Reports.

The constructions "must" and "must not" are not used as substitutes for "shall" and "shall not". Their use is avoided insofar as possible, and they are not used in a normative context except in a direct citation from an external, referenced, non-3GPP document, or so as to maintain continuity of style when extending or modifying the provisions of such a referenced document.

- |                   |                                                |
|-------------------|------------------------------------------------|
| <b>should</b>     | indicates a recommendation to do something     |
| <b>should not</b> | indicates a recommendation not to do something |
| <b>may</b>        | indicates permission to do something           |
| <b>need not</b>   | indicates permission not to do something       |

The construction "may not" is ambiguous and is not used in normative elements. The unambiguous constructions "might not" or "shall not" are used instead, depending upon the meaning intended.

- |               |                                        |
|---------------|----------------------------------------|
| <b>can</b>    | indicates that something is possible   |
| <b>cannot</b> | indicates that something is impossible |

The constructions "can" and "cannot" are not substitutes for "may" and "need not".

- |                 |                                                                                                                                                                            |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>will</b>     | indicates that something is certain or expected to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document     |
| <b>will not</b> | indicates that something is certain or expected not to happen as a result of action taken by an agency the behaviour of which is outside the scope of the present document |
| <b>might</b>    | indicates a likelihood that something will happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document           |

**might not** indicates a likelihood that something will not happen as a result of action taken by some agency the behaviour of which is outside the scope of the present document

In addition:

**is** (or any other verb in the indicative mood) indicates a statement of fact

**is not** (or any other negative verb in the indicative mood) indicates a statement of fact

The constructions "is" and "is not" do not indicate requirements.

---

# 1 Scope

The present document establishes the minimum RF requirements for NR User Equipment (UE) Interworking operation with other radios. This includes but is not limited to additional requirements for carrier aggregation or NR dual connectivity between Range 1 and Range 2 and additional requirements due to NR non-standalone (NSA) operation mode with E-UTRA.

---

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 38.101-1: "NR; User Equipment (UE) radio transmission and reception; Part 1: Range 1 Standalone"
- [3] 3GPP TS 38.101-2: "NR; User Equipment (UE) radio transmission and reception; Part 2: Range 2 Standalone"
- [4] 3GPP TS 36.101: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio transmission and reception"
- [5] 3GPP TS 38.521-3: "NR; User Equipment (UE) conformance specification; Radio transmission and reception; Part 3: Range 1 and Range 2 Interworking operation with other radios"
- [6] Recommendation ITU-R M.1545: "Measurement uncertainty as it applies to test limits for the terrestrial component of International Mobile Telecommunications-2000"
- [7] 3GPP TS 36.211: "E-UTRA; Physical channels and modulation"
- [8] 3GPP TS 36.331: " Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC); Protocol specification"
- [9] 3GPP TS 38.331: "NR; Radio Resource Control (RRC) protocol specification"
- [10] 3GPP TS 38.213: "NR; Physical layer procedures for control"
- [11] 3GPP TS 38.306: "NR; User Equipment (UE) radio access capabilities"
- [12] 3GPP TS 38.133: "NR; Requirements for support of radio resource management"
- [13] 3GPP TS 38.211: "NR; Physical channels and modulation".
- [14] 3GPP TS 38.214: "NR; Physical layer procedures for data"
- [15] 3GPP TS 38.133: "NR; Requirements for support of radio resource management"
- [16] 3GPP TS 36.133: "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management"

## 3 Definitions, symbols and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

**Con-current operation:** The simultaneous transmission and reception of sidelink and Uu interfaces while operation is agnostic of the service used on each interface.

### 3.2 Symbols

For the purposes of the present document, the following symbols apply:

|                            |                                                                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| $\Delta R_{IB,c}$          | Allowed reference sensitivity relaxation due to support for CA or DC operation, for serving cell <i>c</i> .                                                                                                                          |
| $\Delta T_{IB,c}$          | Allowed maximum configured output power relaxation due to support for CA or DC operation, for serving cell <i>c</i>                                                                                                                  |
| $BW_{E-UTRA\_Channel}$     | Channel bandwidth of E-UTRA carrier                                                                                                                                                                                                  |
| $BW_{E-UTRA\_Channel\_CA}$ | Channel bandwidth of E-UTRA sub-block which is composed of intra-band contiguous CA E-UTRA carriers                                                                                                                                  |
| $BW_{NR\_Channel}$         | Channel bandwidth of NR carrier                                                                                                                                                                                                      |
| $BW_{NR\_Channel\_CA}$     | Channel bandwidth of NR sub-block which is composed of intra-band contiguous CA NR carriers                                                                                                                                          |
| $Ceil(x)$                  | Rounding upwards; $ceil(x)$ is the smallest integer such that $ceil(x) \geq x$                                                                                                                                                       |
| $EN-DC_{ACLR}$             | The ratio of the filtered mean power centred on the aggregated sub-block bandwidth ENBW to the filtered mean power centred on an adjacent bandwidth of the same size ENBW                                                            |
| $E-UTRA_{ACLR}$            | E-UTRA ACLR                                                                                                                                                                                                                          |
| $F_C$                      | <i>RF reference frequency</i> for the carrier center on the channel raster                                                                                                                                                           |
| $F_{DL\_low}$              | The lowest frequency of the downlink <i>operating band</i>                                                                                                                                                                           |
| $F_{DL\_high}$             | The highest frequency of the downlink <i>operating band</i>                                                                                                                                                                          |
| $F_{UL\_low}$              | The lowest frequency of the uplink <i>operating band</i>                                                                                                                                                                             |
| $F_{UL\_high}$             | The highest frequency of the uplink <i>operating band</i>                                                                                                                                                                            |
| $F_{OOB}$                  | The boundary between the NR out of band emission and spurious emission domains                                                                                                                                                       |
| $L_{CRB}$                  | Transmission bandwidth which represents the length of a contiguous resource block allocation expressed in units of resource blocks                                                                                                   |
| $Max()$                    | The largest of given numbers                                                                                                                                                                                                         |
| $Min()$                    | The smallest of given numbers                                                                                                                                                                                                        |
| $NR_{ACLR}$                | NR ACLR                                                                                                                                                                                                                              |
| $N_{RB}$                   | Transmission bandwidth configuration, expressed in units of resource blocks                                                                                                                                                          |
| $N_{RB\_agg}$              | The number of the aggregated RBs within the fully allocated aggregated channel bandwidth<br>$N_{RB\_agg} = \sum_1^j N_{RB_j} * 2^{\mu_j} \text{ for carrier 1 to } j, \text{ where } \mu \text{ is defined in TS 38.211 [13]}$       |
| $N_{RB,c}$                 | The transmission bandwidth configuration of component carrier <i>c</i> , expressed in units of resource blocks<br>$N_{RB,cj} = N_{RB_j} * 2^{\mu_j} \text{ for carrier } j, \text{ where } \mu \text{ is defined in TS 38.211 [13]}$ |
| $P_{CMAX}$                 | The configured maximum UE output power                                                                                                                                                                                               |
| $RB_{start}$               | Indicates the lowest RB index of transmitted resource blocks                                                                                                                                                                         |
| $W_{gap}$                  | The sub-block gap between the two sub-blocks                                                                                                                                                                                         |

### 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

|       |                                    |
|-------|------------------------------------|
| ACLR  | Adjacent Channel Leakage Ratio     |
| ACS   | Adjacent Channel Selectivity       |
| A-MPR | Additional Maximum Power Reduction |
| BCS   | Bandwidth Combination Set          |

|         |                                                                                                       |
|---------|-------------------------------------------------------------------------------------------------------|
| CA      | Carrier Aggregation                                                                                   |
| CC      | Component Carrier                                                                                     |
| DC      | Dual Connectivity                                                                                     |
| EIRP    | Equivalent Isotropically Radiated Power                                                               |
| EN-DC   | E-UTRA/NR DC                                                                                          |
| EVM     | Error Vector Magnitude                                                                                |
| FDM     | Frequency Division Multiplexing                                                                       |
| FR      | Frequency Range                                                                                       |
| ENBW    | The aggregated bandwidth of an E-UTRA sub-block and an adjacent NR sub-block                          |
| ITS     | Intelligent Transportation System                                                                     |
| ITU-R   | Radiocommunication Sector of the International Telecommunication Union                                |
| MBW     | Measurement bandwidth defined for the protected band                                                  |
| MPR     | Allowed maximum power reduction                                                                       |
| MSD     | Maximum Sensitivity Degradation                                                                       |
| MCG     | Master Cell Group                                                                                     |
| NR      | New Radio                                                                                             |
| NS      | Network Signalling                                                                                    |
| NSA     | Non-Standalone, a mode of operation where operation of an other radio is assisted with an other radio |
| OOB     | Out-of-band                                                                                           |
| OOBE    | Out-of-band emission                                                                                  |
| OTA     | Over The Air                                                                                          |
| PRB     | Physical Resource Block                                                                               |
| PSCCH   | Physical Sidelink Control CHannel                                                                     |
| PSSCH   | Physical Sidelink Shared CHannel                                                                      |
| RE      | Resource Element                                                                                      |
| REFSENS | Reference Sensitivity                                                                                 |
| RF      | Radio Frequency                                                                                       |
| Rx      | Receiver                                                                                              |
| SCG     | Secondary Cell Group                                                                                  |
| SCS     | Subcarrier spacing                                                                                    |
| SEM     | Spectrum Emission Mask                                                                                |
| SL      | Sidelink                                                                                              |
| SUL     | Supplementary uplink                                                                                  |
| TDM     | Time Division Multiplex                                                                               |
| Tx      | Transmitter                                                                                           |
| UE      | User Equipment                                                                                        |
| UL MIMO | Up Link Multiple Antenna transmission                                                                 |
| ULSUP   | Uplink sharing from UE perspective                                                                    |

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## 4 General

### 4.1 Relationship between minimum requirements and test requirements

The present document is interwork specification for NR UE, covering RF characteristics and minimum performance requirements. Conformance to the present specification is demonstrated by fulfilling the test requirements specified in the conformance specification 3GPP TS 38.521-3 [5].

The Minimum Requirements given in this specification make no allowance for measurement uncertainty. The test specification TS 38.521-3 [5] defines test tolerances. These test tolerances are individually calculated for each test. The test tolerances are used to relax the minimum requirements in this specification to create test requirements. For some requirements, including regulatory requirements, the test tolerance is set to zero.

The measurement results returned by the test system are compared - without any modification - against the test requirements as defined by the shared risk principle.

The shared risk principle is defined in Recommendation ITU-R M.1545 [6].

## 4.2 Applicability of minimum requirements

- a) In this specification the Minimum Requirements are specified as general requirements and additional requirements. Where the Requirement is specified as a general requirement, the requirement is mandated to be met in all scenarios
- b) For specific scenarios for which an additional requirement is specified, in addition to meeting the general requirement, the UE is mandated to meet the additional requirements.
- c) The spurious emissions power requirements are for the long-term average of the power. For the purpose of reducing measurement uncertainty it is acceptable to average the measured power over a period of time sufficient to reduce the uncertainty due to the statistical nature of the signal
- d) Terminal that supports EN-DC or NE-DC configuration shall meet E-UTRA requirements as specified in TS 36.101 [4] and NR requirements as in TS 38.101-1 [2] and TS 38.101-2 [3] unless otherwise specified in this specification
- e) All the requirements for intra-band contiguous and non-contiguous EN-DC or NE-DC apply under the assumption of the same uplink-downlink and special subframe configurations in the E-UTRA and slot format indicated by `UL-DL-configurationCommon` and `UL-DL-configurationDedicated` in the NR for the EN-DC or NE-DC, a time offset between the two RATs configurations may be required.
- f) For EN-DC or NE-DC combinations with CA configurations for E-UTRA and/or NR, all the requirements for E-UTRA and/or NR all the requirements for E-UTRA and/or NR intra-band contiguous and non-contiguous CA apply under the assumption of the same slot format indicated by `UL-DL-configurationCommon` and `UL-DL-configurationDedicated` in the PSCell and SCells for NR and the same uplink-downlink and special subframe configurations in Pcell and SCells for E-UTRA.

A terminal which supports an EN-DC or NE-DC configuration shall support:

If any subsets of the EN-DC configuration do not specify its own bandwidth combination sets in 5.3B, then the terminal shall support the same E-UTRA bandwidth combination sets it signals the support for in E-UTRA CA configuration part of E-UTRA – NR DC and shall support the same NR bandwidth combination sets it signals the support for in NR CA configuration part of E-UTRA – NR DC.

Else if one of the subsets of the EN-DC or NE-DC configuration specify its own bandwidth combination sets in 5.3B, then the terminal shall support a product set of channel bandwidth for each band specified by E-UTRA bandwidth combination sets, NR bandwidth combination sets, and EN-DC or NE-DC bandwidth combination sets it signals the support. A terminal which supports an inter-band EN-DC or NE-DC configuration with a certain UL configuration shall support the all lower order DL configurations of the lower order EN-DC or NE-DC combinations, which have this certain UL configuration and the fallbacks of this UL configuration.

A terminal which supports NE-DC configurations shall meet the minimum requirements for corresponding EN-DC configuration, unless otherwise specified

For CA or DC configurations, which include FR2 intra-band CA combinations with multiple FR2 sub-blocks, where at least one of the sub-blocks is a contiguous CA combination :

- if the field *partialFR2-FallbackRX-Req* is not present, the UE shall meet all applicable UE RF requirements for the highest order CA configuration and all associated fallback CA configurations;
- if the field *partialFR2-FallbackRX-Req* is present, for each FR2 intra-band CA configuration with multiple sub-blocks that the UE indicates support for explicitly in UE capability signalling: the in-gap UE RF requirements in clauses 7.5A, 7.5B, 7.6A, 7.6B apply as the equivalent requirements for the associated fallback FR2 intra-band CA configurations with the same number of sub-blocks, where at least one of the sub-blocks consists of a contiguous CA configuration. The UE shall meet all applicable UE RF requirements for fallback CA configurations with a lesser number of sub-blocks;
- regardless of the field *partialFR2-FallbackRX-Req*, the UE shall meet all DL out-of-gap requirements for all lower order fallback CA configurations.

Terminal that supports inter-band NR-DC between FR1 and FR2 configuration shall meet the requirements for corresponding CA configuration (suffix A), unless otherwise specified.

## 4.3 Specification suffix information

Unless stated otherwise the following suffixes are used for indicating at 2<sup>nd</sup> level clause, shown in Table 4.3-1.

**Table 4.3-1: Definition of suffixes**

| Clause suffix | Variant                                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------------------------------|
| None          | Single Carrier                                                                                                             |
| A             | Carrier Aggregation (CA) between FR1 and FR2                                                                               |
| B             | Dual-Connectivity (DC) with and without SUL including UL sharing from UE perspective, inter-band NR DC between FR1 and FR2 |
| D             | UL MIMO                                                                                                                    |
| E             | V2X                                                                                                                        |
| F             | Shared spectrum channel access                                                                                             |

# 5 Operating bands and channel arrangement

## 5.1 General

The channel arrangements presented in this clause are based on the operating bands and channel bandwidths defined in the present release of specifications.

NOTE: Other operating bands and channel bandwidths may be considered in future releases.

Requirements throughout the RF specifications are in many cases defined separately for different frequency ranges (FR). The frequency ranges in which NR can operate according to this version of the specifications are identified as described in Table 5.1-1.

**Table 5.1-1: Definition of frequency ranges**

| Frequency range designation | Corresponding frequency range |
|-----------------------------|-------------------------------|
| FR1                         | 410 MHz – 7125 MHz            |
| FR2                         | 24250 MHz – 52600 MHz         |

The present specification covers band combinations including

- at least one FR1 operating band and one FR2 operating band for carrier aggregation and dual connectivity operations;
- at least one E-UTRA operating band for dual connectivity operations.

## 5.2 Operating bands

NR is designed to operate in FR1 operating bands defined in TS 38.101-1 [2] and FR2 operating bands defined in TS 38.101-2 [3]. E-UTRA is designed to operate in operating bands defined in TS 36.101 [4].

## 5.2A Operating bands for CA

### 5.2A.1 Inter-band CA between FR1 and FR2

NR carrier aggregation is designed to operate in the operating bands defined in Table 5.2A.1-1 and Table 5.2A.1-2. The band combinations include at least one FR1 operating band and one FR2 operating band.

Operating bands for CA including Band n90 are defined by the corresponding operating bands for CA including Band n41 with Band n90 replacing Band n41. For brevity the said operating bands for CA including Band n90 are not listed in the tables below but are covered by this specification.

If the mandatory simultaneous Rx/Tx capability applies for a lower order band combination, when the applicable lower order band combination is a band pair in a higher order band combination, the mandatory simultaneous Rx/Tx capability also applies for the band pair in the higher order band combination.

**Table 5.2A.1-1: Band combinations for inter-band CA between FR1 and FR2 (two bands)**

| NR CA Band                                                                                                        | NR Band   |
|-------------------------------------------------------------------------------------------------------------------|-----------|
| CA n1-n257 <sup>1</sup>                                                                                           | n1, n257  |
| CA n3-n257 <sup>1</sup>                                                                                           | n3, n257  |
| CA n5-n260 <sup>1</sup>                                                                                           | n5, n260  |
| CA n5-n261 <sup>1</sup>                                                                                           | n5, n261  |
| CA n8-n258 <sup>1</sup>                                                                                           | n8, n258  |
| CA n25-n260 <sup>1</sup>                                                                                          | n25, n260 |
| CA n25-n261 <sup>1</sup>                                                                                          | n25, n261 |
| CA n28-n257 <sup>1</sup>                                                                                          | n28, n257 |
| CA n41-n260 <sup>1</sup>                                                                                          | n41, n260 |
| CA n41-n261 <sup>1</sup>                                                                                          | n41, n261 |
| CA n66-n260                                                                                                       | n66, n260 |
| CA n66-n261                                                                                                       | n66, n261 |
| CA n71-n257 <sup>1</sup>                                                                                          | n71, n257 |
| CA n71-n260 <sup>1</sup>                                                                                          | n71, n260 |
| CA n71-n261 <sup>1</sup>                                                                                          | n71, n261 |
| CA n77-n257 <sup>1</sup>                                                                                          | n77, n257 |
| CA n77-n258 <sup>1</sup>                                                                                          | n77, n258 |
| CA n77-n261 <sup>1</sup>                                                                                          | n77, n261 |
| CA n78-n257 <sup>1</sup>                                                                                          | n78, n257 |
| CA n78-n258 <sup>1</sup>                                                                                          | n78, n258 |
| CA n79-n257 <sup>1</sup>                                                                                          | n79, n257 |
| CA n79-n258 <sup>1</sup>                                                                                          | n79, n258 |
| NOTE 1: Applicable for UE supporting inter-band carrier aggregation with mandatory simultaneous Rx/Tx capability. |           |

**Table 5.2A.1-2: Band combinations for inter-band CA between FR1 and FR2 (three bands)**

| NR CA Band                                                                                                        | NR Band        |
|-------------------------------------------------------------------------------------------------------------------|----------------|
| CA n1-n78-n257 <sup>1</sup>                                                                                       | n1, n78, n257  |
| CA n3-n28-n257 <sup>1</sup>                                                                                       | n3, n28, n257  |
| CA n3-n77-n257 <sup>1</sup>                                                                                       | n3, n77, n257  |
| CA n3-n78-n257 <sup>1</sup>                                                                                       | n3, n78, n257  |
| CA n28-n77-n257 <sup>1</sup>                                                                                      | n28, n77, n257 |
| CA n28-n78-n257 <sup>1</sup>                                                                                      | n28, n78, n257 |
| CA n77-n79-n257                                                                                                   | n77, n79, n257 |
| CA n78-n79-n257                                                                                                   | n78, n79, n257 |
| NOTE 1: Applicable for UE supporting inter-band carrier aggregation with mandatory simultaneous Rx/Tx capability. |                |

**Table 5.2A.1-3: Band combinations for inter-band CA between FR1 and FR2 (four bands)**

| NR CA Band | NR Band |
|------------|---------|
|------------|---------|

|                                                                                                                   |                    |
|-------------------------------------------------------------------------------------------------------------------|--------------------|
| CA n3-n28-n77-n257 <sup>1</sup>                                                                                   | n3, n28, n77, n257 |
| CA n3-n28-n78-n257 <sup>1</sup>                                                                                   | n3, n28, n78, n257 |
| NOTE 1: Applicable for UE supporting inter-band carrier aggregation with mandatory simultaneous Rx/Tx capability. |                    |

## 5.2B Operating bands for DC

### 5.2B.1 General

The operating bands are specified in clause 5.5B for operation with EN-DC, NGEN-DC, NE-DC or NR-DC configured.

### 5.2B.2 Void

### 5.2B.3 Void

### 5.2B.4 Void

### 5.2B.5 Void

### 5.2B.6 Void

### 5.2B.7 Void

## 5.2E Operating bands for V2X

### 5.2E.1 Intra-band V2X bands

NR V2X operation is designed to operate with E-UTRA sidelink in TDM mode on the operating bands combinations listed in Table 5.2E.1-1.

**Table 5.2E.1-1: Intra-band V2X operating bands**

| E-UTRA V2X-NR V2X Band Combination            | E-UTRA or NR Band | Interface |
|-----------------------------------------------|-------------------|-----------|
| V2X_47_n47 <sup>1</sup>                       | 47                | PC5       |
|                                               | n47               | PC5       |
| NOTE 1: Only single switched SL is supported. |                   |           |

### 5.2E.2 Inter-band V2X bands

NR V2X operation is designed to operate concurrent with E-UTRA uplink/downlink on the operating bands combinations listed in Table 5.2E.2-1.

**Table 5.2E.2-1: Inter-band con-current V2X operating bands**

| E-UTRA-NR V2X Band Combination | E-UTRA or NR Band | Interface |
|--------------------------------|-------------------|-----------|
| V2X_20_n38                     | 20                | Uu        |
|                                | n38               | PC5       |
| V2X_n71_47                     | 47                | PC5       |
|                                | n71               | Uu        |
| V2X_n71_(n) 47 <sup>1</sup>    | 47                | PC5       |
|                                | n47               | PC5       |
|                                | n71               | Uu        |

NOTE 1: Only single switched SL in ITS band is supported.

## 5.3 UE Channel bandwidth

### 5.3A UE Channel bandwidth for CA

#### 5.3A.1 Inter-band CA between FR1 and FR2

For inter-band NR CA between FR1 and FR2, a carrier aggregation configuration is a combination of operating bands, each supporting a carrier aggregation bandwidth class as specified in clause 5.3A.5 of TS 38.101-1 [2] and clause 5.3A.4 of TS 38.101-2 [3] independently.

### 5.3B UE Channel bandwidth for DC

#### 5.3B.0 General

For intra-band contiguous EN-DC, the aggregated channel bandwidth is sum of the individual NR and E-UTRA channel bandwidths assuming nominal EN-DC channel with 0 kHz offset spacing as specified in clause 5.4.

$$ENBW = BW_{NR\_Channel} + BW_{E-UTRA\_Channel}$$

In the case where the NR sub-block and/or the E-UTRA sub-block itself is composed of intra-band contiguous CA carriers, the EN-DC aggregated channel bandwidth is the sum of the aggregated channel bandwidths of the NR and E-UTRA sub-blocks assuming nominal EN-DC channel spacing between the NR sub-block and E-UTRA sub-block.

$$ENBW = BW_{NR\_Channel\_CA} + BW_{E-UTRA\_Channel\_CA}$$

Intra-band contiguous EN-DC configurations are defined using intra-band contiguous EN-DC bandwidth class notation DC\_(n)Xyz where the first EN-DC bandwidth class letter y indicates the number of contiguous E-UTRA carriers and the second EN-DC bandwidth class letter z indicates the number of contiguous NR carriers for the EN-DC combination of E-UTRA Band X and NR Band nX. Applicable contiguous intra-band EN-DC bandwidth classes are listed in Table 5.3B.0-1.

**Table 5.3B.0-1: Intra-band contiguous EN-DC bandwidth classes**

| Intra-band contiguous EN-DC bandwidth class | Number of contiguous CC |    |
|---------------------------------------------|-------------------------|----|
|                                             | E-UTRA                  | NR |
| AA                                          | 1                       | 1  |
| AB                                          | 1                       | 2  |
| CA                                          | 2                       | 1  |
| DA                                          | 3                       | 1  |

The UE channel bandwidths for band combinations including Band n41 also apply for the corresponding band combinations with Band n90 replacing Band n41 but with otherwise identical parameters. For brevity the said UE channel bandwidths for band combinations with Band n90 are not listed in the tables below but are covered by this specification.

#### 5.3B.1 Intra-band EN-DC in FR1

##### 5.3B.1.1 General

The requirements for intra-band EN-DC in this specification are defined for EN-DC configurations with associated bandwidth combination sets.

For each EN-DC configuration, requirements are specified for all bandwidth combinations contained in a *bandwidth combination set*, which is indicated per supported band combination in the UE radio access capability. A UE can indicate support of several bandwidth combination sets per band combination.

### 5.3B.1.2 BCS for Intra-band contiguous EN-DC

For intra-band contiguous EN-DC, an EN-DC configuration is consisting of an E-UTRA band and a corresponding NR band having the same frequency range which supports an intra-band contiguous EN-DC bandwidth class. For both the downlink and uplink, these EN-DC configurations comprise contiguous EN-DC sub-blocks as specified in Table 5.3B.0-1 with possible additional E-UTRA sub-blocks in the downlink.

Bandwidth combination sets for intra-band contiguous EN-DC are specified in Table 5.3B.1.2-1. The EN-DC configurations and bandwidth combination sets in Table 5.3B.1.2-1 also apply to higher order EN-DC combinations that include inter-band and intra-band EN-DC on the downlink and inter-band EN-DC on the uplink. If no BCS is reported in the UE capabilities for an intra-band combination the default is that the UE supports BCS0.

**Table 5.3B.1.2-1: EN-DC configurations and bandwidth combination sets defined for intra-band contiguous EN-DC**

| E-UTRA – NR configuration / Bandwidth combination set |                             |                                                             |                                         |                                             |                           |
|-------------------------------------------------------|-----------------------------|-------------------------------------------------------------|-----------------------------------------|---------------------------------------------|---------------------------|
| Downlink EN-DC configuration                          | Uplink EN-DC configurations | Component carriers in order of increasing carrier frequency |                                         |                                             | Bandwidth combination set |
|                                                       |                             | Channel bandwidths for E-UTRA carrier (MHz)                 | Channel bandwidths for NR carrier (MHz) | Channel bandwidths for E-UTRA carrier (MHz) |                           |
| DC_(n)5AA                                             | DC_(n)5AA <sup>4</sup>      | 5, 10                                                       | 5, 10, 15, 20                           |                                             | 25                        |
|                                                       |                             |                                                             | 5, 10, 15, 20                           | 5, 10                                       |                           |
| DC_(n)12AA                                            | DC_(n)12AA <sup>4</sup>     | 5, 10                                                       | 5, 10                                   |                                             | 15                        |
|                                                       |                             |                                                             | 5, 10                                   | 5, 10                                       |                           |
| DC_(n)38AA                                            | DC_(n)38AA <sup>4</sup>     | 5, 10, 15, 20                                               | 5, 10, 15, 20, 40                       |                                             | 50                        |
|                                                       |                             |                                                             | 5, 10, 15, 20, 40                       | 5, 10, 15, 20                               |                           |
| DC_(n)41AA                                            | DC_(n)41AA                  | 20                                                          | 40, 60, 80,100                          |                                             | 120                       |
|                                                       |                             |                                                             | 40, 60, 80,100                          | 20                                          |                           |
|                                                       |                             | 20                                                          | 40, 50, 60, 80,100                      |                                             | 120                       |
|                                                       |                             |                                                             | 40, 50, 60, 80,100                      | 20                                          |                           |
|                                                       |                             | 20                                                          | 10, 20, 30, 40, 50, 60, 80,100          |                                             | 120                       |
|                                                       |                             |                                                             | 10, 20, 30, 40, 50, 60, 80,100          | 20                                          |                           |
|                                                       |                             | 10                                                          | 20, 30, 40, 50, 60, 80,100              |                                             |                           |
|                                                       |                             |                                                             | 20, 30, 40, 50, 60, 80,100              | 10                                          |                           |
| DC_(n)41AB                                            | DC_(n)41AA                  | 10                                                          | 20+20 <sup>7</sup>                      |                                             | 70                        |
|                                                       |                             |                                                             | 20+20 <sup>7</sup>                      | 10                                          |                           |
|                                                       |                             | 20                                                          | 10+20 <sup>7</sup>                      |                                             |                           |
|                                                       |                             |                                                             | 10+20 <sup>7</sup>                      | 20                                          |                           |
|                                                       |                             | 20                                                          | 20+30 <sup>7</sup>                      |                                             |                           |
|                                                       |                             |                                                             | 20+30 <sup>7</sup>                      | 20                                          |                           |
| DC_(n)41CA                                            | DC_(n)41AA                  | 20+20 <sup>7</sup>                                          | 40, 60, 80,100                          |                                             | 140                       |
|                                                       |                             |                                                             | 40, 60, 80,100                          | 20+20 <sup>7</sup>                          |                           |
|                                                       |                             | 20+20 <sup>7</sup>                                          | 40, 50, 60, 80,100                      |                                             | 140                       |
|                                                       |                             |                                                             | 40, 50, 60, 80,100                      | 20+20 <sup>7</sup>                          |                           |
|                                                       |                             | 20+20                                                       | 10, 20, 30, 40, 50, 60, 80,100          |                                             | 140                       |
|                                                       |                             |                                                             |                                         |                                             | 2                         |

| E-UTRA – NR configuration / Bandwidth combination set |                             |                                                                        |                                         |                                                                        |                                    |                           |
|-------------------------------------------------------|-----------------------------|------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------------|------------------------------------|---------------------------|
| Downlink EN-DC configuration                          | Uplink EN-DC configurations | Component carriers in order of increasing carrier frequency            |                                         |                                                                        | Maximum aggregated bandwidth (MHz) | Bandwidth combination set |
|                                                       |                             | Channel bandwidths for E-UTRA carrier (MHz)                            | Channel bandwidths for NR carrier (MHz) | Channel bandwidths for E-UTRA carrier (MHz)                            |                                    |                           |
|                                                       |                             |                                                                        | 10, 20, 30, 40, 50, 60, 80, 100         | 20+20                                                                  |                                    |                           |
|                                                       |                             | 10+20                                                                  | 10, 20, 30, 40, 50, 60, 80, 100         |                                                                        |                                    |                           |
|                                                       |                             |                                                                        | 10, 20, 30, 40, 50, 60, 80, 100         | 10+20                                                                  |                                    |                           |
| DC_(n)41DA                                            | DC_(n)41AA                  | 20+20+20 <sup>7</sup>                                                  | 40, 60, 80, 100                         |                                                                        | 160                                | 0                         |
|                                                       |                             |                                                                        | 40, 60, 80, 100                         | 20+20+20 <sup>7</sup>                                                  | 160                                | 1                         |
|                                                       |                             | 20+20+20 <sup>7</sup>                                                  | 40, 50, 60, 80, 100                     |                                                                        |                                    |                           |
|                                                       |                             |                                                                        | 40, 50, 60, 80, 100                     | 20+20+20 <sup>7</sup>                                                  | 160                                | 2                         |
|                                                       |                             | 20+20+20 <sup>7</sup>                                                  | 30, 40, 50, 60, 80, 100                 |                                                                        |                                    |                           |
|                                                       |                             |                                                                        | 30, 40, 50, 60, 80, 100                 | 20+20+20 <sup>7</sup>                                                  |                                    |                           |
|                                                       |                             | 20+20+15 <sup>7</sup>                                                  | 30, 40, 50, 60, 80, 100                 |                                                                        |                                    |                           |
|                                                       |                             |                                                                        | 30, 40, 50, 60, 80, 100                 | 20+20+15 <sup>7</sup>                                                  |                                    |                           |
| DC_(n)48AA                                            | DC_(n)48AA <sup>4</sup>     | 5, 10, 15, 20                                                          | 5, 10, 15, 20, 40                       |                                                                        | 60                                 | 0                         |
|                                                       |                             |                                                                        | 5, 10, 15, 20, 40                       | 5, 10, 15, 20                                                          |                                    |                           |
| DC_48A-(n)48AA                                        | DC_(n)48AA <sup>4</sup>     | See CA_48A-48A Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-3 | 5, 10, 15, 20, 40                       |                                                                        | 80                                 | 0                         |
|                                                       |                             |                                                                        | 5, 10, 15, 20, 40                       | See CA_48A-48A Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-3 |                                    |                           |
| DC_(n)48CA                                            | DC_(n)48AA <sup>4</sup>     | See CA_48C Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1     | 5, 10, 15, 20, 40                       |                                                                        | 80                                 | 0                         |
|                                                       |                             |                                                                        | 5, 10, 15, 20, 40                       | See CA_48C Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1     |                                    |                           |
| DC_(n)48DA                                            | DC_(n)48AA <sup>4</sup>     | See CA_48D Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1     | 5, 10, 15, 20, 40                       |                                                                        | 100                                | 0                         |
|                                                       |                             |                                                                        | 5, 10, 15, 20, 40                       | See CA_48D Bandwidth                                                   |                                    |                           |

| E-UTRA – NR configuration / Bandwidth combination set                                                                                                                                                                                                                                                                                                                                           |                             |                                                             |                                         |                                               |                                    |                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------|-----------------------------------------|-----------------------------------------------|------------------------------------|---------------------------|
| Downlink EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                    | Uplink EN-DC configurations | Component carriers in order of increasing carrier frequency |                                         |                                               | Maximum aggregated bandwidth (MHz) | Bandwidth combination set |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             | Channel bandwidths for E-UTRA carrier (MHz)                 | Channel bandwidths for NR carrier (MHz) | Channel bandwidths for E-UTRA carrier (MHz)   |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                             |                                         | Combination Set 0 in TS 36.101 Table 5.6A.1-1 |                                    |                           |
| DC_(n)71AA                                                                                                                                                                                                                                                                                                                                                                                      | DC_(n)71AA <sup>3</sup>     | 15                                                          | 5                                       |                                               | 20                                 | 0                         |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             | 10                                                          | 5, 10                                   |                                               |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             | 5                                                           | 5, 10, 15                               |                                               |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                             | 5                                       | 15                                            |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                             | 5, 10                                   | 10                                            |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                             | 5, 10, 15                               | 5                                             |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             | 5                                                           | 5,10,15,20                              |                                               | 25 <sup>3</sup>                    | 1                         |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             | 10                                                          | 5,10,15                                 |                                               |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             | 15                                                          | 5,10                                    |                                               |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                             | 5,10,15,20                              | 5                                             |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                             | 5,10,15                                 | 10                                            |                                    |                           |
|                                                                                                                                                                                                                                                                                                                                                                                                 |                             |                                                             | 5,10                                    | 15                                            |                                    |                           |
| NOTE 1: Void                                                                                                                                                                                                                                                                                                                                                                                    |                             |                                                             |                                         |                                               |                                    |                           |
| NOTE 2: Void                                                                                                                                                                                                                                                                                                                                                                                    |                             |                                                             |                                         |                                               |                                    |                           |
| NOTE 3: For maximum DL aggregated bandwidth of 25 MHz the asymmetric UL and DL channel bandwidth combination of Table 5.3.6-1 in TS 38.101-1 [2] is used with a maximum UL contiguous aggregated bandwidth of 20 MHz. Furthermore, a restriction is imposed on bandwidth combinations so that only a subset of BCS1 is allowed to be used on the uplink, and this subset is equivalent to BCS0. |                             |                                                             |                                         |                                               |                                    |                           |
| NOTE4: Only single switched UL is supported.                                                                                                                                                                                                                                                                                                                                                    |                             |                                                             |                                         |                                               |                                    |                           |
| NOTE5: For TDD bands, the minimum requirements only apply for non-simultaneous Tx/Rx between all carriers.                                                                                                                                                                                                                                                                                      |                             |                                                             |                                         |                                               |                                    |                           |
| NOTE6: The UE does not include the intraBandENDC-Support and intraBandENDC-Support-UL (absent) for these configurations if supported.                                                                                                                                                                                                                                                           |                             |                                                             |                                         |                                               |                                    |                           |
| NOTE 7: X+X or X+X+X presents contiguous intra-band CA configurations with component carriers in order of increasing carrier frequency as listed                                                                                                                                                                                                                                                |                             |                                                             |                                         |                                               |                                    |                           |

### 5.3B.1.3 BCS for Intra-band non-contiguous EN-DC

For intra-band non-contiguous EN-DC, an EN-DC configuration is consisting of an E-UTRA band and a corresponding NR band having the same frequency range which supports E-UTRA and NR carriers, where E-UTRA configuration is indicated by using E-UTRA CA bandwidth class as defined in TS 36.101 [4] and NR configuration is indicated by using NR CA bandwidth class as defined in TS 38.101-1 [2].

Requirements for intra-band non-contiguous EN-DC are defined for the EN-DC configurations and bandwidth combination sets specified in Table 5.3B.1.3-1. The EN-DC configurations and bandwidth combination sets in Table 5.3B.1.3-1 also apply to higher order EN-DC combinations that include inter-band and intra-band EN-DC on the downlink and inter-band EN-DC on the uplink. If no BCS is reported in the UE capabilities for an intra-band combination the default is that the UE supports BCS0.

**Table 5.3B.1.3-1: EN-DC configurations and bandwidth combination sets defined for intra-band non-contiguous EN-DC**

| E-UTRA – NR configuration / Bandwidth combination set |                             |                                                             |                                         |                                             |                                    |                           |
|-------------------------------------------------------|-----------------------------|-------------------------------------------------------------|-----------------------------------------|---------------------------------------------|------------------------------------|---------------------------|
| Downlink EN-DC configuration                          | Uplink EN-DC configurations | Component carriers in order of increasing carrier frequency |                                         |                                             | Maximum aggregated bandwidth (MHz) | Bandwidth combination set |
|                                                       |                             | Channel bandwidths for E-UTRA carrier (MHz)                 | Channel bandwidths for NR carrier (MHz) | Channel bandwidths for E-UTRA carrier (MHz) |                                    |                           |
| DC_2A_n2A                                             | DC_2A_n2A <sup>2</sup>      | 5, 10, 15, 20                                               | 5, 10, 15, 20                           |                                             | 40                                 | 0                         |

|                        |                          |                                                                        |                                 |                                                                        |     |   |
|------------------------|--------------------------|------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------|-----|---|
| DC_3A_n3A              | DC_3A_n3A                |                                                                        | 5, 10, 15, 20, 25, 30           | 5, 10, 15, 20                                                          | 50  | 0 |
|                        |                          |                                                                        | 5, 10, 15, 20, 25, 30           | 5, 10, 15, 20                                                          | 50  | 1 |
|                        |                          | 5, 10, 15, 20                                                          | 5, 10, 15, 20, 25, 30           |                                                                        |     |   |
| DC_5A_n5A              | DC_5A_n5A <sup>2</sup>   | 5, 10                                                                  | 5, 10, 15                       |                                                                        | 20  | 0 |
| DC_7A_n7A <sup>3</sup> | DC_7A_n7A <sup>2</sup>   | 5, 10, 15, 20                                                          | 5, 10, 15, 20                   |                                                                        | 40  | 0 |
| DC_41A_n41A            | DC_41A_n41A              | 20                                                                     | 40, 60, 80, 100                 |                                                                        | 120 | 0 |
|                        |                          |                                                                        | 40, 60, 80, 100                 | 20                                                                     |     |   |
|                        |                          | 20                                                                     | 40, 50, 60, 80, 100             |                                                                        | 120 | 1 |
|                        |                          |                                                                        | 40, 50, 60, 80, 100             | 20                                                                     |     |   |
|                        |                          | 20                                                                     | 10, 20, 30, 40, 50, 60, 80, 100 |                                                                        | 120 | 2 |
|                        |                          |                                                                        | 10, 20, 30, 40, 50, 60, 80, 100 | 20                                                                     |     |   |
|                        |                          | 10                                                                     | 20, 30, 40, 50, 60, 80, 100     |                                                                        |     |   |
|                        |                          |                                                                        | 20, 30, 40, 50, 60, 80, 100     | 10                                                                     |     |   |
| DC_41C_n41A            | DC_41A_n41A              | 20+20 <sup>6</sup>                                                     | 40, 60, 80, 100                 |                                                                        | 140 | 0 |
|                        |                          |                                                                        | 40, 60, 80, 100                 | 20+20 <sup>6</sup>                                                     |     |   |
|                        |                          | 20+20 <sup>6</sup>                                                     | 40, 50, 60, 80, 100             |                                                                        | 140 | 1 |
|                        |                          |                                                                        | 40, 50, 60, 80, 100             | 20+20 <sup>6</sup>                                                     |     |   |
| DC_41D_n41A            | DC_41A_n41A              | 20+20+20 <sup>6</sup>                                                  | 40, 60, 80, 100                 |                                                                        | 160 | 0 |
|                        |                          |                                                                        | 40, 60, 80, 100                 | 20+20+20 <sup>6</sup>                                                  |     |   |
|                        |                          | 20+20+20 <sup>6</sup>                                                  | 40, 50, 60, 80, 100             |                                                                        | 160 | 1 |
|                        |                          |                                                                        | 40, 50, 60, 80, 100             | 20+20+20 <sup>6</sup>                                                  |     |   |
| DC_48A_n48A            | DC_48A_n48A <sup>2</sup> | 5, 10, 15, 20                                                          | 5, 10, 15, 20, 40               |                                                                        | 60  | 0 |
|                        |                          |                                                                        | 5, 10, 15, 20, 40               | 5, 10, 15, 20                                                          |     |   |
| DC_48A-48A_n48A        | DC_48A_n48A <sup>2</sup> | See CA_48A-48A Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-3 | 5, 10, 15, 20, 40               |                                                                        | 80  | 0 |
|                        |                          |                                                                        | 5, 10, 15, 20, 40               | See CA_48A-48A Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-3 |     |   |
| DC_48C_n48A            | DC_48A_n48A <sup>2</sup> | See CA_48C Bandwidth Combination Set 0 in TS                           | 5, 10, 15, 20, 40               |                                                                        | 80  | 0 |

|                 |                          |                                                                        |                   |                                                                    |     |   |
|-----------------|--------------------------|------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------|-----|---|
|                 |                          | 36.101 Table 5.6A.1-1                                                  |                   |                                                                    |     |   |
|                 |                          |                                                                        | 5, 10, 15, 20, 40 | See CA_48C Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1 |     |   |
| DC_48D_n48A     | DC_48A_n48A <sup>2</sup> | See CA_48D Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1     | 5, 10, 15, 20, 40 |                                                                    | 100 | 0 |
|                 |                          |                                                                        | 5, 10, 15, 20, 40 | See CA_48D Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1 |     |   |
| DC_66A_n66A     | DC_66A_n66A <sup>2</sup> | 5, 10, 15, 20                                                          | 5, 10, 15, 20, 40 |                                                                    | 50  | 0 |
| DC_66A-66A_n66A | DC_66A_n66A <sup>2</sup> | See CA_66A-66A Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-3 | 5, 10, 15, 20, 40 |                                                                    | 70  | 0 |

NOTE 1: Void.

NOTE 2: Only single switched UL is supported.

NOTE 3: Requirements in this specification apply for NR SCS of 15 kHz only.

NOTE 4: For TDD bands, the minimum requirements only apply for non-simultaneous Tx/Rx between all carriers.

NOTE 5: The UE supporting the configurations indicates intraBandENDC-Support = 'non-contiguous' with intraBandENDC-Support-UL absent.

NOTE 6: X+X or X+X+X presents contiguous intra-band CA configurations with component carriers in order of increasing carrier frequency as listed

**Table 5.3B.1.3-2: EN-DC configurations and bandwidth combination sets defined for mixed intra-band contiguous and non-contiguous EN-DC**

| E-UTRA – NR configuration / Bandwidth combination set |                             |                                                                    |                                         |                                                                    |                                    |                           |
|-------------------------------------------------------|-----------------------------|--------------------------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------|------------------------------------|---------------------------|
| Downlink EN-DC configuration                          | Uplink EN-DC configurations | Component carriers in order of increasing carrier frequency        |                                         |                                                                    | Maximum aggregated bandwidth (MHz) | Bandwidth combination set |
|                                                       |                             | Channel bandwidths for E-UTRA carrier (MHz)                        | Channel bandwidths for NR carrier (MHz) | Channel bandwidths for E-UTRA carrier (MHz)                        |                                    |                           |
| DC_(n)48CA <sup>5,6</sup>                             | DC_48A_n48A <sup>2</sup>    | See CA_48C Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1 | 5, 10, 15, 20, 40                       |                                                                    | 80                                 | 0                         |
|                                                       |                             |                                                                    | 5, 10, 15, 20, 40                       | See CA_48C Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1 |                                    |                           |
| DC_(n)48DA <sup>5,6</sup>                             | DC_48A_n48A <sup>2</sup>    | See CA_48D Bandwidth Combination                                   | 5, 10, 15, 20, 40                       |                                                                    | 100                                | 0                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                                                        |                   |                                                                        |    |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------|----|---|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          | Set 0 in TS 36.101 Table 5.6A.1-1                                      |                   |                                                                        |    |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                                                        | 5, 10, 15, 20, 40 | See CA_48D Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-1     |    |   |
| DC_48A-(n)48AA <sup>4,5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_48A_n48A <sup>2</sup> | See CA_48A-48A Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-3 | 5, 10, 15, 20, 40 |                                                                        | 80 | 0 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                                                        | 5, 10, 15, 20, 40 | See CA_48A-48A Bandwidth Combination Set 0 in TS 36.101 Table 5.6A.1-3 |    |   |
| <p>NOTE 1: Void.</p> <p>NOTE 2: Only single switched UL is supported.</p> <p>NOTE 3: Requirements in this specification apply for NR SCS of 15 kHz only.</p> <p>NOTE 4: For TDD bands, the minimum requirements only apply for non-simultaneous Tx/Rx between all carriers.</p> <p>NOTE 5: The UE supporting these configurations indicates intraBandENDC-Support-UL = 'non-contiguous' with intraBandENDC-Support absent.</p> <p>NOTE 6: The minimum requirements also apply for the intra-band non-contiguous fallback resulting from releasing an Scell within the sub-block bandwidth of the downlink configuration..</p> |                          |                                                                        |                   |                                                                        |    |   |

### 5.3C Void

### 5.3D Void

## 5.3E UE Channel bandwidth for V2X

### 5.3E.0 General

The requirements specified in clause 5.3B are applicable to NR V2X UE.

### 5.3E.1 Intra-band contiguous V2X in FR1

For intra-band contiguous E-UTRA NR V2X UE, an EN-DC bandwidth class in Table 5.3B.0-1 are considered to specify the V2X transmission/reception configurations.

Bandwidth combination sets and V2X transmission/reception configurations for intra-band contiguous V2X UE are specified in Table 5.3E.1-1.

**Table 5.3E.1-1: E-UTRA-NR V2X configurations and bandwidth combination sets for intra-band contiguous V2X UE**

| V2X configuration | SL transmissison band         | Channel bandwidths for E-UTRA carrier (MHz) | Channel bandwidths for NR carrier (MHz) | Maximum aggregated bandwidth (MHz) | Bandwidth combination set |
|-------------------|-------------------------------|---------------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| V2X_(n)47AA       | E-UTRA Band 47 or NR band n47 | 10                                          | 10,20,30,40                             | 60                                 | 0                         |
|                   |                               | 20                                          | 10,20,30,40                             |                                    |                           |

## 5.3E.2 Intra-band non-contiguous V2X in FR1

For intra-band non-contiguous E-UTRA NR V2X UE, an EN-DC bandwidth class in Table 5.3B.0-1 are considered to specify the V2X transmission/reception configurations.

Bandwidth combination sets and SL transmission/reception configurations for intra-band non-contiguous V2X are specified in Table 5.3E.2-1.

**Table 5.3E.2-1: E-UTRA-NR V2X configurations and bandwidth combination sets for intra-band non-contiguous V2X UE**

| V2X configuration | SL transmissison band         | Channel bandwidths for E-UTRA carrier (MHz) | Channel bandwidths for NR carrier (MHz) | Maximum aggregated bandwidth (MHz) | Bandwidth combination set |
|-------------------|-------------------------------|---------------------------------------------|-----------------------------------------|------------------------------------|---------------------------|
| V2X_47A_n47A      | E-UTRA Band 47 or NR band n47 | 10                                          | 10,20,30,40                             | 60                                 | 0                         |
|                   |                               | 20                                          | 10,20,30,40                             |                                    |                           |

## 5.3E.3 Inter-band V2X in FR1

For inter-band E-UTRA NR V2X UE, the each channel bandwidth for inter-band V2X operations in FR1 is specified in TS 36.101 [4] and TS 38.101-1 [2], respectively.

## 5.4 Void

### 5.4A Channel arrangement for CA

The channel arrangement for CA operations in FR1 and FR2 as specified in TS 38.101-1 [2] and TS 38.101-2 [3], respectively.

### 5.4B Channel arrangement for DC

#### 5.4B.0 General

The channel arrangement for intra-band EN-DC operations in FR1 is specified in TS 36.101 [4] and TS 38.101-1 [2], respectively.

### 5.4B.1 Channel spacing for intra-band EN-DC carriers

The spacing between carriers will depend on the deployment scenario, the size of the frequency block available and the channel bandwidths. The nominal channel spacing between E-UTRA carrier and an adjacent NR carrier for intra-band contiguous EN-DC is defined as following:

- For NR operating bands with 100 kHz channel raster,

$$\text{Nominal Channel spacing} = (BW_{\text{E-UTRA\_Channel}} + BW_{\text{NR\_Channel}})/2$$

- For NR operating bands with 15 kHz channel raster,
  - Nominal Channel spacing =  $(BW_{\text{E-UTRA\_Channel}} + BW_{\text{NR\_Channel}})/2 + \{-5\text{kHz}, 0\text{kHz}, 5\text{kHz}\}$  for  $\Delta F_{\text{Raster}}$  equals to 15 kHz
  - Nominal Channel spacing =  $(BW_{\text{E-UTRA\_Channel}} + BW_{\text{NR\_Channel}})/2 + \{-10\text{ kHz}, 0\text{ kHz}, 10\text{ kHz}\}$  for  $\Delta F_{\text{Raster}}$  equals to 30 kHz

where  $BW_{\text{E-UTRA\_Channel}}$  and  $BW_{\text{NR\_Channel}}$  are the channel bandwidths of the E-UTRA and NR carriers,  $\Delta F_{\text{Raster}}$  is the band dependent channel raster granularity defined in TS38.101-1[2]. The channel spacing can be adjusted depending on the channel raster to optimize performance in a particular deployment scenario.

For intra-band non-contiguous EN-DC the channel spacing between E-UTRA and NR carriers shall be larger than the nominal channel spacing defined in this clause.

## 5.5 Configuration

### 5.5A Configuration for CA

#### 5.5A.1 Inter-band CA configurations between FR1 and FR2

The configurations for operating bands for CA including Band n41 also apply for the corresponding operating bands for CA with Band n90 replacing Band n41 but with otherwise identical parameters. For brevity the said configuration for operating bands for CA with Band n90 are not listed in the tables below but are covered by this specification.

**Table 5.5A.1-1: Inter-band CA configurations and bandwidth combinations sets between FR1 and FR2 (two bands)**

| NR CA configuration | Uplink CA configuration                      | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|----------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                              |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n1A-n257A        | CA_n1A-n257A                                 | n1      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                              | n257    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n257A        | CA_n3A-n257A                                 | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                              | n257    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n257D        | CA_n3A-n257A<br>CA_n3A-n257D                 | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                              | n257    | CA_n257D                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n257G        | CA_n3A-n257A<br>CA_n3A-n257G                 | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                              | n257    | CA_n257G                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n257H        | CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                              | n257    | CA_n257H                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration | Uplink CA configuration                                      | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|--------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                              |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n3A-n257I        | CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n3A-n257I | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n257    | CA_n257I                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n260A        | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    |                                  |    |    |    |    |    | 50 |    |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n5A-n260(2A)     | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n260(3A)     | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(3A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n260(4A)     | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(4A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n260(5A)     | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(5A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n260(6A)     | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(6A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n260(7A)     | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(7A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n260(8A)     | CA_n5A-n260A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(8A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261A        | CA_n5A-n261A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    |                                  |    |    |    |    |    | 50 |    |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n5A-n261(2A)     | CA_n5A-n261A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261(3A)     | CA_n5A-n261A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                      | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|--------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                              |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     |                                                              | n261    | CA_n261(3A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261(4A)     | CA_n5A-n261A                                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261(4A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261G        | CA_n5A-n261A<br>CA_n5A-n261G                                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261G                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261H        | CA_n5A-n261A<br>CA_n5A-n261G<br>CA_n5A-n261H                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261H                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261I        | CA_n5A-n261A<br>CA_n5A-n261G<br>CA_n5A-n261H<br>CA_n5A-n261I | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261I                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261J        | CA_n5A-n261A<br>CA_n5A_n261G<br>CA_n5A_n261H<br>CA_n5A_n261I | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261J                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261K        | CA_n5A-n261A<br>CA_n5A_n261G<br>CA_n5A_n261H                 | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                      | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|--------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                              |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     | CA_n5A_n261I                                                 |         |                                  |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                              | n261    | CA_n261J                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261L        | CA_n5A-n261A<br>CA_n5A_n261G<br>CA_n5A_n261H<br>CA_n5A_n261I | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261L                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n5A-n261M        | CA_n5A-n261A<br>CA_n5A-n261G<br>CA_n5A-n261H<br>CA_n5A-n261I | n5      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    | CA_n261M                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n8A-n258A        | CA_n8A-n258A                                                 | n8      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n258    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n25A-n260A       | -                                                            | n25     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n25A-n260(2A)    | -                                                            | n25     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n25A-n260(3A)    | -                                                            | n25     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(3A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n25A-n260(4A)    | -                                                            | n25     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n260    | CA_n260(4A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n25A-n261A       | -                                                            | n25     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                              | n261    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n25A-n261(2A)    | -                                                            | n25     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                          | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|------------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                  |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     |                                                                  | n261    | CA_n261(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n257A       | CA_n28A-n257A                                                    | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n257    |                                  |    |    |    |    |    | 50 |    |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n28A-n257D       | CA_n28A-n257A<br>CA_n28A-n257D                                   | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n257    | CA_n257D                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n257G       | CA_n28A-n257A<br>CA_n28A-n257G                                   | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n257    | CA_n257G                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n257H       | CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H                  | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n257    | CA_n257H                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n257I       | CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n28A-n257I | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n257    | CA_n257I                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n41A-n260A       | -                                                                | n41     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                  | n260    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n41A-n260(2A)    | -                                                                | n41     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                  | n260    | CA_n260(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n41A-n260(3A)    | -                                                                | n41     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                  | n260    | CA_n260(3A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n41A-n260(4A)    | -                                                                | n41     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |

| NR CA configuration | Uplink CA configuration | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     | Bandwidth combination set |
|---------------------|-------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|---------------------------|
|                     |                         |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400                       |
|                     |                         | n260    | CA_n260(4A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |
| CA_n41C-n260A       | -                       | n41     | CA_n41C                          |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n260    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400                       |
| CA_n41C-n260(2A)    | -                       | n41     | CA_n41C                          |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n260    | CA_n260(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |
| CA_n41(2A)-n260A    | -                       | n41     | CA_n41(2A) BCS1                  |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n260    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400                       |
| CA_n41(2A)-n260(2A) | -                       | n41     | CA_n41(2A) BCS1                  |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n260    | CA_n260(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |
| CA_n41A-n261A       | -                       | n41     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     | 0                         |
|                     |                         | n261    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400                       |
| CA_n41A-n261(2A)    | -                       | n41     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     | 0                         |
|                     |                         | n261    | CA_n261(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |
| CA_n41C-n261A       | -                       | n41     | CA_n41C                          |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n261    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400                       |
| CA_n41(2A)-n261A    | -                       | n41     | CA_n41(2A) BCS1                  |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n261    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400                       |
| CA_n41C-n261(2A)    | -                       | n41     | CA_n41C                          |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n261    | CA_n261(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |
| CA_n41(2A)-n261(2A) | -                       | n41     | CA_n41(2A) BCS1                  |    |    |    |    |    |    |    |    |    |    |    |     |     | 0                         |
|                     |                         | n261    | CA_n261(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |
| CA_n66A-n260A       | CA_n66A-n260A           | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     | 0                         |
|                     |                         | n260    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400                       |
| CA_n66A-n260(2A)    | CA_n66A-n260A           | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     | 0                         |
|                     |                         | n260    | CA_n260(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |

| NR CA configuration | Uplink CA configuration                         | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|-------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                 |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n66A-n260(3A)    | CA_n66A-n260A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n260    | CA_n260(3A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n260(4A)    | CA_n66A-n260A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n260    | CA_n260(4A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n260(5A)    | CA_n66A-n260A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n260    | CA_n260(5A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n260(6A)    | CA_n66A-n260A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n260    | CA_n260(6A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n260(7A)    | CA_n66A-n260A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n260    | CA_n260(7A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n260(8A)    | CA_n66A-n260A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n260    | CA_n260(8A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261A       | CA_n66A-n261A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n261    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n66A-n261(2A)    | CA_n66A-n261A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n261    | CA_n261(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261(3A)    | CA_n66A-n261A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n261    | CA_n261(3A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261(4A)    | CA_n66A-n261A                                   | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n261    | CA_n261(4A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261G       | CA_n66A-n261A<br>CA_n66A-n261G                  | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n261    | CA_n261G                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261H       | CA_n66A-n261A<br>CA_n66A-n261G<br>CA_n66A-n261H | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                          | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|------------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                  |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     |                                                                  | n261    | CA_n261H                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261I       | CA_n66A-n261A<br>CA_n66A-n261G<br>CA_n66A-n261H<br>CA_n66A-n261  | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n261    | CA_n261                          |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261J       | CA_n66A-n261A                                                    | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n261    | CA_n261J                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261K       | CA_n66A-n261A                                                    | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n261    | CA_n261K                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261L       | CA_n66A-n261A                                                    | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n261    | CA_n261L                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n66A-n261M       | CA_n66A-n261A<br>CA_n66A-n261G<br>CA_n66A-n261H<br>CA_n66A-n261I | n66     | 5                                | 10 | 15 | 20 |    |    | 40 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n261    | CA_n261M                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n71A-n257A       | -                                                                | n71     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n257    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n71A-n260A       | -                                                                | n71     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n260    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n71A-n260(2A)    | -                                                                | n71     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n260    | CA_n260(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n71A-n260(3A)    | -                                                                | n71     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                  | n260    | CA_n260(3A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration | Uplink CA configuration                                                 | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|-------------------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                         |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n71A-n260(4A)    | -                                                                       | n71     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                         | n260    | CA_n260(4A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n71A-n261A       | -                                                                       | n71     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                         | n261    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n71A-n261(2A)    | -                                                                       | n71     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                         | n261    | CA_n261(2A)                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n257A       | CA_n77A-n257A                                                           | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                         | n257    |                                  |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n77A-n257D       | CA_n77A-n257A<br>CA_n77A-n257D                                          | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                         | n257    | CA_n257D                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n257E       | CA_n77A-n257A                                                           | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                         | n257    | CA_n257E                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n257F       | CA_n77A-n257A                                                           | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                         | n257    | CA_n257F                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n257G       | CA_n257G<br>CA_n77A-n257A<br>CA_n77A-n257G                              | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                         | n257    | CA_n257G                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n257H       | CA_n257G<br>CA_n257H<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                         | n257    | CA_n257H                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n257I       | CA_n257G<br>CA_n257H<br>CA_n257I                                        | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                                                                                                                        | NR Band | Channel bandwidth (MHz) (NOTE 3)              |    |    |    |    |    |    |    |    |    |    |    |     |     | Bandwidth combination set |     |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|---------------------------|-----|
|                     |                                                                                                                                                                |         | 5                                             | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 |                           | 400 |
|                     | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I                                                                                               |         |                                               |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                                                | n257    | CA_n257I                                      |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
| CA_n77A-n257J       | CA_n257G<br>CA_n257H<br>CA_n257I<br>CA_n257J<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n77A-n257J                              | n77     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |                           | 0   |
|                     |                                                                                                                                                                | n257    | See CA_n257J in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
| CA_n77A-n257K       | CA_n257G<br>CA_n257H<br>CA_n257I<br>CA_n257J<br>CA_n257K<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n77A-n257J<br>CA_n77A-n257K | n77     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |                           | 0   |
|                     |                                                                                                                                                                | n257    | See CA_n257K in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |

| NR CA configuration | Uplink CA configuration                                                                                                                                                                                 | NR Band | Channel bandwidth (MHz) (NOTE 3)              |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                                                                                                         |         | 5                                             | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n77A-n257L       | CA_n257G<br>CA_n257H<br>CA_n257I<br>CA_n257J<br>CA_n257K<br>CA_n257L<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I,<br>CA_n77A-n257J<br>CA_n77A-n257K<br>CA_n77A-n257L            | n77     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                                                                                                                         | n257    | See CA_n257L in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n257M       | CA_n257G<br>CA_n257H<br>CA_n257I<br>CA_n257J<br>CA_n257K<br>CA_n257L<br>CA_n257M<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n77A-n257J<br>CA_n77A-n257K<br>CA_n77A-n257L | n77     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                         | NR Band | Channel bandwidth (MHz) (NOTE 3)              |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|-------------------------------------------------|---------|-----------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                 |         | 5                                             | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     | CA_n77A-n257M                                   |         |                                               |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                 | n257    | See CA_n257M in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77C-n257A       | CA_n77A-n257A                                   | n77     | CA_n77C                                       |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    |                                               |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n77C-n257D       | CA_n77A-n257A                                   | n77     | CA_n77C                                       |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    | CA_n257D                                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77C-n257E       | CA_n77A-n257A                                   | n77     | CA_n77C                                       |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    | CA_n257E                                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77C-n257F       | CA_n77A-n257A                                   | n77     | CA_n77C                                       |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    | CA_n257F                                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77(2A)-n257A    | CA_n77A-n257A                                   | n77     | CA_n77(2A)                                    |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    |                                               |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n77(2A)-n257D    | CA_n77A-n257A<br>CA_n77A-n257D                  | n77     | CA_n77(2A)                                    |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    | CA_n257D                                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77(2A)-n257G    | CA_n77A-n257A<br>CA_n77A-n257G                  | n77     | CA_n77(2A)                                    |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    | CA_n257G                                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77(2A)-n257H    | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H | n77     | CA_n77(2A)                                    |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                 | n257    | CA_n257H                                      |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77(2A)-n257I    | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H | n77     | CA_n77(2A)                                    |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                                                                             | NR Band | Channel bandwidth (MHz) (NOTE 3)                |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|---------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                     |         | 5                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     | CA_n77A-n257I                                                                                                       |         |                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                                                                                     | n257    | See CA_n257I in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77(2A)-n257J    | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n77A-n257J                                   | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                     | n257    | See CA_n257J in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77(2A)-n257K    | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n77A-n257J<br>CA_n77A-n257K                  | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                     | n257    | See CA_n257K in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77(2A)-n257L    | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n77A-n257J<br>CA_n77A-n257K<br>CA_n77A-n257L | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                     | n257    | See CA_n257L in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration | Uplink CA configuration                                                                                                              | NR Band | Channel bandwidth (MHz) (NOTE 3)                |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | Bandwidth combination set |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------|----|----|----|----|----|----|----|----|-----------------|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                                      |         | 5                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70              | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n77(2A)-n257M    | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n77A-n257J<br>CA_n77A-n257K<br>CA_n77A-n257L<br>CA_n77A-n257M | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | 0                         |
|                     |                                                                                                                                      | n257    | See CA_n257M in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n258A       | -                                                                                                                                    | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 |                 | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                                                      | n258    |                                                 |    |    |    |    |    |    | 50 |    |                 |    |    | 100 | 200 | 400 |                           |
| CA_n77A-n261A       | CA_n77A-n261A                                                                                                                        | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                      | n261    |                                                 |    |    |    |    |    |    | 50 |    |                 |    |    | 100 | 200 | 400 |                           |
| CA_n77A-n261D       | CA_n77A-n261A<br>CA_n77A-n261D                                                                                                       | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                      | n261    | CA_n261D                                        |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261G       | CA_n77A-n261A<br>CA_n77A-n261G                                                                                                       | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                      | n261    | CA_n261G                                        |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261H       | CA_n77A-n261A<br>CA_n77A-n261G<br>CA_n77A-n261H                                                                                      | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                      | n261    | CA_n261H                                        |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |

| NR CA configuration | Uplink CA configuration                                                                            | NR Band | Channel bandwidth (MHz) (NOTE 3)              |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | Bandwidth combination set |
|---------------------|----------------------------------------------------------------------------------------------------|---------|-----------------------------------------------|----|----|----|----|----|----|----|----|-----------------|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                    |         | 5                                             | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70              | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n77A-n261I       | CA_n77A-n261A<br>CA_n77A-n261G<br>CA_n77A-n261H<br>CA_n77A-n261I                                   | n77     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                    | n261    | CA_n261I                                      |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261J       | CA_n77A-n261A<br>CA_n77A-n261G<br>CA_n77A-n261H<br>CA_n77A-n261I<br>CA_n77A-n261J                  | n77     |                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                                                                                    | n261    | See CA_n261J in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261K       | CA_n77A-n261A<br>CA_n77A-n261G<br>CA_n77A-n261H<br>CA_n77A-n261I<br>CA_n77A-n261J<br>CA_n77A-n261K | n77     |                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                                                                                    | n261    | See CA_n261K in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261L       | CA_n77A-n261A<br>CA_n77A-n261G<br>CA_n77A-n261H<br>CA_n77A-n261I                                   | n77     |                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |

| NR CA configuration | Uplink CA configuration                                                                                                              | NR Band                                       | Channel bandwidth (MHz) (NOTE 3)                 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | Bandwidth combination set |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------|----|----|----|----|----|----|----|----|-----------------|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                                      |                                               | 5                                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70              | 80 | 90 | 100 | 200 | 400 |                           |
|                     | CA_n77A-n261J<br>CA_n77A-n261K<br>CA_n77A-n261L                                                                                      |                                               |                                                  |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
|                     | n261                                                                                                                                 | See CA_n261L in Table 5.5A.1-1 in TS 38.101-2 |                                                  |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261M       | CA_n77A-n261A<br>CA_n77A-n261G<br>CA_n77A-n261H<br>CA_n77A-n261I<br>CA_n77A-n261J<br>CA_n77A-n261K<br>CA_n77A-n261L<br>CA_n77A-n261M | n77                                           |                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     | n261                                                                                                                                 | See CA_n261M in Table 5.5A.1-1 in TS 38.101-2 |                                                  |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(2A)    | CA_n77A-n261A                                                                                                                        | n77                                           |                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                                                                                                                      | n261                                          | See CA_n261(2A) in Table 5.5A.2-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(2G)    | CA_n77A-n261A                                                                                                                        | n77                                           |                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                                                                                                                      | n261                                          | See CA_n261(2G) in Table 5.5A.2-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(2H)    | CA_n77A-n261A                                                                                                                        | n77                                           |                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                                                                                                                      | n261                                          | See CA_n261(2H) in Table 5.5A.2-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(2I)    | CA_n77A-n261A                                                                                                                        | n77                                           |                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                                                                                                                      | n261                                          | See CA_n261(2I) in Table 5.5A.2-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(3A)    | CA_n77A-n261A                                                                                                                        | n77                                           |                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                                                                                                                      | n261                                          | See CA_n261(3A) in Table 5.5A.2-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(4A)    | CA_n77A-n261A                                                                                                                        | n77                                           |                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |

| NR CA configuration | Uplink CA configuration        | NR Band | Channel bandwidth (MHz) (NOTE 3)                  |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | Bandwidth combination set |
|---------------------|--------------------------------|---------|---------------------------------------------------|----|----|----|----|----|----|----|----|-----------------|----|----|-----|-----|-----|---------------------------|
|                     |                                |         | 5                                                 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70              | 80 | 90 | 100 | 200 | 400 |                           |
|                     |                                | n261    | See CA_n261(4A) in Table 5.5A.2-1 in TS 38.101-2  |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(A-G)   | CA_n77A-n261A                  | n77     |                                                   | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                | n261    | See CA_n261(A-G) in Table 5.5A.2-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(A-H)   | CA_n77A-n261A                  | n77     |                                                   | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     | 0                         |
|                     |                                | n261    | See CA_n261(A-H) in Table 5.5A.2-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(A-I)   | CA_n77A-n261A                  | n77     |                                                   | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     |                           |
|                     |                                | n261    | See CA_n261(A-I) in Table 5.5A.2-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(G-H)   | CA_n77A-n261A                  | n77     |                                                   | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     |                           |
|                     |                                | n261    | See CA_n261(G-H) in Table 5.5A.2-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(G-I)   | CA_n77A-n261A                  | n77     |                                                   | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     |                           |
|                     |                                | n261    | See CA_n261(G-I) in Table 5.5A.2-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n77A-n261(H-I)   | CA_n77A-n261A                  | n77     |                                                   | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 <sup>1</sup> | 80 | 90 | 100 | 200 |     |                           |
|                     |                                | n261    | See CA_n261(H-I) in Table 5.5A.2-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n78A-n257A       | CA_n78A-n257A                  | n78     |                                                   | 10 | 15 | 20 |    |    | 40 | 50 | 60 |                 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                | n257    |                                                   |    |    |    |    |    |    | 50 |    |                 |    |    | 100 | 200 | 400 |                           |
| CA_n78A-n257D       | CA_n78A-n257A<br>CA_n78A-n257D | n78     |                                                   | 10 | 15 | 20 |    |    | 40 | 50 | 60 |                 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                | n257    | CA_n257D                                          |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n78A-n257E       | CA_n78A-n257A                  | n78     |                                                   | 10 | 15 | 20 |    |    | 40 | 50 | 60 |                 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                | n257    | CA_n257E                                          |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n78A-n257F       | CA_n78A-n257A                  | n78     |                                                   | 10 | 15 | 20 |    |    | 40 | 50 | 60 |                 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                | n257    | CA_n257F                                          |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n78C-n257A       | CA_n78A-n257A                  | n78     | CA_n78C                                           |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | 0                         |
|                     |                                | n257    |                                                   |    |    |    |    |    |    | 50 |    |                 |    |    | 100 | 200 | 400 |                           |
| CA_n78C-n257D       | CA_n78A-n257A                  | n78     | CA_n78C                                           |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | 0                         |
|                     |                                | n257    | CA_n257D                                          |    |    |    |    |    |    |    |    |                 |    |    |     |     |     |                           |
| CA_n78C-n257E       | CA_n78A-n257A                  | n78     | CA_n78C                                           |    |    |    |    |    |    |    |    |                 |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                                                              | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|------------------------------------------------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                      |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     |                                                                                                      | n257    | CA_n257E                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78C-n257F       | CA_n78A-n257A                                                                                        | n78     | CA_n78C                          |    |    |    |    |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257F                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n257G       | CA_n257G<br>CA_n78A-n257A<br>CA_n78A-n257G                                                           | n78     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257G                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n257H       | CA_n257G<br>CA_n257H<br>CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H                              | n78     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257H                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n257I       | CA_n257G<br>CA_n257H<br>CA_n257I<br>CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H<br>CA_n78A-n257I | n78     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257I                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n257J       | CA_n78A-n257A                                                                                        | n78     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257J                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n257K       | CA_n78A-n257A                                                                                        | n78     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257K                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n257L       | CA_n78A-n257A                                                                                        | n78     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257L                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration | Uplink CA configuration                                                           | NR Band | Channel bandwidth (MHz) (NOTE 3)                                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|-----------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                   |         | 5                                                                        | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n78A-n257M       | CA_n78A-n257A                                                                     | n78     |                                                                          | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                   | n257    | CA_n257M                                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n258A       | CA_n78A-n258A                                                                     | n78     |                                                                          | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                   | n258    |                                                                          |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n78A-n258G       | CA_n78A-n258A<br>CA_n78A-n258G                                                    | n78     |                                                                          | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                   | n258    | See CA_n258G Bandwidth Combination Set 0 in Table 5.5A.1-1 from 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n258H       | CA_n78A-n258A<br>CA_n78A-n258G<br>CA_n78A-n258H                                   | n78     |                                                                          | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                   | n258    | See CA_n258H Bandwidth Combination Set 0 in Table 5.5A.1-1 from 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n258I       | CA_n78A-n258A<br>CA_n78A-n258G<br>CA_n78A-n258H<br>CA_n78A-n258I                  | n78     |                                                                          | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                   | n258    | See CA_n258I Bandwidth Combination Set 0 in Table 5.5A.1-1 from 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n258J       | CA_n78A-n258A<br>CA_n78A-n258G<br>CA_n78A-n258H<br>CA_n78A-n258I<br>CA_n78A-n258J | n78     |                                                                          | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                   | n258    | See CA_n258J Bandwidth Combination Set 0 in Table 5.5A.1-1 from 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n258K       | CA_n78A-n258A                                                                     | n78     |                                                                          | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |

| NR CA configuration | Uplink CA configuration                                                                                                              | NR Band                                                                  | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                                      |                                                                          | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     | CA_n78A-n258G<br>CA_n78A-n258H<br>CA_n78A-n258I<br>CA_n78A-n258J<br>CA_n78A-n258K                                                    |                                                                          |                                  |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                     | n258                                                                                                                                 | See CA_n258K Bandwidth Combination Set 0 in Table 5.5A.1-1 from 38.101-2 |                                  |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n258L       | CA_n78A-n258A<br>CA_n78A-n258G<br>CA_n78A-n258H<br>CA_n78A-n258I<br>CA_n78A-n258J<br>CA_n78A-n258K<br>CA_n78A-n258L                  | n78                                                                      |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     | n258                                                                                                                                 | See CA_n258L Bandwidth Combination Set 0 in Table 5.5A.1-1 from 38.101-2 |                                  |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n258M       | CA_n78A-n258A<br>CA_n78A-n258G<br>CA_n78A-n258H<br>CA_n78A-n258I<br>CA_n78A-n258J<br>CA_n78A-n258K<br>CA_n78A-n258L<br>CA_n78A-n258M | n78                                                                      |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 |    | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                      |                                                                          |                                  |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration | Uplink CA configuration                                                                              | NR Band | Channel bandwidth (MHz) (NOTE 3)                                         |    |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|------------------------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                      |         | 5                                                                        | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 200 | 400 |                           |
|                     |                                                                                                      | n258    | See CA_n258M Bandwidth Combination Set 0 in Table 5.5A.1-1 from 38.101-2 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n79A-n257A       | CA_n79A-n257A                                                                                        | n79     |                                                                          |    |    |    |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    |                                                                          |    |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n79A-n257D       | CA_n79A-n257A                                                                                        | n79     |                                                                          |    |    |    |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257D                                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n79A-n257E       | CA_n79A-n257A                                                                                        | n79     |                                                                          |    |    |    |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257E                                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n79A-n257F       | CA_n79A-n257A                                                                                        | n79     |                                                                          |    |    |    |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257F                                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n79A-n257G       | CA_n257G<br>CA_n79A-n257A,<br>CA_n79A-n257G                                                          | n79     |                                                                          |    |    |    |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257G                                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n79A-n257H       | CA_n257G<br>CA_n257H<br>CA_n79A-n257A<br>CA_n79A-n257G<br>CA_n79A-n257H                              | n79     |                                                                          |    |    |    |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257H                                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n79A-n257I       | CA_n257G<br>CA_n257H<br>CA_n257I<br>CA_n79A-n257A<br>CA_n79A-n257G<br>CA_n79A-n257H<br>CA_n79A-n257I | n79     |                                                                          |    |    |    |    |    | 40 | 50 | 60 |    | 80 |    | 100 |     |     | 0                         |
|                     |                                                                                                      | n257    | CA_n257I                                                                 |    |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration                                                                                                                               | Uplink CA configuration | NR Band | Channel bandwidth (MHz) (NOTE 3) |    |    |    |    |    |     |    |    |    |    |     |     |     |     | Bandwidth combination set |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|---------|----------------------------------|----|----|----|----|----|-----|----|----|----|----|-----|-----|-----|-----|---------------------------|
|                                                                                                                                                   |                         |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40  | 50 | 60 | 70 | 80 | 90  | 100 | 200 | 400 |                           |
| CA_n79C-n257A                                                                                                                                     | CA_n79A-n257A           | n79     | CA_n79C                          |    |    |    |    |    |     |    |    |    |    |     |     |     |     | 0                         |
|                                                                                                                                                   |                         | n257    |                                  |    |    |    |    |    | Yes |    |    |    |    | 100 | 200 | 400 |     |                           |
| CA_n79C-n257D                                                                                                                                     | CA_n79A-n257A           | n79     | CA_n79C                          |    |    |    |    |    |     |    |    |    |    |     |     |     |     | 0                         |
|                                                                                                                                                   |                         | n257    | CA_n257D                         |    |    |    |    |    |     |    |    |    |    |     |     |     |     |                           |
| CA_n79C-n257E                                                                                                                                     | CA_n79A-n257A           | n79     | CA_n79C                          |    |    |    |    |    |     |    |    |    |    |     |     |     |     | 0                         |
|                                                                                                                                                   |                         | n257    | CA_n257E                         |    |    |    |    |    |     |    |    |    |    |     |     |     |     |                           |
| CA_n79C-n257F                                                                                                                                     | CA_n79A-n257A           | n79     | CA_n79C                          |    |    |    |    |    |     |    |    |    |    |     |     |     |     | 0                         |
|                                                                                                                                                   |                         | n257    | CA_n257F                         |    |    |    |    |    |     |    |    |    |    |     |     |     |     |                           |
| CA_n79A-n258A                                                                                                                                     | -                       | n79     |                                  |    |    |    |    |    | 40  | 50 | 60 |    | 80 |     | 100 |     |     | 0                         |
|                                                                                                                                                   |                         | n258    |                                  |    |    |    |    |    |     | 50 |    |    |    |     | 100 | 200 | 400 |                           |
| NOTE 1: This UE channel bandwidth is optional in this release of the specification. (From Table 5.3.5-1 of 38.101-1)                              |                         |         |                                  |    |    |    |    |    |     |    |    |    |    |     |     |     |     |                           |
| NOTE 2: The CA configurations are given in Table 5.5A.1-1 of either TS 38.101-1 or TS 38.101-2 where unless otherwise stated BCS0 is referred to. |                         |         |                                  |    |    |    |    |    |     |    |    |    |    |     |     |     |     |                           |
| NOTE 3: The SCS of each channel bandwidth for NR FR1 and NR FR2 band refers to Table 5.3.5-1 of TS 38.101-1 and TS 38.101-2 respectively.         |                         |         |                                  |    |    |    |    |    |     |    |    |    |    |     |     |     |     |                           |

Table 5.5A.1-2: Inter-band CA configurations and bandwidth combination sets between FR1 and FR2 (three bands)

| NR CA configuration | Uplink configuration                                                          | NR Band | Channel bandwidth (MHz) (NOTE 1) |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|-------------------------------------------------------------------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                               |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n1A-n78A-n257A   | -                                                                             | n1      | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                               | n78     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                               | n257    |                                  |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n28A-n257A   | CA_n3A-n28A<br>CA_n3A-n257A<br>CA_n28A-n257A                                  | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                               | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                                               | n257    |                                  |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n28A-n257D   | CA_n3A-n28A<br>CA_n3A-n257A<br>CA_n3A-n257D<br>CA_n28A-n257A<br>CA_n28A-n257D | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                               | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration | Uplink configuration                                                                                                                            | NR Band | Channel bandwidth (MHz) (NOTE 1)                   |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                                                 |         | 5                                                  | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257D BCS0 in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n257G   | CA_n3A-n28A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n28A-n257A<br>CA_n28A-n257G                                                                   | n3      | 5                                                  | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n28     | 5                                                  | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257G BCS0 in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n257H   | CA_n3A-n28A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H                                  | n3      | 5                                                  | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n28     | 5                                                  | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257H BCS0 in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n257I   | CA_n3A-n28A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n3A-n257I<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n28A-n257I | n3      | 5                                                  | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n28     | 5                                                  | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257I BCS0 in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n77A-n257A   | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n77A-n257A                                                                                                    | n3      | 5                                                  | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n77     |                                                    | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                 | n257    |                                                    |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n77A-n257D   | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n3A-n257D<br>CA_n77A-n257A<br>CA_n77A-n257D                                                                   | n3      | 5                                                  | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n77     |                                                    | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257D in Table 5.5A.1-2 in TS 38.101-2      |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration  | Uplink configuration                                                                                                                            | NR Band | Channel bandwidth (MHz) (NOTE 1)                |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                      |                                                                                                                                                 |         | 5                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n3A-n77A-n257G    | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n77A-n257A<br>CA_n77A-n257G                                                                   | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257G in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n77A-n257H    | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H                                  | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257H in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n77A-n257I    | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n3A-n257I<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257I in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n77(2A)-n257A | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n77A-n257A                                                                                                    | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n77     | See CA_n77(2A) Bandwidth Combination Set 0      |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                      |                                                                                                                                                 | n257    |                                                 |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n77(2A)-n257D | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n3A-n257D<br>CA_n77A-n257A<br>CA_n77A-n257D                                                                   | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257D in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n77(2A)-n257G | CA_n3A-n77A<br>CA_n3A-n257A                                                                                                                     | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration  | Uplink configuration                                                                                                                            | NR Band | Channel bandwidth (MHz) (NOTE 1)                |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                      |                                                                                                                                                 |         | 5                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
|                      | CA_n3A-n257D<br>CA_n3A-n257G<br>CA_n77A-n257A<br>CA_n77A-n257G                                                                                  |         |                                                 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                      |                                                                                                                                                 | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257G in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n77(2A)-n257H | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H                                  | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257H in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n77(2A)-n257I | CA_n3A-n77A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n3A-n257I<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257I in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n78A-n257A    | CA_n3A-n78A<br>CA_n3A-n257A<br>CA_n78A-n257A                                                                                                    | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n78     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                      |                                                                                                                                                 | n257    |                                                 |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n78A-n257D    | CA_n3A-n78A<br>CA_n3A-n257A<br>CA_n3A-n257D<br>CA_n78A-n257A<br>CA_n78A-n257D                                                                   | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                      |                                                                                                                                                 | n78     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                      |                                                                                                                                                 | n257    | See CA_n257D in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n78A-n257G    | CA_n3A-n78A<br>CA_n3A-n257A<br>CA_n3A-n257G                                                                                                     | n3      | 5                                               | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink configuration                                                                                                                            | NR Band | Channel bandwidth (MHz) (NOTE 1)              |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                                                 |         | 5                                             | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
|                     | CA_n78A-n257A<br>CA_n78A-n257G                                                                                                                  |         |                                               |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                                                                                                                 | n78     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257G in Table 5.5A.1-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n78A-n257H   | CA_n3A-n78A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H                                  | n3      | 5                                             | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n78     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257H in Table 5.5A.1-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n78A-n257I   | CA_n3A-n78A<br>CA_n3A-n257A<br>CA_n3A-n257G<br>CA_n3A-n257H<br>CA_n3A-n257I<br>CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H<br>CA_n78A-n257I | n3      | 5                                             | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n78     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257I in Table 5.5A.1-2 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n77A-n257A  | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n77A-n257A                                                                                                  | n28     | 5                                             | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n77     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                 | n257    |                                               |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n28A-n77A-n257D  | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257D<br>CA_n77A-n257A<br>CA_n77A-n257D                                                                | n28     | 5                                             | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                 | n77     |                                               | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                 | n257    | See CA_n257D in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n77A-n257G  | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n77A-n257A<br>CA_n77A-n257G                                                                | n28     | 5                                             | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration   | Uplink configuration                                                                                                                                 | NR Band | Channel bandwidth (MHz) (NOTE 1)                |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                       |                                                                                                                                                      |         | 5                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
|                       |                                                                                                                                                      | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257G in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n77A-n257H    | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H                                   | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n77     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257H in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n77A-n257I    | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n28A-n257I<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n78     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257I in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n77(2A)-n257A | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n77A-n257A                                                                                                       | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                       |                                                                                                                                                      | n257    |                                                 |    |    |    |    |    | 50 |    |    |    |    | 100 | 200 | 400 |                           |
| CA_n28A-n77(2A)-n257D | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257D<br>CA_n77A-n257A<br>CA_n77A-n257D                                                                     | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257D in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n77(2A)-n257G | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n77A-n257A<br>CA_n77A-n257G                                                                     | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257G in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration   | Uplink configuration                                                                                                                                 | NR Band | Channel bandwidth (MHz) (NOTE 1)                |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                       |                                                                                                                                                      |         | 5                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n28A-n77(2A)-n257H | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H                                   | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257H in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n77(2A)-n257I | CA_n28A-n77A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n28A-n257I<br>CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n77     | See CA_n77(2A) in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257I in Table 5.5A.1-2 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n78A-n257A    | CA_n28A-n78A,<br>CA_n28A-n257A,<br>CA_n78A-n257A                                                                                                     | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n78     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                       |                                                                                                                                                      | n257    |                                                 |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n28A-n78A-n257D    | CA_n28A-n78A<br>CA_n28A-n257A<br>CA_n28A-n257D<br>CA_n78A-n257A<br>CA_n78A-n257D                                                                     | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n78     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257D in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n78A-n257G    | CA_n28A-n78A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n78A-n257A<br>CA_n78A-n257G                                                                     | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                       |                                                                                                                                                      | n78     |                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                       |                                                                                                                                                      | n257    | See CA_n257G in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n78A-n257H    | CA_n28A-n78A<br>CA_n28A-n257A                                                                                                                        | n28     | 5                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |

| NR CA configuration | Uplink configuration                                                                                                                                 | NR Band | Channel bandwidth (MHz) (NOTE 1)                                |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                     |                                                                                                                                                      |         | 5                                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
|                     | CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H                                                                    |         |                                                                 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                     |                                                                                                                                                      | n78     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                      | n257    | See CA_n257H in Table 5.5A.1-1 in TS 38.101-2                   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n28A-n78A-n257I  | CA_n28A-n78A<br>CA_n28A-n257A<br>CA_n28A-n257G<br>CA_n28A-n257H<br>CA_n28A-n257I<br>CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H<br>CA_n78A-n257I | n28     | 5                                                               | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     | 0                         |
|                     |                                                                                                                                                      | n78     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                     |                                                                                                                                                      | n257    | See CA_n257I in Table 5.5A.1-1 in TS 38.101-2                   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n79A-n257A  | -                                                                                                                                                    | n77     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                     |                                                                                                                                                      | n257    |                                                                 |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n77A-n79A-n257G  | CA_n257G                                                                                                                                             | n77     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                     |                                                                                                                                                      | n257    | See CA_n257G in Table 5.5A.1-1 in TS 38.101-2                   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n79A-n257H  | CA_n257G<br>CA_n257H                                                                                                                                 | n77     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                     |                                                                                                                                                      | n257    | See CA_n257G and CA_n257H in Table 5.5A.1-1 in TS 38.101-2      |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n77A-n79A-n257I  | CA_n257G<br>CA_n257H<br>CA_n257I                                                                                                                     | n77     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                     |                                                                                                                                                      | n257    | See CA_n257G, n257H, and n257I in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n79A-n257A  | -                                                                                                                                                    | n78     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                     |                                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                     |                                                                                                                                                      | n257    |                                                                 |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n78A-n79A-n257G  | CA_n257G                                                                                                                                             | n78     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |

| NR CA configuration | Uplink configuration                                                                                                                 | NR Band | Channel bandwidth (MHz) (NOTE 1)                                      |    |    |    |    |    |    |    |    |    |    |     |     | Bandwidth combination set |     |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|---------------------------|-----|
|                     |                                                                                                                                      |         | 5                                                                     | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 |                           | 400 |
|                     |                                                                                                                                      | n79     |                                                                       |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |                           |     |
|                     |                                                                                                                                      | n257    | See CA_n257G in Table 5.5A.1-1 in TS 38.101-2                         |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                      | n78     |                                                                       | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |                           |     |
| CA_n78A-n79A-n257H  | CA_n257G<br>CA_n257H                                                                                                                 | n79     |                                                                       |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |                           |     |
|                     |                                                                                                                                      | n257    | See CA_n257G and CA_n257H in Table 5.5A.1-1 in TS 38.101-2            |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                      | n78     |                                                                       | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |                           | 0   |
| CA_n78A-n79A-n257I  | CA_n257G<br>CA_n257H<br>CA_n257I                                                                                                     | n79     |                                                                       |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |                           |     |
|                     |                                                                                                                                      | n257    | See CA_n257G, CA_n257H, and CA_n257I in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                      | n77     |                                                                       | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |                           | 0   |
| CA_n77A-n79A-n257A  | CA_n77A-n257A<br>CA_n79A-n257A                                                                                                       | n79     |                                                                       |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |                           |     |
|                     |                                                                                                                                      | n257    |                                                                       |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400                       |     |
|                     |                                                                                                                                      | n77     |                                                                       | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |                           | 0   |
| CA_n77A-n79A-n257G  | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n79A-n257A<br>CA_n79A-n257G                                                                     | n79     |                                                                       |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |                           |     |
|                     |                                                                                                                                      | n257    | See CA_n257G in Table 5.5A.1-1 in TS 38.101-2                         |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                      | n77     |                                                                       | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |                           | 0   |
| CA_n77A-n79A-n257H  | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n79A-n257A<br>CA_n79A-n257G<br>CA_n79A-n257H                                   | n79     |                                                                       |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |                           |     |
|                     |                                                                                                                                      | n257    | See CA_n257G and n257H in Table 5.5A.1-1 in TS 38.101-2               |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                      | n77     |                                                                       | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |                           | 0   |
| CA_n77A-n79A-n257I  | CA_n77A-n257A<br>CA_n77A-n257G<br>CA_n77A-n257H<br>CA_n77A-n257I<br>CA_n79A-n257A<br>CA_n79A-n257G<br>CA_n79A-n257H<br>CA_n79A-n257I | n79     |                                                                       |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                      | n257    | See CA_n257G, n257H, and n257I in Table 5.5A.1-1 in TS 38.101-2       |    |    |    |    |    |    |    |    |    |    |     |     |                           |     |
|                     |                                                                                                                                      | n78     |                                                                       | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |                           | 0   |

| NR CA configuration                                                                                                                       | Uplink configuration                                                                                                                 | NR Band | Channel bandwidth (MHz) (NOTE 1)                                |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                                                                                                                                           |                                                                                                                                      |         | 5                                                               | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
|                                                                                                                                           |                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 |    |    |     |     |     |                           |
|                                                                                                                                           |                                                                                                                                      | n257    |                                                                 |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n78A-n79A-n257G                                                                                                                        | CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n79A-n257A<br>CA_n79A-n257G                                                                     | n78     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                                                                                                                                           |                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                                                                                                                                           |                                                                                                                                      | n257    | See CA_n257G in Table 5.5A.1-1 in TS 38.101-2                   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n79A-n257H                                                                                                                        | CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H<br>CA_n79A-n257A<br>CA_n79A-n257G<br>CA_n79A-n257H                                   | n78     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                                                                                                                                           |                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                                                                                                                                           |                                                                                                                                      | n257    | See CA_n257G and n257H in Table 5.5A.1-1 in TS 38.101-2         |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n78A-n79A-n257I                                                                                                                        | CA_n78A-n257A<br>CA_n78A-n257G<br>CA_n78A-n257H<br>CA_n78A-n257I<br>CA_n79A-n257A<br>CA_n79A-n257G<br>CA_n79A-n257H<br>CA_n79A-n257I | n78     |                                                                 | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     | 0                         |
|                                                                                                                                           |                                                                                                                                      | n79     |                                                                 |    |    |    |    |    | 40 | 50 | 60 | 80 |    | 100 |     |     |                           |
|                                                                                                                                           |                                                                                                                                      | n257    | See CA_n257G, n257H, and n257I in Table 5.5A.1-1 in TS 38.101-2 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| NOTE 1: The SCS of each channel bandwidth for NR FR1 and NR FR2 band refers to Table 5.3.5-1 of TS 38.101-1 and TS 38.101-2 respectively. |                                                                                                                                      |         |                                                                 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

NOTE 1: The SCS of each channel bandwidth for NR FR1 and NR FR2 band refers to Table 5.3.5-1 of TS 38.101-1 and TS 38.101-2 respectively.

**Table 5.5A.1-3: Inter-band CA configurations and bandwidth combination sets between FR1 and FR2 (four bands)**

| NR CA configuration    | Uplink configuration | NR Band | Channel bandwidth (MHz) (NOTE 1) |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|------------------------|----------------------|---------|----------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                        |                      |         | 5                                | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n3A-n28A-n77A-n257A | -                    | n3      | 5                                | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                        |                      | n28     | 5                                | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                        |                      | n77     |                                  | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                        |                      | n257    |                                  |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |

| NR CA configuration       | Uplink configuration | NR Band | Channel bandwidth (MHz) (NOTE 1)                     |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|---------------------------|----------------------|---------|------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                           |                      |         | 5                                                    | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n3A-n28A-n77A-n257D    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                           |                      | n257    | See CA_n257D BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n77A-n257G    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                           |                      | n257    | See CA_n257G BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n77A-n257H    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                           |                      | n257    | See CA_n257H BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n77A-n257I    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                           |                      | n257    | See CA_n257I BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n77(2A)-n257A | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     | See CA_n77(2A) BCS0 in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n257    |                                                      |    |    |    |    |    |    | 50 |    |    |    |     | 100 | 200 |                           |
| CA_n3A-n28A-n77(2A)-n257D | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     | See CA_n77(2A) BCS0 in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n257    | See CA_n257D BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n77(2A)-n257G | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     | See CA_n77(2A) BCS0 in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n257    | See CA_n257G BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n77(2A)-n257H | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n77     | See CA_n77(2A) BCS0 in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                           |                      | n257    | See CA_n257H BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

| NR CA configuration                                                                                                                       | Uplink configuration | NR Band | Channel bandwidth (MHz) (NOTE 1)                     |    |    |    |    |    |    |    |    |    |    |     |     |     | Bandwidth combination set |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------|------------------------------------------------------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|---------------------------|
|                                                                                                                                           |                      |         | 5                                                    | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | 200 | 400 |                           |
| CA_n3A-n28A-n77(2A)-n257I                                                                                                                 | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                                                                                                                                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                                                                                                                                           |                      | n77     | See CA_n77(2A) BCS0 in Table 5.5A.2-1 in TS 38.101-1 |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
|                                                                                                                                           |                      | n257    | See CA_n257I BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n78A-n257A                                                                                                                    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                                                                                                                                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                                                                                                                                           |                      | n78     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                                                                                                                                           |                      | n257    |                                                      |    |    |    |    |    |    | 50 |    |    |    | 100 | 200 | 400 |                           |
| CA_n3A-n28A-n78A-n257D                                                                                                                    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                                                                                                                                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                                                                                                                                           |                      | n78     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                                                                                                                                           |                      | n257    | See CA_n257D BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n78A-n257G                                                                                                                    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                                                                                                                                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                                                                                                                                           |                      | n78     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                                                                                                                                           |                      | n257    | See CA_n257G BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n78A-n257H                                                                                                                    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                                                                                                                                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                                                                                                                                           |                      | n78     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                                                                                                                                           |                      | n257    | See CA_n257H BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| CA_n3A-n28A-n78A-n257I                                                                                                                    | -                    | n3      | 5                                                    | 10 | 15 | 20 | 25 | 30 |    |    |    |    |    |     |     |     | 0                         |
|                                                                                                                                           |                      | n28     | 5                                                    | 10 | 15 | 20 |    |    |    |    |    |    |    |     |     |     |                           |
|                                                                                                                                           |                      | n78     |                                                      | 10 | 15 | 20 |    |    | 40 | 50 | 60 | 80 | 90 | 100 |     |     |                           |
|                                                                                                                                           |                      | n257    | See CA_n257I BCS0 in Table 5.5A.1-1 in TS 38.101-2   |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |
| NOTE 1: The SCS of each channel bandwidth for NR FR1 and NR FR2 band refers to Table 5.3.5-1 of TS 38.101-1 and TS 38.101-2 respectively. |                      |         |                                                      |    |    |    |    |    |    |    |    |    |    |     |     |     |                           |

NOTE 1: The SCS of each channel bandwidth for NR FR1 and NR FR2 band refers to Table 5.3.5-1 of TS 38.101-1 and TS 38.101-2 respectively.

## 5.5B Configuration for DC

### 5.5B.1 General

The operating bands and bandwidth classes are specified for operation with EN-DC, NGEN-DC, NE-DC or NR-DC configured. The EN-DC, NGEN-DC or NE-DC band combinations include at least one E-UTRA operating band.

For EN-DC or NE-DC configurations indicated by column "Single Uplink allowed" (e.g., problematic band combinations as defined in TS 38.306 [11]) in tables in this clause the UE may indicate capability of not supporting simultaneous dual and triple uplink operation due to possible intermodulation interference to its own primary downlink channel bandwidth of PCell or PSCell if the intermodulation order is 2 or if the intermodulation order is 3 for the combinations when both operating bands are between 450 MHz – 960 MHz or between 1427 MHz – 2690 MHz. When LTE and NR transmissions collide, simultaneous dual transmissions may not be supported by UE for these EN-DC band combinations for which only single switched UL is supported.

In the case for EN-DC or NE-DC configurations listed in tables in this clause for which the intermodulation products caused by the dual and triple uplink operation fall into the receive band but do not interfere with its own primary downlink channel bandwidth of PCell or PSCell as defined in Annex I the UE is mandated to operate in dual and triple uplink mode. Single Uplink is also allowed for certain band combinations where intermodulation or reverse intermodulation products could create difficulty for meeting emission requirements. For EN-DC combinations of order 3 or higher, "Single Uplink allowed" UL configurations captured in Table 5.5B.2-1, Table 5.5B.3-1, and Table 5.5B.4-1 apply.

If multiple UL DC configurations are listed for multiple DL DC configurations, valid uplink configurations are such that uplink does not have more carriers than downlink.

The configurations for operating bands for DC including Band n41 also apply for the corresponding operating bands for DC with Band n90 replacing Band n41 but with otherwise identical parameters. For brevity the said configuration for operating bands for DC with Band n90 are not listed in the tables below but are covered by this specification.

Non contiguous resource allocation and almost contiguous allocation are not applicable for E UTRA or NR carrier part of intra band EN DC configuration.

If the mandatory simultaneous Rx/Tx capability applies for a lower order DC configuration, when the applicable lower order DC configuration is a band pair in a higher order DC configuration, the mandatory simultaneous Rx/Tx capability also applies for the band pair in the higher order DC configuration.

For a higher order EN-DC band combination of which DC\_20\_n28/ DC\_28\_n20/ CA\_20-28/ CA\_n20-n28 is a subset, the frequency range in band n28/28 is restricted for the higher order band combination to 703-733 MHz for the UL and 758-788 MHz for the DL.

For NR inter-band dual connectivity specified in 5.5B.7, the corresponding NR CA configurations in 5.5A.1, i.e., dual uplink inter-band carrier aggregation between FR1 and FR2 with uplink assigned to two NR bands, are applicable to Dual Connectivity.

NOTE 1: Requirements for the dual connectivity configurations are defined in the clause corresponding NR uplink CA between FR1 and FR2 configurations, unless otherwise specified.

### 5.5B.2 Intra-band contiguous EN-DC

**Table 5.5B.2-1: Intra-band contiguous EN-DC configurations**

| EN-DC configuration      | Uplink EN-DC configuration (NOTE 1) | Single UL allowed |
|--------------------------|-------------------------------------|-------------------|
| DC_(n)5AA                | DC_(n)5AA <sup>6</sup>              | Yes <sup>6</sup>  |
| DC_(n)12AA               | DC_(n)12AA <sup>6</sup>             | Yes <sup>6</sup>  |
| DC_(n)38AA               | DC_(n)38AA <sup>6</sup>             | Yes <sup>6</sup>  |
| DC_(n)41AA<br>DC_(n)41AB | DC_(n)41AA                          | Yes <sup>3</sup>  |

|                                                                                                                                                                     |                         |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|------------------|
| DC_(n)41CA                                                                                                                                                          |                         |                  |
| DC_(n)41DA                                                                                                                                                          |                         |                  |
| DC_(n)48AA                                                                                                                                                          | DC_(n)48AA <sup>6</sup> | Yes <sup>6</sup> |
| DC_48A-(n)48AA                                                                                                                                                      | DC_(n)48AA <sup>6</sup> | Yes <sup>6</sup> |
| DC_(n)48CA                                                                                                                                                          | DC_(n)48AA <sup>6</sup> | Yes <sup>6</sup> |
| DC_(n)48DA                                                                                                                                                          | DC_(n)48AA <sup>6</sup> | Yes <sup>6</sup> |
| DC_(n)71AA <sup>2</sup>                                                                                                                                             | DC_(n)71AA              | No <sup>4</sup>  |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.                                                      |                         |                  |
| NOTE 2: Requirements in this specification apply for NR SCS of 15 kHz only.                                                                                         |                         |                  |
| NOTE 3: Single UL allowed due to potential emission issues, not self-interference.                                                                                  |                         |                  |
| NOTE 4: For UE(s) supporting dynamic power sharing it is mandatory to do dual simultaneous UL. For UE(s) not supporting dynamic power sharing single UL is allowed. |                         |                  |
| NOTE 5: For TDD bands, the minimum requirements only apply for non-simultaneous Tx/Rx between all carriers.                                                         |                         |                  |
| NOTE 6: Only single switched UL is supported                                                                                                                        |                         |                  |
| NOTE 7: The UE does not include the intraBandENDC-Support and intraBandENDC-Support-UL (absent) for these configurations if supported.                              |                         |                  |

### 5.5B.3 Intra-band non-contiguous EN-DC

**Table 5.5B.3-1: Intra-band non-contiguous EN-DC configurations**

| EN-DC configuration                                                                                                                   | Uplink EN-DC configuration (NOTE 1) | Single UL allowed |
|---------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|
| DC_2A_n2A                                                                                                                             | DC_2A_n2A <sup>5</sup>              | Yes <sup>5</sup>  |
| DC_3A_n3A                                                                                                                             | DC_3A_n3A                           | Yes <sup>7</sup>  |
| DC_5A_n5A                                                                                                                             | DC_5A_n5A <sup>5</sup>              | Yes <sup>5</sup>  |
| DC_7A_n7A <sup>6</sup>                                                                                                                | DC_7A_n7A <sup>5</sup>              | Yes <sup>5</sup>  |
| DC_41A_n41A<br>DC_41C_n41A<br>DC_41D_n41A                                                                                             | DC_41A_n41A                         | Yes <sup>4</sup>  |
| DC_48A_n48A                                                                                                                           | DC_48A_n48A <sup>5</sup>            | Yes <sup>5</sup>  |
| DC_48A-48A_n48A                                                                                                                       | DC_48A_n48A <sup>5</sup>            | Yes <sup>5</sup>  |
| DC_48C_n48A                                                                                                                           | DC_48A_n48A <sup>5</sup>            | Yes <sup>5</sup>  |
| DC_48D_n48A                                                                                                                           | DC_48A_n48A <sup>5</sup>            | Yes <sup>5</sup>  |
| DC_66A_n66A                                                                                                                           | DC_66A_n66A <sup>5</sup>            | Yes <sup>5</sup>  |
| DC_66A-66A_n66A                                                                                                                       | DC_66A_n66A <sup>5</sup>            | Yes <sup>5</sup>  |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.                        |                                     |                   |
| NOTE 2: Void                                                                                                                          |                                     |                   |
| NOTE 3: For TDD bands, the minimum requirements only apply for non-simultaneous Tx/Rx between all carriers.                           |                                     |                   |
| NOTE 4: Single UL allowed due to potential emission issues, not self-interference.                                                    |                                     |                   |
| NOTE 5: Only single switched UL is supported.                                                                                         |                                     |                   |
| NOTE 6: Requirements in this specification apply for NR SCS of 15 kHz only.                                                           |                                     |                   |
| NOTE 7: Single UL allowed due to potential emission issues and self-interference.                                                     |                                     |                   |
| NOTE 8: The UE supporting the configurations indicates intraBandENDC-Support = 'non-contiguous' with intraBandENDC-Support-UL absent. |                                     |                   |

**Table 5.5B.3-2: Intra-band EN-DC configurations for mixed intra-band contiguous and non-contiguous EN-DC**

| EN-DC configuration                                                                                                                       | Uplink EN-DC configuration (NOTE 1) | Single UL allowed |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|
| DC_(n)48CA <sup>6,7</sup>                                                                                                                 | DC_48A_n48A <sup>5</sup>            | Yes <sup>5</sup>  |
| DC_(n)48DA <sup>6,7</sup>                                                                                                                 | DC_48A_n48A <sup>5</sup>            | Yes <sup>5</sup>  |
| DC_48A-(n)48AA <sup>6</sup>                                                                                                               | DC_48A_n48A <sup>5</sup>            | Yes <sup>5</sup>  |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.                            |                                     |                   |
| NOTE 2: Void                                                                                                                              |                                     |                   |
| NOTE 3: For TDD bands, the minimum requirements only apply for non-simultaneous Tx/Rx between all carriers.                               |                                     |                   |
| NOTE 4: Single UL allowed due to potential emission issues, not self-interference.                                                        |                                     |                   |
| NOTE 5: Only single switched UL is supported.                                                                                             |                                     |                   |
| NOTE 6: The UE supporting these configurations indicates non-contiguous by IE intraBandENDC-Support-UL with intraBandENDC-Support absent. |                                     |                   |

NOTE 7: The minimum requirements also apply for the intra-band non-contiguous fallback resulting from releasing an S-cell within the sub-block bandwidth of the downlink configuration.

## 5.5B.4 Inter-band EN-DC within FR1

### 5.5B.4.1 Inter-band EN-DC configurations within FR1 (two bands)

**Table 5.5B.4.1-1: Inter-band EN-DC configurations within FR1 (two bands)**

| EN-DC configuration                                | Uplink EN-DC configuration (NOTE 1) | Single UL allowed | DL interruption allowed (Note 14) |
|----------------------------------------------------|-------------------------------------|-------------------|-----------------------------------|
| DC_1A_n3A<br>DC_1C_n3A                             | DC_1A_n3A<br>DC_1C_n3A              | DC_1_n3           |                                   |
| DC_1A_n5A                                          | DC_1A_n5A                           | No                |                                   |
| DC_1A_n7A<br>DC_1A_n7B                             | DC_1A_n7A                           | No                |                                   |
| DC_1A-1A_n7A<br>DC_1A-1A_n7B                       | DC_1A_n7A                           | No                |                                   |
| DC_1A_n8A                                          | DC_1A_n8A                           | No                |                                   |
| DC_1A_n20A                                         | DC_1A_n20A                          | No                |                                   |
| DC_1A_n28A                                         | DC_1A_n28A                          | No                |                                   |
| DC_1A_n38A<br>DC_1C_n38A                           | DC_1A_n38A                          | No                |                                   |
| DC_1A_n40A                                         | DC_1A_n40A                          | No                |                                   |
| DC_1A_n41A <sup>7</sup>                            | DC_1A_n41A                          | No                |                                   |
| DC_1A_n50A                                         | DC_1A_n50A                          | No                |                                   |
| DC_1A_n51A                                         | DC_1A_n51A                          | No                |                                   |
| DC_1A_n71A<br>DC_1A_n71B                           | DC_1A_n71A                          | No                |                                   |
| DC_1A_n77A <sup>7</sup><br>DC_1A_n77C <sup>7</sup> | DC_1A_n77A                          | DC_1_n77          | No                                |
| DC_1A_n77(2A) <sup>7</sup>                         | DC_1A_n77A                          | DC_1_n77          | No                                |
| DC_1A_n78A <sup>7</sup><br>DC_1A_n78C <sup>7</sup> | DC_1A_n78A                          | No                | No                                |
| DC_1A_n78(2A) <sup>7</sup>                         | DC_1A_n78A                          | No                | No                                |
| DC_1A_n79A <sup>7</sup><br>DC_1A_n79C <sup>7</sup> | DC_1A_n79A                          | No                | No                                |
| DC_2A_n5A                                          | DC_2A_n5A                           | No                |                                   |
| DC_2A-2A_n5A                                       | DC_2A_n5A                           | No                |                                   |
| DC_2A_n7A                                          | DC_2A_n7A                           | No                |                                   |
| DC_2A_n7(2A)                                       | DC_2A_n7A                           | No                |                                   |
| DC_2A_n12A                                         | DC_2A_n12A                          | No                |                                   |
| DC_2A_n38A                                         | DC_2A_n38A                          | No                |                                   |
| DC_2A-2A_n38A                                      | DC_2A_n38A                          | No                |                                   |
| DC_2A_n41A<br>DC_2A_n41C<br>DC_2C_n41A             | DC_2A_n41A<br>DC_2C_n41A            | No                |                                   |
| DC_2A-2A_n41A<br>DC_2A_n41(2A)                     | DC_2A_n41A                          | No                |                                   |
| DC_2A_n46A                                         | DC_2A_n46A                          | No                |                                   |
| DC_2A_n48A<br>DC_2A_n48B                           | DC_2A_n48A                          | No                |                                   |
| DC_2A_n66A                                         | DC_2A_n66A                          | DC_2_n66          |                                   |
| DC_2A-2A_n66A                                      | DC_2A_n66A                          | DC_2_n66          |                                   |
| DC_2A_n71A<br>DC_2A_n71B<br>DC_2C_n71A             | DC_2A_n71A<br>DC_2C_n71A            | No                |                                   |
| DC_2A-2A_n71A                                      | DC_2A_n71A                          | No                |                                   |
| DC_2A_n78A                                         | DC_2A_n78A                          | DC_2_n78          |                                   |
| DC_2A_n78(2A)                                      | DC_2A_n78A                          | DC_2_n78          |                                   |
| DC_2A-2A_n78A                                      | DC_2A_n78A                          | DC_2_n78          |                                   |
| DC_3A_n1A<br>DC_3C_n1A                             | DC_3A_n1A<br>DC_3C_n1A              | DC_3_n1           |                                   |

| EN-DC configuration                                                           | Uplink EN-DC configuration (NOTE 1) | Single UL allowed | DL interruption allowed (Note 14) |
|-------------------------------------------------------------------------------|-------------------------------------|-------------------|-----------------------------------|
| DC_3A-3A_n1A                                                                  | DC_3A_n1A                           | DC_3_n1           |                                   |
| DC_3A_n5A<br>DC_3C_n5A                                                        | DC_3A_n5A                           | DC_3_n5           |                                   |
| DC_3A_n7A<br>DC_3A_n7B<br>DC_3C_n7A<br>DC_3C_n7B                              | DC_3A_n7A<br>DC_3A_n7B<br>DC_3C_n7A | No                |                                   |
| DC_3A-3A_n7A<br>DC_3A-3A_n7B                                                  | DC_3A_n7A                           | No                |                                   |
| DC_3A_n8A                                                                     | DC_3A_n8A                           | No                |                                   |
| DC_3A_n20A                                                                    | DC_3A_n20A                          | No                |                                   |
| DC_3A_n28A<br>DC_3C_n28A                                                      | DC_3A_n28A<br>DC_3C_n28A            | No                |                                   |
| DC_3A_n34A                                                                    | DC_3A_n34A                          | No                |                                   |
| DC_3A_n38A<br>DC_3C_n38A                                                      | DC_3A_n38A                          | No                |                                   |
| DC_3A_n40A                                                                    | DC_3A_n40A                          | No                |                                   |
| DC_3A_n41A <sup>7</sup><br>DC_3C_n41A                                         | DC_3A_n41A<br>DC_3C_n41A            | DC_3_n41          | No                                |
| DC_3A_n50A                                                                    | DC_3A_n50A                          | No                |                                   |
| DC_3A_n51A                                                                    | DC_3A_n51A                          | No                |                                   |
| DC_3A_n71A<br>DC_3A_n71B                                                      | DC_3A_n71A                          | No                |                                   |
| DC_3A_n77A <sup>7</sup><br>DC_3A_n77C <sup>7</sup>                            | DC_3A_n77A                          | DC_3_n77          | No                                |
| DC_3A_n77(2A) <sup>7</sup>                                                    | DC_3A_n77A                          | DC_3_n77          | No                                |
| DC_3A-3A_n77A <sup>7</sup>                                                    | DC_3A_n77A                          | DC_3_n77          | No                                |
| DC_3A_n78A <sup>7</sup><br>DC_3A_n78C <sup>7</sup><br>DC_3C_n78A <sup>7</sup> | DC_3A_n78A                          | DC_3_n78          | No                                |
| DC_3A_n78(2A) <sup>7</sup><br>DC_3C_n78(2A) <sup>7</sup>                      | DC_3A_n78A                          | DC_3_n78          | No                                |
| DC_3A-3A_n78A <sup>7</sup>                                                    | DC_3A_n78A                          | DC_3_n78          | No                                |
| DC_3A_n79A <sup>7</sup><br>DC_3A_n79C <sup>7</sup><br>DC_3C_n79A <sup>7</sup> | DC_3A_n79A<br>DC_3C_n79A            | No                | No                                |
| DC_4A_n38A                                                                    | DC_4A_n38A                          | No                |                                   |
| DC_4A_n41A                                                                    | DC_4A_n41A                          | No                |                                   |
| DC_4A_n78A                                                                    | DC_4A_n78A                          | No                |                                   |
| DC_4A_n78(2A)                                                                 | DC_4A_n78A                          | No                |                                   |
| DC_5A_n2A<br>DC_5B_n2A                                                        | DC_5A_n2A                           | No                |                                   |
| DC_5A-5A_n2A                                                                  | DC_5A_n2A                           | No                |                                   |
| DC_5A_n7A                                                                     | DC_5A_n7A                           | DC_5_n7           |                                   |
| DC_5A_n7(2A)                                                                  | DC_5A_n7A                           | DC_5_n7           |                                   |
| DC_5A_n12A                                                                    | DC_5A_n12A                          | No                |                                   |
| DC_5A_n38A                                                                    | DC_5A_n38A                          | DC_5_n38          |                                   |
| DC_5A_n40A                                                                    | DC_5A_n40A                          | No                |                                   |
| DC_5A_n48A<br>DC_5A_n48B                                                      | DC_5A_n48A                          | No                |                                   |
| DC_5A_n66A<br>DC_5B_n66A                                                      | DC_5A_n66A                          | DC_5_n66          |                                   |
| DC_5A-5A_n66A                                                                 | DC_5A_n66A                          | DC_5_n66          |                                   |
| DC_5A_n71A                                                                    | DC_5A_n71A                          | No                |                                   |
| DC_5A_n78A <sup>7</sup>                                                       | DC_5A_n78A                          | No                | No                                |
| DC_5A_n78(2A) <sup>7</sup>                                                    | DC_5A_n78A                          | No                | No                                |
| DC_5A_n79A                                                                    | DC_5A_n79A                          | No                | No                                |
| DC_7A_n1A<br>DC_7C_n1A                                                        | DC_7A_n1A<br>DC_7C_n1A              | No                |                                   |
| DC_7A-7A_n1A                                                                  | DC_7A_n1A                           | No                |                                   |
| DC_7A_n3A<br>DC_7C_n3A                                                        | DC_7A_n3A<br>DC_7C_n3A              | No                |                                   |
| DC_7A_n5A                                                                     | DC_7A_n5A                           | DC_7_n5           |                                   |

| EN-DC configuration           | Uplink EN-DC configuration (NOTE 1) | Single UL allowed | DL interruption allowed (Note 14) |
|-------------------------------|-------------------------------------|-------------------|-----------------------------------|
| DC_7C_n5A                     | DC_7C_n5A                           |                   |                                   |
| DC_7A-7A_n5A                  | DC_7A_n5A                           | DC_7_n5           |                                   |
| DC_7A_n8A                     | DC_7A_n8A                           | No                |                                   |
| DC_7A-7A_n78A <sup>7</sup>    | DC_7A_n78A                          | No                |                                   |
| DC_7A-7A_n78(2A) <sup>7</sup> | DC_7A_n78A                          | No                |                                   |
| DC_7A_n20A                    | DC_7A_n20A                          | No                |                                   |
| DC_7A_n28A                    | DC_7A_n28A                          | No                |                                   |
| DC_7C_n28A                    | DC_7C_n28A                          |                   |                                   |
| DC_7A_n40A                    | DC_7A_n40A                          | DC_7_n40          |                                   |
| DC_7A_n51A                    | DC_7A_n51A                          | No                |                                   |
| DC_7A_n66A                    | DC_7A_n66A                          | No                |                                   |
| DC_7C_n66A                    |                                     |                   |                                   |
| DC_7A-7A_n66A                 | DC_7A_n66A                          | No                |                                   |
| DC_7A_n71A                    | DC_7A_n71A                          | No                |                                   |
| DC_7A_n77A <sup>7</sup>       | DC_7A_n77A                          | No                |                                   |
| DC_7A-7A_n77A <sup>7</sup>    | DC_7A_n77A                          | No                |                                   |
| DC_7A_n78A <sup>7</sup>       | DC_7A_n78A                          | No                |                                   |
| DC_7C_n78A <sup>7</sup>       | DC_7C_n78A                          |                   |                                   |
| DC_7A_n78(2A) <sup>7</sup>    | DC_7A_n78A                          | No                |                                   |
| DC_7C_n78(2A) <sup>7</sup>    | DC_7C_n78A                          |                   |                                   |
| DC_8A_n1A                     | DC_8A_n1A                           | No                |                                   |
| DC_8A_n3A                     | DC_8A_n3A                           | No                |                                   |
| DC_8A_n20A                    | DC_8A_n20A                          | DC_8_n20          |                                   |
| DC_8A_n28A                    | DC_8A_n28A                          | No                |                                   |
| DC_8A_n34A                    | DC_8A_n34A                          | No                |                                   |
| DC_8A_n39A                    | DC_8A_n39A                          | No                |                                   |
| DC_8A_n40A <sup>7</sup>       | DC_8A_n40A                          | No                |                                   |
| DC_8A_n41A <sup>7</sup>       | DC_8A_n41A                          | No                | No                                |
| DC_8A_n41C                    |                                     |                   |                                   |
| DC_8A_n41(2A)                 | DC_8A_n41A                          | No                | No                                |
| DC_8A_n77A <sup>7</sup>       | DC_8A_n77A                          | No                | No                                |
| DC_8A_n77(2A) <sup>7</sup>    | DC_8A_n77A                          | No                | No                                |
| DC_8A_n78A <sup>7</sup>       | DC_8A_n78A                          | No                | No                                |
| DC_8A_n79A <sup>7</sup>       | DC_8A_n79A                          | No                | No                                |
| DC_8A_n79C                    | DC_8A_n79C                          |                   |                                   |
| DC_8A_n93A                    | DC_8A_n93A_ULSUP-TDM                | N/A               |                                   |
| DC_8A_n94A                    | DC_8A_n94A_ULSUP-TDM                | N/A               |                                   |
| DC_11A_n3A                    | DC_11A_n3A                          | No                |                                   |
| DC_11A_n28A                   | DC_11A_n28A                         | No                |                                   |
| DC_11A_n77A <sup>7</sup>      | DC_11A_n77A                         | No                | No                                |
| DC_11A_n77(2A) <sup>7</sup>   | DC_11A_n77A                         | No                | No                                |
| DC_11A_n78A <sup>7</sup>      | DC_11A_n78A                         | No                | No                                |
| DC_11A_n79A <sup>7</sup>      | DC_11A_n79A                         | No                |                                   |
| DC_12A_n2A                    | DC_12A_n2A                          | No                |                                   |
| DC_12A_n5A                    | DC_12A_n5A                          | No                |                                   |
| DC_12A_n7A                    | DC_12A_n7A                          | No                |                                   |
| DC_12A_n7(2A)                 |                                     |                   |                                   |
| DC_12A_n25A                   | DC_12A_n25A                         | No                |                                   |
| DC_12A_n38A                   | DC_12A_n38A                         | No                |                                   |
| DC_12A_n41A                   | DC_12A_n41A                         | No                |                                   |
| DC_12A_n66A                   | DC_12A_n66A                         | No                |                                   |
| DC_12A_n78A                   | DC_12A_n78A                         | DC_12_n78         |                                   |
| DC_12A_n78(2A)                |                                     |                   |                                   |
| DC_13A_n2A                    | DC_13A_n2A                          | No                |                                   |
| DC_13A_n5A                    | DC_13A_n5A                          | DC_13_n5          |                                   |
| DC_13A_n7A                    | DC_13A_n7A                          | No                |                                   |
| DC_13A_n7(2A)                 |                                     |                   |                                   |
| DC_13A_n48A                   | DC_13A_n48A                         | No                |                                   |
| DC_13A_n48B                   |                                     |                   |                                   |
| DC_13A_n66A                   | DC_13A_n66A                         | No                |                                   |
| DC_13A_n71A                   | DC_13A_n71A                         | No                |                                   |

| EN-DC configuration                                  | Uplink EN-DC configuration (NOTE 1) | Single UL allowed | DL interruption allowed (Note 14) |
|------------------------------------------------------|-------------------------------------|-------------------|-----------------------------------|
| DC_13A_n78A<br>DC_13A_n78(2A)                        | DC_13A_n78A                         | No                |                                   |
| DC_14A_n2A                                           | DC_14A_n2A                          | No                |                                   |
| DC_14A_n66A                                          | DC_14A_n66A                         | No                |                                   |
| DC_18A_n3A                                           | DC_18A_n3A                          | No                |                                   |
| DC_18A_n77A <sup>7</sup>                             | DC_18A_n77A                         | No                | No                                |
| DC_18A_n78A <sup>7</sup>                             | DC_18A_n78A                         | No                | No                                |
| DC_20A_n91A                                          | DC_20A_n91A_ULSUP-TDM               | N/A               |                                   |
| DC_20A_n92A                                          | DC_20A_n92A_ULSUP-TDM               | N/A               |                                   |
| DC_18A_n79A <sup>7</sup>                             | DC_18A_n79A                         | No                |                                   |
| DC_19A_n77A <sup>7</sup><br>DC_19A_n77C <sup>7</sup> | DC_19A_n77A                         | No                |                                   |
| DC_19A_n78A <sup>7</sup><br>DC_19A_n78C <sup>7</sup> | DC_19A_n78A                         | No                | No                                |
| DC_19A_n79A <sup>7</sup><br>DC_19A_n79C <sup>7</sup> | DC_19A_n79A                         | No                | No                                |
| DC_20A_n1A                                           | DC_20A_n1A                          | No                |                                   |
| DC_20A_n3A                                           | DC_20A_n3A                          | No                |                                   |
| DC_20A_n7A                                           | DC_20A_n7A                          | DC_20_n7          |                                   |
| DC_20A_n8A                                           | DC_20A_n8A                          | DC_20_n8          |                                   |
| DC_20A_n28A <sup>8, 11, 13</sup>                     | DC_20A_n28A                         | No                |                                   |
| DC_20A_n38A                                          | DC_20A_n38A                         | No                |                                   |
| DC_20A_n41A                                          | DC_20A_n41A                         | DC_20_n41         |                                   |
| DC_20A_n50A                                          | DC_20A_n50A                         | No                |                                   |
| DC_20A_n51A                                          | DC_20A_n51A                         | No                |                                   |
| DC_20A_n77A <sup>7</sup>                             | DC_20A_n77A                         | No                |                                   |
| DC_20A_n78A <sup>7</sup>                             | DC_20A_n78A                         | No                |                                   |
| DC_20A_n78(2A) <sup>7</sup>                          | DC_20A_n78A                         | No                |                                   |
| DC_21A_n77A <sup>7</sup><br>DC_21A_n77C <sup>7</sup> | DC_21A_n77A                         | No                |                                   |
| DC_21A_n78A <sup>7</sup><br>DC_21A_n78C <sup>7</sup> | DC_21A_n78A                         | No                | No                                |
| DC_21A_n79A <sup>7</sup><br>DC_21A_n79C <sup>7</sup> | DC_21A_n79A                         | No                | No                                |
| DC_25A_n41A                                          | DC_25A_n41A                         | No                |                                   |
| DC_25A-25A_n41A                                      | DC_25A_n41A                         | No                |                                   |
| DC_26A_n25A                                          | DC_26A_n25A                         | No                |                                   |
| DC_26A_n41A                                          | DC_26A_n41A                         | No                |                                   |
| DC_26A_n77A <sup>7</sup>                             | DC_26A_n77A                         | No                |                                   |
| DC_26A_n78A <sup>7</sup>                             | DC_26A_n78A                         | No                |                                   |
| DC_26A_n79A <sup>7</sup>                             | DC_26A_n79A                         | No                |                                   |
| DC_28A_n3A                                           | DC_28A_n3A                          | No                |                                   |
| DC_28A_n5A                                           | DC_28A_n5A                          | No                |                                   |
| DC_28A_n7A<br>DC_28A_n7B                             | DC_28A_n7A<br>DC_28A_n7B            | No                |                                   |
| DC_28A_n51A                                          | DC_28A_n51A                         | No                |                                   |
| DC_28A_n8A                                           | DC_28A_n8A                          | No                |                                   |
| DC_28A_n40A                                          | DC_28A_n40A                         | No                |                                   |
| DC_28A_n41A <sup>7</sup>                             | DC_28A_n41A                         | No                |                                   |
| DC_28A_n50A                                          | DC_28A_n50A                         | No                |                                   |
| DC_28A_n77A <sup>7</sup><br>DC_28A_n77C <sup>7</sup> | DC_28A_n77A                         | No                | No                                |
| DC_28A_n77(2A) <sup>7</sup>                          | DC_28A_n77A                         | No                | No                                |
| DC_28A_n78A <sup>7</sup><br>DC_28A_n78C <sup>7</sup> | DC_28A_n78A                         | No                | No                                |
| DC_28A_n78(2A) <sup>7</sup>                          | DC_28A_n78A                         | No                | No                                |
| DC_28A_n79A <sup>7</sup><br>DC_28A_n79C <sup>7</sup> | DC_28A_n79A                         | No                |                                   |
| DC_30A_n2A                                           | DC_30A_n2A                          | No                |                                   |
| DC_30A_n5A                                           | DC_30A_n5A                          | No                |                                   |
| DC_30A_n66A                                          | DC_30A_n66A                         | No                |                                   |

| EN-DC configuration                                                                                                                                                                                                                                                         | Uplink EN-DC configuration (NOTE 1) | Single UL allowed | DL interruption allowed (Note 14) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|-----------------------------------|
| DC_38A_n78A <sup>7</sup>                                                                                                                                                                                                                                                    | DC_38A_n78A                         | No                |                                   |
| DC_39A_n40A <sup>3</sup>                                                                                                                                                                                                                                                    | DC_39A_n40A                         | No                |                                   |
| DC_39A_n41A <sup>3</sup><br>DC_39C_n41A <sup>3</sup>                                                                                                                                                                                                                        | DC_39A_n41A<br>DC_39C_n41A          | No                | No                                |
| DC_39A_n78A <sup>5,7</sup>                                                                                                                                                                                                                                                  | DC_39A_n78A                         | No                |                                   |
| DC_39A_n79A <sup>7</sup><br>DC_39A_n79C <sup>7</sup>                                                                                                                                                                                                                        | DC_39A_n79A                         | No                | No                                |
| DC_40A_n1A                                                                                                                                                                                                                                                                  | DC_40A_n1A                          | No                |                                   |
| DC_40A_n41A <sup>3</sup><br>DC_40C_n41A <sup>3</sup>                                                                                                                                                                                                                        | DC_40A_n41A                         | No                |                                   |
| DC_40A_n77A                                                                                                                                                                                                                                                                 | DC_40A_n77A                         | No                |                                   |
| DC_40A_n78A<br>DC_40C_n78A                                                                                                                                                                                                                                                  | DC_40A_n78A<br>DC_40C_n78A          | No                |                                   |
| DC_40A_n79A <sup>7,12</sup><br>DC_40C_n79A <sup>7,12</sup>                                                                                                                                                                                                                  | DC_40A_n79A                         | No                | No                                |
| DC_41A_n3A <sup>7</sup><br>DC_41C_n3A <sup>7</sup>                                                                                                                                                                                                                          | DC_41A_n3A<br>DC_41C_n3A            | No                |                                   |
| DC_41A_n28A <sup>7</sup><br>DC_41C_n28A <sup>7</sup>                                                                                                                                                                                                                        | DC_41A_n28A<br>DC_41C_n28A          | No                |                                   |
| DC_41A_n77A<br>DC_41C_n77A                                                                                                                                                                                                                                                  | DC_41A_n77A<br>DC_41C_n77A          | No                |                                   |
| DC_41A_n77(2A)<br>DC_41C_n77(2A)                                                                                                                                                                                                                                            | DC_41A_n77A<br>DC_41C_n77A          | No                |                                   |
| DC_41A_n78A<br>DC_41C_n78A<br>DC_41D_n78A                                                                                                                                                                                                                                   | DC_41A_n78A<br>DC_41C_n78A          | No                |                                   |
| DC_41A_n78(2A)<br>DC_41C_n78(2A)                                                                                                                                                                                                                                            | DC_41A_n78A<br>DC_41C_n78A          | No                |                                   |
| DC_41A_n79A <sup>6,7</sup><br>DC_41A_n79C <sup>6,7</sup><br>DC_41C_n79A <sup>6,7</sup>                                                                                                                                                                                      | DC_41A_n79A<br>DC_41C_n79A          | No                | No                                |
| DC_42A_n28A <sup>7</sup><br>DC_42C_n28A <sup>7</sup>                                                                                                                                                                                                                        | DC_42A_n28A<br>DC_42C_n28A          | No                |                                   |
| DC_42A_n51A                                                                                                                                                                                                                                                                 | DC_42A_n51A                         | No                |                                   |
| DC_42A_n77A <sup>3,4,9,11,13</sup><br>DC_42A_n77C <sup>3,4,9</sup><br>DC_42C_n77A <sup>3,4,9,11</sup><br>DC_42C_n77C <sup>3,4,9</sup><br>DC_42D_n77A <sup>3,4,9,11</sup><br>DC_42D_n77C <sup>3,4,9</sup><br>DC_42E_n77A <sup>3,4,9,11</sup><br>DC_42E_n77C <sup>3,4,9</sup> | N/A                                 | N/A               |                                   |
| DC_42A_n77(2A) <sup>3,4,9</sup><br>DC_42C_n77(2A) <sup>3,4,9</sup>                                                                                                                                                                                                          | N/A                                 | N/A               |                                   |
| DC_42A_n78A <sup>3,4,9,11,13</sup><br>DC_42A_n78C <sup>3,4,9</sup><br>DC_42C_n78A <sup>3,4,9,11</sup><br>DC_42C_n78C <sup>3,4,9</sup><br>DC_42D_n78A <sup>3,4,9,11</sup><br>DC_42D_n78C <sup>3,4,9</sup><br>DC_42E_n78A <sup>3,4,9,11</sup><br>DC_42E_n78C <sup>3,4,9</sup> | N/A                                 | N/A               |                                   |
| DC_42A_n79A <sup>9,15</sup><br>DC_42A_n79C <sup>9,15</sup><br>DC_42C_n79A <sup>9,15</sup><br>DC_42C_n79C <sup>9,15</sup><br>DC_42D_n79A <sup>9,15</sup><br>DC_42D_n79C <sup>9,15</sup><br>DC_42E_n79A <sup>9,15</sup><br>DC_42E_n79C <sup>9,15</sup>                        | N/A                                 | N/A               |                                   |
| DC_46A_n78A <sup>2</sup><br>DC_46C_n78A <sup>2</sup><br>DC_46D_n78A <sup>2</sup><br>DC_46E_n78A <sup>2</sup>                                                                                                                                                                | N/A                                 | N/A               |                                   |

| EN-DC configuration                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1) | Single UL allowed | DL interruption allowed (Note 14) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|-----------------------------------|
| DC_48A_n5A                                                                                                                                                                                                                                                                                               | DC_48A_n5A                          | No                |                                   |
| DC_48A_n12A                                                                                                                                                                                                                                                                                              | DC_48A_n12A                         | No                |                                   |
| DC_48A_n46A<br>DC_48B_n46A<br>DC_48C_n46A<br>DC_48D_n46A<br>DC_48E_n46A<br>DC_48A_n46B<br>DC_48B_n46B<br>DC_48C_n46B<br>DC_48D_n46B<br>DC_48E_n46B<br>DC_48A_n46C<br>DC_48B_n46C<br>DC_48C_n46C<br>DC_48D_n46C<br>DC_48E_n46C<br>DC_48A_n46D<br>DC_48B_n46D<br>DC_48C_n46D<br>DC_48D_n46D<br>DC_48E_n46D | DC_48A_n46A<br>DC_48B_n46A          | No                |                                   |
| DC_48A_n66A                                                                                                                                                                                                                                                                                              | DC_48A_n66A                         | No                |                                   |
| DC_48A_n71A<br>DC_48B_n71A<br>DC_48C_n71A<br>DC_48D_n71A                                                                                                                                                                                                                                                 | DC_48A_n71A                         | No                |                                   |
| DC_48A-48A_n71A<br>DC_48A-48A-48A_n71A                                                                                                                                                                                                                                                                   | DC_48A_n71A                         | No                |                                   |
| DC_66A_n2A                                                                                                                                                                                                                                                                                               | DC_66A_n2A                          | DC_66_n2          |                                   |
| DC_66A-66A_n2A                                                                                                                                                                                                                                                                                           | DC_66A_n2A                          | DC_66_n2          |                                   |
| DC_66A_n5A<br>DC_66B_n5A<br>DC_66C_n5A                                                                                                                                                                                                                                                                   | DC_66A_n5A                          | DC_66_n5          |                                   |
| DC_66A-66A_n5A<br>DC_66A-66A-66A_n5A                                                                                                                                                                                                                                                                     | DC_66A_n5A                          | DC_66_n5          |                                   |
| DC_66A_n7A<br>DC_66A-66A_n7A<br>DC_66A_n7(2A)<br>DC_66A-66A_n7(2A)                                                                                                                                                                                                                                       | DC_66A_n7A                          | No                |                                   |
| DC_66A_n12A                                                                                                                                                                                                                                                                                              | DC_66A_n12A                         | No                |                                   |
| DC_66A_n25A                                                                                                                                                                                                                                                                                              | DC_66A_n25A                         | DC_66_n25         |                                   |
| DC_66A_n38A                                                                                                                                                                                                                                                                                              | DC_66A_n38A                         | No                |                                   |
| DC_66A-66A_n38A                                                                                                                                                                                                                                                                                          | DC_66A_n38A                         | No                |                                   |
| DC_66A_n41A<br>DC_66A_n41C                                                                                                                                                                                                                                                                               | DC_66A_n41A                         | No                |                                   |
| DC_66A_n41(2A)                                                                                                                                                                                                                                                                                           | DC_66A_n41A                         | No                |                                   |
| DC_66A_n46A                                                                                                                                                                                                                                                                                              | DC_66A_n46A                         | No                |                                   |
| DC_66A_n48A<br>DC_66A_n48B                                                                                                                                                                                                                                                                               | DC_66A_n48A                         | No                |                                   |
| DC_66A-66A_n48A<br>DC_66A-66A_n48B                                                                                                                                                                                                                                                                       | DC_66A_n48A                         | No                |                                   |
| DC_66A_n71A<br>DC_66C_n71A<br>DC_66A_n71B                                                                                                                                                                                                                                                                | DC_66A_n71A                         | No                |                                   |
| DC_66A-66A_n71A                                                                                                                                                                                                                                                                                          | DC_66A_n71A                         | No                |                                   |
| DC_66A_n78A                                                                                                                                                                                                                                                                                              | DC_66A_n78A                         | No                |                                   |
| DC_66A_n78(2A)                                                                                                                                                                                                                                                                                           | DC_66A_n78A                         | No                |                                   |
| DC_66A-66A_n78A                                                                                                                                                                                                                                                                                          | DC_66A_n78A                         | No                |                                   |
| DC_66A-66A_n78(2A)                                                                                                                                                                                                                                                                                       | DC_66A_n78A                         | No                |                                   |
| DC_71A_n5A                                                                                                                                                                                                                                                                                               | DC_71A_n5A                          | No                |                                   |
| DC_71A_n38A                                                                                                                                                                                                                                                                                              | DC_71A_n38A                         | No                |                                   |
| DC_71A_n48A                                                                                                                                                                                                                                                                                              | DC_71A_n48A                         | No                |                                   |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1) | Single UL allowed | DL interruption allowed (Note 14) |
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| DC_71A_n66A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_71A_n66A                         | No                |                                   |
| DC_71A_n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_71A_n78A                         | No                |                                   |
| <p>NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.</p> <p>NOTE 2: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band for Band 46 is paired with the uplink operating band (external E-UTRA band) of the carrier aggregation configuration that is supporting the configured Pcell.</p> <p>NOTE 3: The minimum requirements apply only when there is non-simultaneous Tx/Rx operation between E-UTRA and NR carriers. This restriction applies also for these carriers when applicable EN-DC configuration is part of a higher order EN-DC configuration.</p> <p>NOTE 4: For a UE not capable of <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For a UE not capable of <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, when UE capability <i>interBandContiguousMRDC</i> is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addition to intra-band non-contiguous EN-DC. For these UEs, the said intra-band requirements also apply for these carriers when applicable EN-DC configuration is a subset of a higher order EN-DC configuration.</p> <p>NOTE 5: The frequency range above 3600 MHz for Band n78 is not used in this combination.</p> <p>NOTE 6: The frequency range below 2506 MHz for Band 41 is not used in this combination.</p> <p>NOTE 7: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability.</p> <p>NOTE 8: The frequency range in band n28 / 28 is restricted for this band combination to 703 - 733 MHz for the UL and 758-788 MHz for the DL. This restriction also applies for any band combinations when DC_20_n28/ DC_28_n20/ CA_20-28/ CA_n20-n28 is a subset of a higher order band combination.</p> <p>NOTE 9: The combination is not used alone as fall-back mode of other band combinations in which UL in Band 42 is not used.</p> <p>NOTE 10: Void.</p> <p>NOTE 11: Maximum 6 dB power spectral density imbalance between downlink carriers is assumed when UE does not indicate <i>interBandMRDC-WithOverlapDL-Bands-r16</i>. Clause 7.10B.3 power imbalance requirement apply if the UE indicates <i>interBandMRDC-WithOverlapDL-Bands-r16</i>. For these UEs, the power spectral density imbalance condition also applies for these carriers when applicable EN-DC configuration is a subset of a higher order EN-DC configuration.</p> <p>NOTE 12: Applicable for frequency range above 4800 MHz for Band n79 in this combination.</p> <p>NOTE 13: For a UE not capable of <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference <math>\leq 3</math> usec. The requirements also apply for these carriers when applicable EN-DC configuration is a subset of a higher order EN-DC configuration.</p> <p>NOTE 14: Applicable when dynamic switching between two uplink carriers is conducted. The DL interruption requirements for NR DL carrier(s) and E-UTRA DL carrier(s) are specified in clause 8.2.1.2.14 of 38.133 [15] and clause 7.32.2.12 of 36.133 [16] respectively.</p> <p>NOTE 15: Simultaneous Rx/Tx capability does not apply for UEs supporting band 42 with a n77 implementation only. Same restrictions are applied to related higher order configurations.</p> |                                     |                   |                                   |

#### 5.5B.4.2 Inter-band EN-DC configurations within FR1 (three bands)

**Table 5.5B.4.2-1: Inter-band EN-DC configurations within FR1 (three bands)**

| EN-DC configuration                                                                                                                  | Uplink EN-DC configuration (NOTE 1)    |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| DC_1A-3A_n5A<br>DC_1A-3C_n5A                                                                                                         | DC_1A_n5A<br>DC_3A_n5A                 |
| DC_1A-3A_n7A<br>DC_1A-3A_n7B<br>DC_1A-3C_n7A<br>DC_1A-3C_n7B                                                                         | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A    |
| DC_1A-1A-3A_n7A<br>DC_1A-1A-3A_n7B<br>DC_1A-1A-3C_n7A<br>DC_1A-1A-3C_n7B<br>DC_1A-3A-3A_n7A<br>DC_1A-3A-3A_n7B<br>DC_1A-1A-3A-3A_n7A | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A    |
| DC_1A-3A_n8A                                                                                                                         | DC_1A_n8A<br>DC_3A_n8A                 |
| DC_1A-3A_n28A<br>DC_1A-3C_n28A                                                                                                       | DC_1A_n28A<br>DC_3A_n28A<br>DC_3C_n28A |
| DC_1A_n3A-n28A                                                                                                                       | DC_1A_n3A                              |

| EN-DC configuration                                                                    | Uplink EN-DC configuration (NOTE 1)    |
|----------------------------------------------------------------------------------------|----------------------------------------|
|                                                                                        | DC_1A_n28A                             |
| DC_1A-3A_n38A                                                                          | DC_1A_n38A<br>DC_3A_n38A               |
| DC_1A-3A_n40A                                                                          | DC_1A_n40A<br>DC_3A_n40A               |
| DC_1A-3A_n41A <sup>5</sup><br>DC_1A-3C_n41A                                            | DC_1A_n41A<br>DC_3A_n41A<br>DC_3C_n41A |
| DC_1A-3A_n71A<br>DC_1A-3A_n71B                                                         | DC_1A_n71A<br>DC_3A_n71A               |
| DC_1A-3A_n77A <sup>5</sup><br>DC_1A-3A_n77C <sup>5</sup>                               | DC_1A_n77A<br>DC_3A_n77A               |
| DC_1A-3A_n77(2A) <sup>5</sup>                                                          | DC_1A_n77A<br>DC_3A_n77A               |
| DC_1A-3A_n78A <sup>5</sup><br>DC_1A-3A_n78C <sup>5</sup><br>DC_1A-3C_n78A <sup>5</sup> | DC_1A_n78A<br>DC_3A_n78A               |
| DC_1A-3A_n78(2A) <sup>5</sup><br>DC_1A-3C_n78(2A) <sup>5</sup>                         | DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A |
| DC_1A_n3A-n78A <sup>5</sup>                                                            | DC_1A_n3A<br>DC_1A_n78A                |
| DC_1A-3A_n79A <sup>5</sup><br>DC_1A-3A_n79C <sup>5</sup>                               | DC_1A_n79A<br>DC_3A_n79A               |
| DC_1A-5A_n78A <sup>5</sup>                                                             | DC_1A_n78A<br>DC_5A_n78A               |
| DC_1A-5A_n79A                                                                          | DC_1A_n79A<br>DC_5A_n79A               |
| DC_1A_n5A-n78A <sup>5</sup>                                                            | DC_1A_n5A<br>DC_1A_n78A                |
| DC_1A-7A_n3A<br>DC_1A-7C_n3A                                                           | DC_1A_n3A<br>DC_7A_n3A<br>DC_7C_n3A    |
| DC_1A-7A_n5A<br>DC_1A-7C_n5A                                                           | DC_1A_n5A<br>DC_7A_n5A<br>DC_7C_n5A    |
| DC_1A-7A_n7A                                                                           | DC_1A_n7A<br>DC_7A_n7A <sup>2</sup>    |
| DC_1A-1A-7A_n7A                                                                        | DC_1A_n7A<br>DC_7A_n7A <sup>2</sup>    |
| DC_1A-7A_n8A                                                                           | DC_1A_n8A<br>DC_7A_n8A                 |
| DC_1A-7A_n28A <sup>5</sup><br>DC_1A-7C_n28A                                            | DC_1A_n28A<br>DC_7A_n28A<br>DC_7C_n28A |
| DC_1A-7A_n40A                                                                          | DC_1A_n40A<br>DC_7A_n40A               |
| DC_1A-7A_n78A <sup>5</sup><br>DC_1A-7C_n78A                                            | DC_1A_n78A<br>DC_7A_n78A<br>DC_7C_n78A |
| DC_1A-7A_n78(2A) <sup>5</sup><br>DC_1A-7C_n78(2A) <sup>5</sup>                         | DC_1A_n78A<br>DC_7A_n78A<br>DC_7C_n78A |
| DC_1A-7A-7A_n78A <sup>5</sup>                                                          | DC_1A_n78A<br>DC_7A_n78A               |
| DC_1A_n7A-n78A<br>DC_1A_n7B-n78A                                                       | DC_1A_n7A<br>DC_1A_n78A                |
| DC_1A-8A_n3A                                                                           | DC_1A_n3A<br>DC_8A_n3A                 |
| DC_1A-8A_n28A                                                                          | DC_1A_n28A<br>DC_8A_n28A               |
| DC_1A_n8A-n40A                                                                         | DC_1A_n8A<br>DC_1A_n40A                |
| DC_1A-8A_n77A <sup>5</sup>                                                             | DC_1A_n77A                             |

| EN-DC configuration                                        | Uplink EN-DC configuration (NOTE 1)                |
|------------------------------------------------------------|----------------------------------------------------|
|                                                            | DC_8A_n77A                                         |
| DC_1A-8A_n77(2A) <sup>5</sup>                              | DC_1A_n77A<br>DC_8A_n77A                           |
| DC_1A-8A_n78A <sup>5</sup>                                 | DC_1A_n78A<br>DC_8A_n78A                           |
| DC_1A_n8A-n78A <sup>5</sup>                                | DC_1A_n8A<br>DC_1A_n78A                            |
| DC_1A-8A_n79A <sup>5</sup>                                 | DC_1A_n79A<br>DC_8A_n79A                           |
| DC_1A-11A_n3A                                              | DC_1A_n3A<br>DC_11A_n3A                            |
| DC_1A-11A_n77A <sup>5</sup>                                | DC_1A_n77A<br>DC_11A_n77A                          |
| DC_1A-11A_n77(2A) <sup>5</sup>                             | DC_1A_n77A<br>DC_11A_n77A                          |
| DC_1A-11A_n78A <sup>5</sup>                                | DC_1A_n78A<br>DC_11A_n78A                          |
| DC_1A-18A_n3A                                              | DC_1A_n3A<br>DC_18A_n3A                            |
| DC_1A-18A_n77A <sup>5</sup>                                | DC_1A_n77A<br>DC_18A_n77A                          |
| DC_1A-18A_n78A <sup>5</sup>                                | DC_1A_n78A<br>DC_18A_n78A                          |
| DC_1A-18A_n79A                                             | DC_1A_n79A<br>DC_18A_n79A                          |
| DC_1A-19A_n77A <sup>5</sup><br>DC_1A-19A_n77C <sup>5</sup> | DC_1A_n77A<br>DC_19A_n77A                          |
| DC_1A-19A_n78A <sup>5</sup><br>DC_1A-19A_n78C <sup>5</sup> | DC_1A_n78A<br>DC_19A_n78A                          |
| DC_1A-19A_n79A <sup>5</sup><br>DC_1A-19A_n79C <sup>5</sup> | DC_1A_n79A<br>DC_19A_n79A                          |
| DC_1A-20A_n3A<br>DC_1C-20A_n3A                             | DC_1A_n3A<br>DC_20A_n3A                            |
| DC_1A-20A_n8A                                              | DC_1A_n8A<br>DC_20A_n8A                            |
| DC_1A-20A_n28A <sup>6,11,12</sup>                          | DC_1A_n28A<br>DC_20A_n28A                          |
| DC_1A-20A_n38A                                             | DC_1A_n38A<br>DC_20A_n38A                          |
| DC_1A-20A_n41A                                             | DC_1A_n41A<br>DC_20A_n41A                          |
| DC_1A-20A_n78A <sup>5</sup>                                | DC_1A_n78A<br>DC_20A_n78A                          |
| DC_1A-21A_n77A <sup>5</sup><br>DC_1A-21A_n77C <sup>5</sup> | DC_1A_n77A<br>DC_21A_n77A                          |
| DC_1A-21A_n78A <sup>5</sup><br>DC_1A-21A_n78C <sup>5</sup> | DC_1A_n78A<br>DC_21A_n78A                          |
| DC_1A-21A_n79A <sup>5</sup><br>DC_1A-21A_n79C <sup>5</sup> | DC_1A_n79A<br>DC_21A_n79A                          |
| DC_1A-28A_n3A                                              | DC_1A_n3A<br>DC_28A_n3A                            |
| DC_1A-28A_n5A <sup>6</sup>                                 | DC_1A_n5A<br>DC_28A_n5A                            |
| DC_1A-28A_n7A<br>DC_1A-28A_n7B                             | DC_1A_n7A<br>DC_28A_n7A<br>DC_1A_n7B<br>DC_28A_n7B |
| DC_1A-1A-28A_n7A<br>DC_1A-1A-28A_n7B                       | DC_1A_n7A<br>DC_28A_n7A<br>DC_1A_n7B<br>DC_28A_n7B |
| DC_1A_n28A-n40A                                            | DC_1A_n28A<br>DC_1A_n40A                           |
| DC_1A-28A_n40A                                             | DC_1A_n40A                                         |

| EN-DC configuration                                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
|                                                                                                                                                                                                                                                                                      | DC_28A_n40A                              |
| DC_1A-28A_n77A <sup>5</sup><br>DC_1A-28A_n77C <sup>5</sup>                                                                                                                                                                                                                           | DC_1A_n77A<br>DC_28A_n77A                |
| DC_1A-28A_n78A <sup>5</sup><br>DC_1A-28A_n78C <sup>5</sup>                                                                                                                                                                                                                           | DC_1A_n78A<br>DC_28A_n78A                |
| DC_1A_n28A-n77A <sup>5</sup><br>DC_1A_n28A-n77(2A) <sup>5</sup>                                                                                                                                                                                                                      | DC_1A_n28A<br>DC_1A_n77A                 |
| DC_1A_n28A-n78A <sup>5</sup>                                                                                                                                                                                                                                                         | DC_1A_n28A<br>DC_1A_n78A                 |
| DC_1A-28A_n79A <sup>5</sup><br>DC_1A-28A_n79C <sup>5</sup>                                                                                                                                                                                                                           | DC_1A_n79A<br>DC_28A_n79A                |
| DC_1A-32A_n78A<br>DC_1A-32A_n78(2A)                                                                                                                                                                                                                                                  | DC_1A_n78A                               |
| DC_1A-(n)38AA                                                                                                                                                                                                                                                                        | DC_1A_n38A                               |
| DC_1A_n40A-n78A<br>DC_1A_n40A-n78(2A)                                                                                                                                                                                                                                                | DC_1A_n40A<br>DC_1A_n78A                 |
| DC_1A-41A_n3A <sup>5</sup><br>DC_1A-41C_n3A <sup>5</sup>                                                                                                                                                                                                                             | DC_41A_n3A<br>DC_41C_n3A                 |
| DC_1A-41A_n28A <sup>5</sup><br>DC_1A-41C_n28A <sup>5</sup>                                                                                                                                                                                                                           | DC_1A_n28A<br>DC_41A_n28A<br>DC_41C_n28A |
| DC_1A-(n)41AA<br>DC_1A-(n)41CA<br>DC_1A-(n)41DA                                                                                                                                                                                                                                      | DC_1A_n41A                               |
| DC_1A-41A_n41A<br>DC_1A-41C_n41A                                                                                                                                                                                                                                                     | DC_1A_n41A                               |
| DC_1A-41A_n77A<br>DC_1A-41C_n77A                                                                                                                                                                                                                                                     | DC_1A_n77A<br>DC_41A_n77A                |
| DC_1A-41A_n77(2A)<br>DC_1A-41C_n77(2A)                                                                                                                                                                                                                                               | DC_1A_n77A<br>DC_41A_n77A<br>DC_41C_n77A |
| DC_1A-41A_n78A<br>DC_1A-41C_n78A                                                                                                                                                                                                                                                     | DC_1A_n78A<br>DC_41A_n78A                |
| DC_1A_n41A-n78A                                                                                                                                                                                                                                                                      | DC_1A_n41A<br>DC_1A_n78A                 |
| DC_1A-41A_n78(2A)<br>DC_1A-41C_n78(2A)                                                                                                                                                                                                                                               | DC_1A_n78A<br>DC_41A_n78A<br>DC_41C_n78A |
| DC_1A-41A_n79A <sup>5</sup><br>DC_1A-41C_n79A <sup>5</sup>                                                                                                                                                                                                                           | DC_1A_n79A                               |
| DC_1A-42A_n28A <sup>5</sup>                                                                                                                                                                                                                                                          | DC_1A_n28A<br>DC_42A_n28A                |
| DC_1A-42C_n28A <sup>5</sup>                                                                                                                                                                                                                                                          | DC_1A_n28A<br>DC_42A_n28A<br>DC_42C_n28A |
| DC_1A-42A_n77A <sup>10,11</sup><br>DC_1A-42A_n77C <sup>10,11</sup><br>DC_1A-42C_n77A <sup>10,11</sup><br>DC_1A-42C_n77C <sup>10,11</sup><br>DC_1A-42D_n77A <sup>10,11</sup><br>DC_1A-42D_n77C <sup>10,11</sup><br>DC_1A-42E_n77A <sup>10,11</sup><br>DC_1A-42E_n77C <sup>10,11</sup> | DC_1A_n77A                               |
| DC_1A-42A_n77(2A) <sup>10,11</sup><br>DC_1A-42C_n77(2A) <sup>10,11</sup>                                                                                                                                                                                                             | DC_1A_n77A                               |
| DC_1A-42A_n78A <sup>10,11</sup><br>DC_1A-42A_n78C <sup>10,11</sup><br>DC_1A-42C_n78A <sup>10,11</sup><br>DC_1A-42C_n78C <sup>10,11</sup><br>DC_1A-42D_n78A <sup>10,11</sup><br>DC_1A-42D_n78C <sup>10,11</sup><br>DC_1A-42E_n78A <sup>10,11</sup><br>DC_1A-42E_n78C <sup>10,11</sup> | DC_1A_n78A                               |
| DC_1A-42A_n79A                                                                                                                                                                                                                                                                       | DC_1A_n79A                               |

| EN-DC configuration                                                                                                        | Uplink EN-DC configuration (NOTE 1)      |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| DC_1A-42A_n79C<br>DC_1A-42C_n79A<br>DC_1A-42C_n79C<br>DC_1A-42D_n79A<br>DC_1A-42D_n79C<br>DC_1A-42E_n79A<br>DC_1A-42E_n79C |                                          |
| DC_1A_n75A-n78A<br>DC_1A_n75A-n78(2A)                                                                                      | DC_1A_n78A                               |
| DC_1A_n77A-n79A <sup>13</sup>                                                                                              | DC_1A_n77A<br>DC_1A_n79A                 |
| DC_1A_SUL_n77A-n80A                                                                                                        | DC_1A_n77A<br>DC_1A_n80A                 |
| DC_1A_SUL_n77A-n84A                                                                                                        | DC_1A_n77A<br>DC_1A_n84A ULSUP-TDM_n77A  |
| DC_1A_n78A-n79A <sup>14</sup>                                                                                              | DC_1A_n78A<br>DC_1A_n79A                 |
| DC_1A_SUL_n78A-n80A                                                                                                        | DC_1A_n78A<br>DC_1A_n80A                 |
| DC_1A_SUL_n78A-n84A <sup>5</sup>                                                                                           | DC_1A_n78A,<br>DC_1A_n84A ULSUP-TDM_n78A |
| DC_1A_SUL_n79A-n84A                                                                                                        | DC_1A_n79A,<br>DC_1A_n84A ULSUP-TDM_n79A |
| DC_2A-4A_n38A                                                                                                              | DC_2A_n38A<br>DC_4A_n38A                 |
| DC_2A-4A_n41A                                                                                                              | DC_2A_n41A<br>DC_4A_n41A                 |
| DC_2A-5A_n2A                                                                                                               | DC_5A_n2A                                |
| DC_2A-5B_n2A                                                                                                               | DC_5A_n2A                                |
| DC_2A-5A-5A_n2A                                                                                                            | DC_5A_n2A                                |
| DC_2A-5A_n5A                                                                                                               | DC_2A_n5A                                |
| DC_2A-2A-5A_n5A                                                                                                            | DC_2A_n5A                                |
| DC_2A-5A_n66A<br>DC_2A-5B_n66A                                                                                             | DC_2A_n66A<br>DC_5A_n66A                 |
| DC_2A-5A-5A_n66A                                                                                                           | DC_2A_n66A<br>DC_5A_n66A                 |
| DC_2A-5A_n71A                                                                                                              | DC_2A_n71A<br>DC_5A_n71A                 |
| DC_2A-7A_n38A                                                                                                              | 2A <sup>8</sup>                          |
| DC_2A-2A-7A_n38A                                                                                                           | 2A <sup>8</sup>                          |
| DC_2A-7A_n66A<br>DC_2A-7C_n66A                                                                                             | DC_2A_n66A<br>DC_7A_n66A                 |
| DC_2A-7A-7A_n66A<br>DC_2A-2A-7A_n66A                                                                                       | DC_2A_n66A<br>DC_7A_n66A                 |
| DC_2A-7A_n71A                                                                                                              | DC_2A_n71A<br>DC_7A_n71A                 |
| DC_2A-2A-7A_n71A                                                                                                           | DC_2A_n71A<br>DC_7A_n71A                 |
| DC_2A-7A_n78A<br>DC_2A-7C_n78A<br>DC_2A-7A_n78(2A)<br>DC_2A-7C_n78(2A)                                                     | DC_2A_n78A<br>DC_7A_n78A<br>DC_7C_n78A   |
| DC_2A_n7A-n78A                                                                                                             | DC_2A_n7A<br>DC_2A_n78A                  |
| DC_2A_n7(2A)-n78A                                                                                                          | DC_2A_n7A<br>DC_2A_n78A                  |
| DC_2A_n7A-n78(2A)                                                                                                          | DC_2A_n7A<br>DC_2A_n78A                  |
| DC_2A_n7(2A)-n78(2A)                                                                                                       | DC_2A_n7A<br>DC_2A_n78A                  |
| DC_2A-7A-7A_n78A<br>DC_2A-7A-7A_n78(2A)                                                                                    | DC_2A_n78A<br>DC_7A_n78A                 |
| DC_2A-12A_n2A                                                                                                              | DC_12A_n2A                               |
| DC_2A-(n)12AA                                                                                                              | DC_2A_n12A                               |

| EN-DC configuration                                         | Uplink EN-DC configuration (NOTE 1)  |
|-------------------------------------------------------------|--------------------------------------|
|                                                             | DC_(n)12AA <sup>2</sup>              |
| DC_2A-12A_n66A                                              | DC_2A_n66A<br>DC_12A_n66A            |
| DC_2A-2A-12A_n66A                                           | DC_2A_n66A<br>DC_12A_n66A            |
| DC_2A-13A_n2A                                               | DC_13A_n2A                           |
| DC_2A-13A_n5A                                               | DC_2A_n5A                            |
| DC_2A-2A-13A_n5A                                            | DC_2A_n5A                            |
| DC_2A-13A_n66A                                              | DC_2A_n66A<br>DC_13A_n66A            |
| DC_2A-2A-13A_n66A                                           | DC_2A_n66A<br>DC_13A_n66A            |
| DC_2A-14A_n2A                                               | DC_2A_n2A <sup>2</sup><br>DC_14A_n2A |
| DC_2A-14A_n66A                                              | DC_2A_n66A<br>DC_14A_n66A            |
| DC_2A-2A-14A_n66A                                           | DC_2A_n66A<br>DC_14A_n66A            |
| DC_2A-29A_n66A                                              | DC_2A_n66A                           |
| DC_2A-2A-29A_n66A                                           | DC_2A_n66A                           |
| DC_2A-30A_n2A                                               | DC_2A_n2A <sup>2</sup><br>DC_30A_n2A |
| DC_2A-30A_n5A                                               | DC_2A_n5A<br>DC_30A_n5A              |
| DC_2A-2A-30A_n5A                                            | DC_2A_n5A<br>DC_30A_n5A              |
| DC_2A-30A_n66A                                              | DC_2A_n66A<br>DC_30A_n66A            |
| DC_2A-2A-30A_n66A                                           | DC_2A_n66A<br>DC_30A_n66A            |
| DC_2A_n38A-n78A                                             | DC_2A_n38A<br>DC_2A_n78A             |
| DC_2A_n41A-n66A<br>DC_2A_n41C-n66A                          | DC_2A_n41A<br>DC_2A_n66A             |
| DC_2A_n41(2A)-n66A                                          | DC_2A_n41A<br>DC_2A_n66A             |
| DC_2A_n41A-n71A<br>DC_2A_n41C-n71A                          | DC_2A_n41A<br>DC_2A_n71A             |
| DC_2A_n41(2A)-n71A                                          | DC_2A_n41A<br>DC_2A_n71A             |
| DC_2A-46A_n41A<br>DC_2A-46C_n41A<br>DC_2A-46D_n41A          | DC_2A_n41A                           |
| DC_2A-46A_n41(2A)<br>DC_2A-46C_n41(2A)<br>DC_2A-46D_n41(2A) | DC_2A_n41A                           |
| DC_2A-46A_n66A<br>DC_2A-46C_n66A<br>DC_2A-46D_n66A          | DC_2A_n66A                           |
| DC_2A-46A_n71A<br>DC_2A-46C_n71A<br>DC_2A-46D_n71A          | DC_2A_n71A                           |
| DC_2A-48A_n71A                                              | DC_2A_n71A<br>DC_48A_n71A            |
| DC_2A-48A_n12A                                              | DC_2A_n12A<br>DC_48A_n12A            |
| DC_2A-48A_n66A                                              | DC_2A_n66A<br>DC_48A_n66A            |
| DC_2A-66A_n2A                                               | DC_2A_n2A <sup>2</sup><br>DC_66A_n2A |
| DC_2A-66A_n5A                                               | DC_2A_n5A<br>DC_66A_n5A              |
| DC_2A-2A-66A_n5A<br>DC_2A-66A-66A_n5A                       | DC_2A_n5A<br>DC_66A_n5A              |

| EN-DC configuration                                                  | Uplink EN-DC configuration (NOTE 1)              |
|----------------------------------------------------------------------|--------------------------------------------------|
| DC_2A-2A-66A-66A_n5A<br>DC_2A-66A-66A-66A_n5A                        |                                                  |
| DC_2A-66A_n12A                                                       | DC_2A_n12A<br>DC_66A_n12A                        |
| DC_2A-66A_n25A <sup>11,12</sup>                                      | DC_66A_n25A                                      |
| DC_2A-66A_n38A                                                       | DC_2A_n38A<br>DC_66A_n38A                        |
| DC_2A-2A-66A_n38A<br>DC_2A-66A-66A_n38A                              | DC_2A_n38A<br>DC_66A_n38A                        |
| DC_2A-66A_n41A<br>DC_2A-66A_n41C<br>DC_2C-66A_n41A                   | DC_2A_n41A<br>DC_66A_n41A                        |
| DC_2A-2A-66A_n41A<br>DC_2A-66A_n41(2A)                               | DC_2A_n41A<br>DC_66A_n41A                        |
| DC_2A-66A_n48A                                                       | DC_2A_n48A<br>DC_66A_n48A                        |
| DC_2A-66A_n48B                                                       | DC_2A_n48A<br>DC_66A_n48A                        |
| DC_2A-66A-66A_n48A                                                   | DC_2A_n48A<br>DC_66A_n48A                        |
| DC_2A-66A-66A_n48B                                                   | DC_2A_n48A<br>DC_66A_n48A                        |
| DC_2A-66A_n66A                                                       | DC_2A_n66A<br>DC_66A_n66A <sup>2</sup>           |
| DC_2A-2A-66A_n66A                                                    | DC_2A_n66A<br>DC_66A_n66A <sup>2</sup>           |
| DC_2A-66A_n71A<br>DC_2A-66A_n71B<br>DC_2A-66C_n71A<br>DC_2C-66A_n71A | DC_2A_n71A<br>DC_66A_n71A                        |
| DC_2A-2A-66A_n71A<br>DC_2A-66A-66A_n71A<br>DC_2A-2A-66A-66A_n71A     | DC_2A_n71A<br>DC_66A_n71A                        |
| DC_2A_n66A-n71A                                                      | DC_2A_n66A<br>DC_2A_n71A                         |
| DC_2A-66A_n78A<br>DC_2A-66A_n78(2A)                                  | DC_2A_n78A<br>DC_66A_n78A                        |
| DC_2A_n66A-n78A                                                      | DC_2A_n66A<br>DC_2A_n78A                         |
| DC_2A-66A-66A_n78A<br>DC_2A-66A-66A_n78(2A)                          | DC_2A_n78A<br>DC_66A_n78A                        |
| DC_2A-71A_n38A                                                       | DC_71A_n38A<br>DC_2A_n38A                        |
| DC_2A-2A-71A_n38A                                                    | DC_71A_n38A<br>DC_2A_n38A                        |
| DC_2A-71A_n66A                                                       | DC_2A_n66A<br>DC_71A_n66A                        |
| DC_2A-2A-71A_n66A                                                    | DC_2A_n66A<br>DC_71A_n66A                        |
| DC_2A-71A_n78A                                                       | DC_71A_n78A<br>DC_2A_n78A                        |
| DC_2A-2A-71A_n78A                                                    | DC_71A_n78A<br>DC_2A_n78A                        |
| DC_2A-(n)71AA                                                        | DC_2A_n71A<br>DC_(n)71AA                         |
| DC_3A_n1A-n7A                                                        | DC_3A_n1A<br>DC_3A_n7A                           |
| DC_3C_n1A-n7A                                                        | DC_3A_n1A<br>DC_3A_n7A<br>DC_3C_n1A<br>DC_3C_n7A |
| DC_3A_n1A-n28A                                                       | DC_3A_n1A<br>DC_3A_n28A                          |
| DC_3C_n1A-n28A                                                       | DC_3A_n1A                                        |

| EN-DC configuration                                                                                                              | Uplink EN-DC configuration (NOTE 1)                  |
|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
|                                                                                                                                  | DC_3A_n28A<br>DC_3C_n1A<br>DC_3C_n28A                |
| DC_3A_n1A-n40A                                                                                                                   | DC_3A_n1A<br>DC_3A_n40A                              |
| DC_3A_n1A-n77A <sup>5</sup>                                                                                                      | DC_3A_n1A<br>DC_3A_n77A                              |
| DC_3A_n1A-n78A <sup>5</sup><br>DC_3C_n1A-n78A <sup>5</sup>                                                                       | DC_3A_n1A<br>DC_3A_n78A                              |
| DC_3A-3A_n1A-n78A <sup>5</sup>                                                                                                   | DC_3A_n1A<br>DC_3A_n78A                              |
| DC_3A_n1A-n79A <sup>5</sup>                                                                                                      | DC_3A_n1A<br>DC_3A_n79A                              |
| DC_3A_n3A-n77A <sup>5</sup>                                                                                                      | DC_3A_n77A<br>DC_3A_n3A <sup>2</sup>                 |
| DC_3A_n3A-n78A <sup>5</sup>                                                                                                      | DC_3A_n78A<br>DC_3A_n3A <sup>2</sup>                 |
| DC_3A-5A_n78A <sup>5</sup>                                                                                                       | DC_3A_n78A<br>DC_5A_n78A                             |
| DC_3A_n5A-n78A <sup>5</sup><br>DC_3C_n5A-n78A <sup>5</sup>                                                                       | DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A                |
| DC_3A-5A_n79A <sup>5</sup>                                                                                                       | DC_3A_n79A<br>DC_5A_n79A                             |
| DC_3A-7A_n1A<br>DC_3A-7C_n1A<br>DC_3C-7A_n1A<br>DC_3C-7C_n1A                                                                     | DC_3A_n1A<br>DC_3C_n1A<br>DC_7A_n1A<br>DC_7C_n1A     |
| DC_3A-3A-7A_n1A<br>DC_3A-7A-7A_n1A<br>DC_3A-3A-7A-7A_n1A                                                                         | DC_3A_n1A<br>DC_7A_n1A                               |
| DC_3A-7A_n5A<br>DC_3C-7A_n5A<br>DC_3A-7C_n5A<br>DC_3C-7C_n5A                                                                     | DC_3A_n5A<br>DC_7A_n5A<br>DC_7C_n5A                  |
| DC_3A-7A_n7A<br>DC_3C-7A_n7A                                                                                                     | DC_3A_n7A<br>DC_3C_n7A<br>DC_7A_n7A <sup>2</sup>     |
| DC_3A-3A-7A_n7A                                                                                                                  | DC_3A_n7A<br>DC_7A_n7A <sup>2</sup>                  |
| DC_3A-7A_n8A                                                                                                                     | DC_3A_n8A<br>DC_7A_n8A                               |
| DC_3A-7A_n28A<br>DC_3A-7C_n28A<br>DC_3C-7A_n28A<br>DC_3C-7C_n28A                                                                 | DC_3A_n28A<br>DC_3C_n28A<br>DC_7A_n28A<br>DC_7C_n28A |
| DC_3A-7A_n40A                                                                                                                    | DC_3A_n40A<br>DC_7A_n40A                             |
| DC_3A-7A_n77A <sup>5</sup>                                                                                                       | DC_3A_n77A<br>DC_7A_n77A                             |
| DC_3A-3A-7A_n77A <sup>5</sup><br>DC_3A-7A-7A_n77A <sup>5</sup><br>DC_3A-3A-7A-7A_n77A <sup>5</sup>                               | DC_3A_n77A<br>DC_7A_n77A                             |
| DC_3A-7A_n78A <sup>5</sup><br>DC_3C-7A_n78A <sup>5</sup><br>DC_3A-7C_n78A <sup>5</sup><br>DC_3C-7C_n78A <sup>5</sup>             | DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A<br>DC_7C_n78A |
| DC_3A-7A_n78(2A) <sup>5</sup><br>DC_3C-7A_n78(2A) <sup>5</sup><br>DC_3A-7C_n78(2A) <sup>5</sup><br>DC_3C-7C_n78(2A) <sup>5</sup> | DC_3A_n78A<br>DC_7A_n78A<br>DC_3C_n78A<br>DC_7C_n78A |
| DC_3A_n7A-n28A<br>DC_3C_n7A-n28A                                                                                                 | DC_3A_n7A<br>DC_3A_n28A<br>DC_3C_n7A                 |

| EN-DC configuration                                                                                                      | Uplink EN-DC configuration (NOTE 1)                |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
|                                                                                                                          | DC_3C_n28A                                         |
| DC_3A-3A-7A_n78A <sup>5</sup><br>DC_3A-7A-7A_n78A <sup>5</sup><br>DC_3A-3A-7A-7A_n78A <sup>5</sup>                       | DC_3A_n78A<br>DC_7A_n78A                           |
| DC_3A_n7A-n78A <sup>5</sup><br>DC_3A_n7B-n78A <sup>5</sup><br>DC_3C_n7A-n78A <sup>5</sup><br>DC_3C_n7B-n78A <sup>5</sup> | DC_3A_n7A<br>DC_3C_n7A<br>DC_3A_n78A               |
| DC_3A-3A_n7A-n78A <sup>5</sup><br>DC_3A-3A_n7B-n78A <sup>5</sup>                                                         | DC_3A_n7A<br>DC_3A_n7B<br>DC_3A_n78A               |
| DC_3A_n7A-n78(2A)<br>DC_3C_n7A-n78(2A)                                                                                   | DC_3A_n7A<br>DC_3A_n78A<br>DC_3C_n7A<br>DC_3C_n78A |
| DC_3A-8A_n1A<br>DC_3C-8A_n1A                                                                                             | DC_3A_n1A<br>DC_8A_n1A                             |
| DC_3A-3A-8A_n1A                                                                                                          | DC_3A_n1A<br>DC_8A_n1A                             |
| DC_3A_n8A-n40A                                                                                                           | DC_3A_n8A<br>DC_3A_n40A                            |
| DC_3A-8A_n28A                                                                                                            | DC_3A_n28A<br>DC_8A_n28A                           |
| DC_3A-8A_n77A <sup>5</sup>                                                                                               | DC_3A_n77A<br>DC_8A_n77A                           |
| DC_3A-8A_n77(2A) <sup>5</sup>                                                                                            | DC_3A_n77A<br>DC_8A_n77A                           |
| DC_3A-8A_n78A <sup>5</sup><br>DC_3C-8A_n78A <sup>5</sup>                                                                 | DC_3A_n78A<br>DC_8A_n78A                           |
| DC_3A-3A-8A_n78A <sup>5</sup>                                                                                            | DC_3A_n78A<br>DC_8A_n78A                           |
| DC_3A-8A_n79A <sup>5</sup>                                                                                               | DC_3A_n79A<br>DC_8A_n79A                           |
| DC_3A_n8A-n78A <sup>5</sup>                                                                                              | DC_3A_n8A<br>DC_3A_n78A                            |
| DC_3A-18A_n77A                                                                                                           | DC_3A_n77A<br>DC_18A_n77A                          |
| DC_3A-18A_n78A                                                                                                           | DC_3A_n78A<br>DC_18A_n78A                          |
| DC_3A-18A_n79A                                                                                                           | DC_3A_n79A<br>DC_18A_n79A                          |
| DC_3A-19A_n77A <sup>5</sup><br>DC_3A-19A_n77C <sup>5</sup>                                                               | DC_3A_n77A<br>DC_19A_n77A                          |
| DC_3A-19A_n78A <sup>5</sup><br>DC_3A-19A_n78C <sup>5</sup>                                                               | DC_3A_n78A<br>DC_19A_n78A                          |
| DC_3A-19A_n79A <sup>5</sup><br>DC_3A-19A_n79C <sup>5</sup>                                                               | DC_3A_n79A<br>DC_19A_n79A                          |
| DC_3A-20A_n1A<br>DC_3C-20A_n1A                                                                                           | DC_3A_n1A<br>DC_3C_n1A<br>DC_20A_n1A               |
| DC_3A-20A_n7A<br>DC_3C-20A_n7A                                                                                           | DC_3A_n7A<br>DC_3C_n7A<br>DC_20A_n7A               |
| DC_3A-20A_n8A                                                                                                            | DC_3A_n8A<br>DC_20A_n8A                            |
| DC_3A-20A_n28A <sup>5,6,11,12</sup><br>DC_3C-20A_n28A <sup>5,6,11,12</sup>                                               | DC_3A_n28A<br>DC_3C_n28A<br>DC_20A_n28A            |
| DC_3A-20A_n41A                                                                                                           | DC_3A_n41A<br>DC_20A_n41A                          |
| DC_3C-20A_n41A                                                                                                           | DC_3C_n41A<br>DC_20A_n41A                          |
| DC_3A-20A_n38A                                                                                                           | DC_3A_n38A<br>DC_20A_n38A                          |

| EN-DC configuration                                                                       | Uplink EN-DC configuration (NOTE 1)                             |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| DC_3A-20A_n78A <sup>5</sup><br>DC_3C-20A_n78A <sup>5</sup>                                | DC_3A_n78A<br>DC_20A_n78A                                       |
| DC_3A_n20A-n78A                                                                           | DC_3A_n20A<br>DC_3A_n78A                                        |
| DC_3A-21A_n77A <sup>5</sup><br>DC_3A-21A_n77C <sup>5</sup>                                | DC_3A_n77A<br>DC_21A_n77A                                       |
| DC_3A-21A_n78A <sup>5</sup><br>DC_3A-21A_n78C <sup>5</sup>                                | DC_3A_n78A<br>DC_21A_n78A                                       |
| DC_3A-21A_n79A <sup>5</sup><br>DC_3A-21A_n79C <sup>5</sup>                                | DC_3A_n79A<br>DC_21A_n79A                                       |
| DC_3A-28A_n5A<br>DC_3C-28A_n5A                                                            | DC_3A_n5A<br>DC_28A_n5A                                         |
| DC_3A-28A_n7A<br>DC_3C-28A_n7A<br>DC_3A-28A_n7B<br>DC_3C-28A_n7B                          | DC_3A_n7A<br>DC_3C_n7A<br>DC_28A_n7A<br>DC_3A_n7B<br>DC_28A_n7B |
| DC_3A-28A_n40A                                                                            | DC_3A_n40A<br>DC_28A_n40A                                       |
| DC_3A-3A-28A_n7A<br>DC_3A-3A-28A_n7B                                                      | DC_3A_n7A<br>DC_28A_n7A<br>DC_3A_n7B<br>DC_28A_n7B              |
| DC_3A_n28A-n40A                                                                           | DC_3A_n28A<br>DC_3A_n40A                                        |
| DC_3A-28A_n41A <sup>5</sup>                                                               | <b>DC_3A_n41A</b><br>DC_28A_n41A                                |
| DC_3A-28A_n77A <sup>5</sup><br>DC_3A-28A_n77C <sup>5</sup>                                | DC_3A_n77A<br>DC_28A_n77A                                       |
| DC_3A-28A_n77(2A) <sup>5</sup>                                                            | DC_3A_n77A<br>DC_28A_n77A                                       |
| DC_3A_n28A-n77A <sup>5</sup>                                                              | DC_3A_n28A<br>DC_3A_n77A                                        |
| DC_3A_n28A-n77(2A) <sup>5</sup>                                                           | DC_3A_n28A<br>DC_3A_n77A                                        |
| DC_3A-28A_n78A <sup>5</sup><br>DC_3C-28A_n78A <sup>5</sup><br>DC_3A-28A_n78C <sup>5</sup> | DC_3A_n78A<br>DC_28A_n78A                                       |
| DC_3A-3A-28A_n78A                                                                         | DC_3A_n78A<br>DC_28A_n78A                                       |
| DC_3A_n28A-n78A <sup>5</sup><br>DC_3C_n28A-n78A <sup>5</sup>                              | DC_3A_n28A<br>DC_3A_n78A<br>DC_3C_n28A                          |
| DC_3A-28A_n79A <sup>5</sup><br>DC_3A-28A_n79C <sup>5</sup>                                | DC_3A_n79A<br>DC_28A_n79A                                       |
| DC_3A-32A_n78A<br>DC_3A-32A_n78(2A)                                                       | DC_3A_n78A                                                      |
| DC_3A-38A_n78A                                                                            | DC_3A_n78A                                                      |
| DC_3A-40A_n1A                                                                             | DC_3A_n1A<br>DC_40A_n1A                                         |
| DC_3A_n40A-n41A                                                                           | DC_3A_n40A<br>DC_3A_n41A                                        |
| DC_3A_n40A-n78A                                                                           | DC_3A_n40A<br>DC_3A_n78A                                        |
| DC_3A_n40A-n79A                                                                           | DC_3A_n40A<br>DC_3A_n79A                                        |
| DC_3A-41A_n28A <sup>5</sup>                                                               | DC_3A_n28A<br>DC_41A_n28A                                       |
| DC_3A-41C_n28A <sup>5</sup>                                                               | DC_3A_n28A<br>DC_41A_n28A<br>DC_41C_n28A                        |
| DC_3A-41A_n41A<br>DC_3A-41C_n41A<br>DC_3A-41D_n41A                                        | DC_3A_n41A                                                      |

| EN-DC configuration                                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| DC_3A-(n)41AA<br>DC_3A-(n)41CA<br>DC_3A-(n)41DA                                                                                                                                                                                                                                      | DC_3A_n41A                                                                         |
| DC_3A-41A_n77A<br>DC_3A-41C_n77A                                                                                                                                                                                                                                                     | DC_3A_n77A<br>DC_41A_n77A                                                          |
| DC_3A-41A_n77(2A)<br>DC_3A-41C_n77(2A)                                                                                                                                                                                                                                               | DC_3A_n77A<br>DC_41A_n77A<br>DC_41C_n77A                                           |
| DC_3A-41A_n78A<br>DC_3A-41C_n78A                                                                                                                                                                                                                                                     | DC_3A_n78A<br>DC_41A_n78A<br>DC_41C_n78A                                           |
| DC_3A_n41A-n78A                                                                                                                                                                                                                                                                      | DC_3A_n41A<br>DC_3A_n78A                                                           |
| DC_3A-41A_n78(2A)<br>DC_3A-41C_n78(2A)                                                                                                                                                                                                                                               | DC_3A_n78A<br>DC_41A_n78A<br>DC_41C_n78A                                           |
| DC_3A-42A_n28A <sup>5</sup>                                                                                                                                                                                                                                                          | DC_3A_n28A<br>DC_42A_n28A                                                          |
| DC_3A-42C_n28A <sup>5</sup>                                                                                                                                                                                                                                                          | DC_3A_n28A<br>DC_42A_n28A<br>DC_42C_n28A                                           |
| DC_3A-41A_n79A <sup>5</sup><br>DC_3A-41C_n79A <sup>5</sup>                                                                                                                                                                                                                           | DC_3A_n79A<br>DC_41A_n79A                                                          |
| DC_3A_n41A-n79A <sup>5</sup>                                                                                                                                                                                                                                                         | DC_3A_n41A<br>DC_3A_n79A                                                           |
| DC_3A_SUL_n41A-n80A<br>DC_3C_SUL_n41A-n80A                                                                                                                                                                                                                                           | DC_3A_n41A<br>DC_3C_n41A<br>DC_3A_n80A_ULSUP-TDM_n41A<br>DC_3C_n80A_ULSUP-TDM_n41A |
| DC_3A-42A_n77A <sup>10,11</sup><br>DC_3A-42A_n77C <sup>10,11</sup><br>DC_3A-42C_n77A <sup>10,11</sup><br>DC_3A-42C_n77C <sup>10,11</sup><br>DC_3A-42D_n77A <sup>10,11</sup><br>DC_3A-42D_n77C <sup>10,11</sup><br>DC_3A-42E_n77A <sup>10,11</sup><br>DC_3A-42E_n77C <sup>10,11</sup> | DC_3A_n77A                                                                         |
| DC_3A-42A_n77(2A) <sup>10,11</sup><br>DC_3A-42C_n77(2A) <sup>10,11</sup>                                                                                                                                                                                                             | DC_3A_n77A                                                                         |
| DC_3A-42A_n78A <sup>10,11</sup><br>DC_3A-42A_n78C <sup>10,11</sup><br>DC_3A-42C_n78A <sup>10,11</sup><br>DC_3A-42C_n78C <sup>10,11</sup><br>DC_3A-42D_n78A <sup>10,11</sup><br>DC_3A-42D_n78C <sup>10,11</sup><br>DC_3A-42E_n78A <sup>10,11</sup><br>DC_3A-42E_n78C <sup>10,11</sup> | DC_3A_n78A                                                                         |
| DC_3A-42A_n79A<br>DC_3A-42A_n79C<br>DC_3A-42C_n79A<br>DC_3A-42C_n79C<br>DC_3A-42D_n79A<br>DC_3A-42D_n79C<br>DC_3A-42E_n79A<br>DC_3A-42E_n79C                                                                                                                                         | DC_3A_n79A                                                                         |
| DC_3A_n75A-n78A                                                                                                                                                                                                                                                                      | DC_3A_n78A                                                                         |
| DC_3A_n75A-n78(2A)                                                                                                                                                                                                                                                                   | DC_3A_n78A                                                                         |
| DC_3A_n77A-n79A <sup>13</sup>                                                                                                                                                                                                                                                        | DC_3A_n77A<br>DC_3A_n79A                                                           |
| DC_3A_n78A-n79A <sup>14</sup>                                                                                                                                                                                                                                                        | DC_3A_n78A<br>DC_3A_n79A                                                           |
| DC_3A_SUL_n77A-n80A                                                                                                                                                                                                                                                                  | DC_3A_n77A<br>DC_3A_n80A_ULSUP-TDM_n77A                                            |
| DC_3A_SUL_n77A-n84A                                                                                                                                                                                                                                                                  | DC_3A_n77A                                                                         |

| EN-DC configuration                                                                | Uplink EN-DC configuration (NOTE 1)                |
|------------------------------------------------------------------------------------|----------------------------------------------------|
|                                                                                    | DC_3A_n84A                                         |
| DC_3A_SUL_n78A-n80A <sup>5</sup><br>DC_3C_SUL_n78A-n80A                            | DC_3A_n78A<br>DC_3A_n80A ULSUP-TDM_n78A            |
| DC_3A_SUL_n78A-n82A <sup>5</sup>                                                   | DC_3A_n78A<br>DC_3A_n82A                           |
| DC_3A_SUL_n78A-n84A                                                                | DC_3A_n78A<br>DC_3A_n84A                           |
| DC_3A_SUL_n79A-n80A <sup>5</sup>                                                   | DC_3A_n79A,<br>DC_3A_n80A ULSUP-TDM_n79A           |
| DC_5A-7A_n71A                                                                      | DC_5A_n71A<br>DC_7A_n71A                           |
| DC_5A-7A_n78A                                                                      | DC_5A_n78A<br>DC_7A_n78A                           |
| DC_5A_n7A-n78A                                                                     | DC_5A_n7A<br>DC_5A_n78A                            |
| DC_5A_n7(2A)-n78A                                                                  | DC_5A_n7A<br>DC_5A_n78A                            |
| DC_5A_n7A-n78(2A)                                                                  | DC_5A_n7A<br>DC_5A_n78A                            |
| DC_5A_n7(2A)-n78(2A)                                                               | DC_5A_n7A<br>DC_5A_n78A                            |
| DC_5A-7A-7A_n78A                                                                   | DC_5A_n78A<br>DC_7A_n78A                           |
| DC_5A-(n)12AA                                                                      | DC_5A_n12A<br>DC_(n)12AA <sup>2</sup>              |
| DC_5A-30A_n66A                                                                     | DC_5A_n66A<br>DC_30A_n66A                          |
| DC_5A-41A_n79A                                                                     | DC_5A_n79A<br>DC_41A_n79A                          |
| DC_5A-66A_n2A<br>DC_5B-66A_n2A                                                     | DC_5A_n2A                                          |
| DC_5A-5A-66A_n2A<br>DC_5A-66A-66A_n2A<br>DC_5B-66A-66A_n2A<br>DC_5A-5A-66A-66A_n2A | DC_5A_n2A                                          |
| DC_5A-66A_n5A                                                                      | DC_66A_n5A                                         |
| DC_5A-66A-66A_n5A                                                                  | DC_66A_n5A                                         |
| DC_5A-66A_n66A                                                                     | DC_5A_n66A                                         |
| DC_5A-5A-66A_n66A<br>DC_5B-66A_n66A                                                | DC_5A_n66A                                         |
| DC_5A-5A-66A-66A_n66A<br>DC_5A-66A-66A_n66A<br>DC_5B-66A-66A_n66A                  | DC_5A_n66A                                         |
| DC_5A-66A_n71A                                                                     | DC_5A_n71A<br>DC_66A_n71A                          |
| DC_5A-66A_n78A<br>DC_5A-66A_n78(2A)                                                | DC_5A_n78A<br>DC_66A_n78A                          |
| DC_5A-13A_n2A                                                                      | DC_5A_n2A<br>DC_13A_n2A                            |
| DC_7A_n1A-n40A                                                                     | DC_7A_n1A<br>DC_7A_n40A                            |
| DC_7A_n1A-n78A <sup>5</sup><br>DC_7C_n1A-n78A <sup>5</sup>                         | DC_7A_n1A<br>DC_7A_n78A<br>DC_7C_n1A<br>DC_7C_n78A |
| DC_7A-7A_n1A-n78A <sup>5</sup>                                                     | DC_7A_n1A<br>DC_7A_n78A                            |
| DC_7A_n3A-n78A<br>DC_7C_n3A-n78A                                                   | DC_7A_n3A<br>DC_7A_n78A<br>DC_7C_n3A<br>DC_7C_n78A |
| DC_7A_n5A-n78A<br>DC_7C_n5A-n78A                                                   | DC_7A_n5A<br>DC_7C_n5A<br>DC_7A_n78A               |

| EN-DC configuration                                                                                                      | Uplink EN-DC configuration (NOTE 1)                  |
|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
|                                                                                                                          | DC_7C_n78A                                           |
| DC_7A_n7A-n78A <sup>5</sup>                                                                                              | DC_7A_n78A<br>DC_7A_n7A <sup>2</sup>                 |
| DC_7A_n7A-n78(2A)                                                                                                        | DC_7A_n78A<br>DC_7A_n7A <sup>2</sup>                 |
| DC_7A-8A_n1A                                                                                                             | DC_7A_n1A<br>DC_8A_n1A                               |
| DC_7A-7A-8A_n1A                                                                                                          | DC_7A_n1A<br>DC_8A_n1A                               |
| DC_7A-8A_n3A                                                                                                             | DC_7A_n3A<br>DC_8A_n3A                               |
| DC_7A_n8A-n40A                                                                                                           | DC_7A_n8A<br>DC_7A_n40A                              |
| DC_7A-8A_n77A <sup>5</sup>                                                                                               | DC_7A_n77A<br>DC_8A_n77A                             |
| DC_7A-8A_n78A <sup>5</sup>                                                                                               | DC_7A_n78A<br>DC_8A_n78A                             |
| DC_7A-7A-8A_n78A <sup>5</sup>                                                                                            | DC_7A_n78A<br>DC_8A_n78A                             |
| DC_7A_n8A-n78A <sup>5</sup>                                                                                              | DC_7A_n8A<br>DC_7A_n78A                              |
| DC_7A-13A_n66A<br>DC_7A-7A-13A_n66A<br>DC_7C-13A_n66A                                                                    | DC_7A_n66A<br>DC_13A_n66A                            |
| DC_7A-20A_n1A<br>DC_7C-20A_n1A                                                                                           | DC_7A_n1A<br>DC_7C_n1A<br>DC_20A_n1A                 |
| DC_7A-20A_n3A<br>DC_7C-20A_n3A                                                                                           | DC_7A_n3A<br>DC_7C_n3A<br>DC_20A_n3A                 |
| DC_7A-20A_n8A                                                                                                            | DC_7A_n8A<br>DC_20A_n8A                              |
| DC_7A-20A_n28A <sup>6,11,12</sup>                                                                                        | DC_7A_n28A<br>DC_20A_n28A                            |
| DC_7A-20A_n78A <sup>5</sup>                                                                                              | DC_7A_n78A<br>DC_20A_n78A                            |
| DC_7A-28A_n3A<br>DC_7C-28A_n3A                                                                                           | DC_7A_n3A<br>DC_7C_n3A<br>DC_28A_n3A                 |
| DC_7A-28A_n5A <sup>6</sup><br>DC_7C-28A_n5A <sup>6</sup>                                                                 | DC_7A_n5A<br>DC_7C_n5A<br>DC_28A_n5A                 |
| DC_7A-28A_n7A                                                                                                            | DC_7A_n7A <sup>2</sup><br>DC_28A_n7A                 |
| DC_7A_n28A-n40A                                                                                                          | DC_7A_n28A<br>DC_7A_n40A                             |
| DC_7A-28A_n40A                                                                                                           | DC_7A_n40A<br>DC_28A_n40A                            |
| DC_7A-28A_n78A <sup>5</sup><br>DC_7C-28A_n78A <sup>5</sup>                                                               | DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n78A              |
| DC_7A_n28A-n78A <sup>5</sup><br>DC_7C_n28A-n78A                                                                          | DC_7A_n28A<br>DC_7A_n78A<br>DC_7C_n28A<br>DC_7C_n78A |
| DC_7A-40A_n1A                                                                                                            | DC_7A_n1A<br>DC_40A_n1A                              |
| DC_7A-46A_n78A <sup>3</sup><br>DC_7A-46C_n78A <sup>3</sup><br>DC_7A-46D_n78A <sup>3</sup><br>DC_7A-46E_n78A <sup>3</sup> | DC_7A_n78A                                           |
| DC_7A-66A_n38A                                                                                                           | 66A <sup>9</sup>                                     |
| DC_7A-66A_n66A<br>DC_7C-66A_n66A                                                                                         | DC_7A_n66A<br>DC_66A_n66A <sup>2</sup>               |

| EN-DC configuration                                                                        | Uplink EN-DC configuration (NOTE 1)      |
|--------------------------------------------------------------------------------------------|------------------------------------------|
| DC_7A-7A-66A_n66A                                                                          | DC_7A_n66A<br>DC_66A_n66A <sup>2</sup>   |
| DC_7A-66A_n71A                                                                             | DC_7A_n71A<br>DC_66A_n71A                |
| DC_7A-66A-66A_n71A                                                                         | DC_7A_n71A<br>DC_66A_n71A                |
| DC_7A_n66A-n78A<br>DC_7A-7A_n66A-n78A<br>DC_7C_n66A-n78A                                   | DC_7A_n66A<br>DC_7A_n78A                 |
| DC_7A-66A_n78A<br>DC_7C-66A_n78A<br>DC_7A-66A_n78(2A)<br>DC_7C-66A_n78(2A)                 | DC_7A_n78A<br>DC_7C_n78A<br>DC_66A_n78A  |
| DC_7A-7A-66A_n78A<br>DC_7A-7A-66A_n78(2A)                                                  | DC_7A_n78A<br>DC_66A_n78A                |
| DC_7A-7A-66A-66A_n78A<br>DC_7A-7A-66A-66A_n78(2A)                                          | DC_7A_n78A<br>DC_66A_n78A                |
| DC_7A-66A-66A_n78A<br>DC_7C-66A-66A_n78A<br>DC_7A-66A-66A_n78(2A)<br>DC_7C-66A-66A_n78(2A) | DC_7A_n78A<br>DC_66A_n78A                |
| DC_7A_SUL_n78A-n80A                                                                        | DC_7A_n78A<br>DC_7A_n80A                 |
| DC_8A_n1A-n78A <sup>5</sup>                                                                | DC_8A_n1A<br>DC_8A_n78A                  |
| DC_8A_n3A-n28A                                                                             | DC_8A_n3A<br>DC_8A_n28A                  |
| DC_8A-11A_n3A                                                                              | DC_8A_n3A<br>DC_11A_n3A                  |
| DC_8A-11A_n77A <sup>5</sup>                                                                | DC_8A_n77A<br>DC_11A_n77A                |
| DC_8A-11A_n77(2A) <sup>5</sup>                                                             | DC_8A_n77A<br>DC_11A_n77A                |
| DC_8A-11A_n78A <sup>5</sup>                                                                | DC_8A_n78A<br>DC_11A_n78A                |
| DC_8A-20A_n78A                                                                             | DC_8A_n78A<br>DC_20A_n78A                |
| DC_8A_n28A-n77A <sup>5</sup>                                                               | DC_8A_n28A<br>DC_8A_n77A                 |
| DC_8A_n28A-n77(2A) <sup>5</sup>                                                            | DC_8A_n28A<br>DC_8A_n77A                 |
| DC_8A_n40A-n41A                                                                            | DC_8A_n40A<br>DC_8A_n41A                 |
| DC_8A_n40A-n79A                                                                            | DC_8A_n40A<br>DC_8A_n79A                 |
| DC_8A_n41A-n79A <sup>5</sup>                                                               | DC_8A_n41A<br>DC_8A_n79A                 |
| DC_8A-42A_n28A <sup>5</sup>                                                                | DC_8A_n28A<br>DC_42A_n28A                |
| DC_8A-42C_n28A <sup>5</sup>                                                                | DC_8A_n28A<br>DC_42A_n28A<br>DC_42C_n28A |
| DC_8A-42A_n77A <sup>10,11</sup><br>DC_8A-42C_n77A <sup>10,11</sup>                         | DC_8A_n77A                               |
| DC_8A-42A_n77(2A) <sup>10,11</sup><br>DC_8A-42C_n77(2A) <sup>10,11</sup>                   | DC_8A_n77A                               |
| DC_8A_SUL_n41A-n81A                                                                        | DC_8A_n41A,<br>DC_8A_n81A ULSUP-TDM_n41A |
| DC_8A_SUL_n78A-n80A                                                                        | DC_8A_n78A<br>DC_8A_n80A                 |
| DC_8A_SUL_n78A-n81A <sup>5</sup>                                                           | DC_8A_n78A,<br>DC_8A_n81A ULSUP-TDM_n78A |
| DC_8A_SUL_n79A-n81A <sup>5</sup>                                                           | DC_8A_n79A,<br>DC_8A_n81A ULSUP-TDM_n79A |

| EN-DC configuration                                                      | Uplink EN-DC configuration (NOTE 1)     |
|--------------------------------------------------------------------------|-----------------------------------------|
| DC_11A-18A_n77A                                                          | DC_11A_n77A<br>DC_18A_n77A              |
| DC_11A-18A_n78A                                                          | DC_11A_n78A<br>DC_18A_n78A              |
| DC_12A-(n)5AA                                                            | DC_12A_n5A<br>DC_(n)5AA <sup>2</sup>    |
| DC_12A_n7A-n78A                                                          | DC_12A_n7A<br>DC_12A_n78A               |
| DC_12A_n7(2A)-n78A                                                       | DC_12A_n7A<br>DC_12A_n78A               |
| DC_12A_n7A-n78(2A)                                                       | DC_12A_n7A<br>DC_12A_n78A               |
| DC_12A_n7(2A)-n78(2A)                                                    | DC_12A_n7A<br>DC_12A_n78A               |
| DC_12A-30A_n2A                                                           | DC_12A_n2A<br>DC_30A_n2A                |
| DC_12A-30A_n66A                                                          | DC_12A_n66A<br>DC_30A_n66A              |
| DC_12A-66A_n2A                                                           | DC_12A_n2A<br>DC_66A_n2A                |
| DC_12A-66A-66A_n2A                                                       | DC_12A_n2A<br>DC_66A_n2A                |
| DC_12A-66A_n25A                                                          | DC_12A_n25A<br>DC_66A_n25A              |
| DC_12A-66A_n66A                                                          | DC_12A_n66A<br>DC_66A_n66A <sup>2</sup> |
| DC_13A-46A_n5A                                                           | DC_13A_n5A                              |
| DC_13A-66A_n2A                                                           | DC_13A_n2A<br>DC_66A_n2A                |
| DC_13A-66A-66A_n2A                                                       | DC_13A_n2A<br>DC_66A_n2A                |
| DC_13A-66A_n48A<br>DC_13A-66A_n48B                                       | DC_13A_n48A<br>DC_66A_n48A              |
| DC_13A-66A-66A_n48A<br>DC_13A-66A-66A_n48B                               | DC_13A_n48A<br>DC_66A_n48A              |
| DC_13A-66A_n66A                                                          | DC_13A_n66A                             |
| DC_13A-66A-66A_n66A                                                      | DC_13A_n66A                             |
| DC_18A_n3A-n78A                                                          | DC_18A_n3A<br>DC_18A_n78A               |
| DC_13A-48A_n2A<br>DC_13A-48B_n2A<br>DC_13A-48D_n2A<br>DC_13A-48E_n2A     | DC_13A_n2A                              |
| DC_13A-48A_n66A<br>DC_13A-48B_n66A<br>DC_13A-48D_n66A<br>DC_13A-48E_n66A | DC_13A_n66A                             |
| DC_18A_n3A-n77A                                                          | DC_18A_n3A<br>DC_18A_n77A               |
| DC_14A-66A_n2A                                                           | DC_14A_n2A<br>DC_66A_n2A                |
| DC_14A-66A-66A_n2A                                                       | DC_14A_n2A<br>DC_66A_n2A                |
| DC_14A-66A_n66A                                                          | DC_14A_n66A<br>DC_66A_n66A <sup>2</sup> |
| DC_18A-28A_n77A <sup>5</sup>                                             | DC_18A_n77A<br>DC_28A_n77A              |
| DC_18A-28A_n78A <sup>5</sup>                                             | DC_18A_n78A<br>DC_28A_n78A              |
| DC_18A-28A_n79A <sup>5</sup>                                             | DC_18A_n79A<br>DC_28A_n79A              |
| DC_18A-41A_n3A<br>DC_18A-41C_n3A                                         | DC_18A_n3A<br>DC_41A_n3A<br>DC_41C_n3A  |

| EN-DC configuration                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| DC_18A-41A_n77A<br>DC_18A-41C_n77A                                                                                                                                                                                   | DC_18A_n77A<br>DC_41A_n77A<br>DC_41C_n77A |
| DC_18A-41A_n78A<br>DC_18A-41C_n78A                                                                                                                                                                                   | DC_18A_n78A<br>DC_41A_n78A<br>DC_41C_n78A |
| DC_18A-42A_n77A <sup>10,11</sup><br>DC_18A-42C_n77A <sup>10,11</sup>                                                                                                                                                 | DC_18A_n77A                               |
| DC_18A-42A_n78A <sup>10,11</sup><br>DC_18A-42C_n78A <sup>10,11</sup>                                                                                                                                                 | DC_18A_n78A                               |
| DC_18A-42A_n79A<br>DC_18A-42C_n79A                                                                                                                                                                                   | DC_18A_n79A                               |
| DC_19A-21A_n78A <sup>5</sup><br>DC_19A-21A_n78C <sup>5</sup>                                                                                                                                                         | DC_19A_n78A<br>DC_21A_n78A                |
| DC_19A-21A_n79A <sup>5</sup><br>DC_19A-21A_n79C <sup>5</sup>                                                                                                                                                         | DC_19A_n79A<br>DC_21A_n79A                |
| DC_19A-21A_n77A <sup>5</sup><br>DC_19A-21A_n77C <sup>5</sup>                                                                                                                                                         | DC_19A_n77A<br>DC_21A_n77A                |
| DC_19A-42A_n77A <sup>10,11</sup><br>DC_19A-42A_n77C <sup>10,11</sup><br>DC_19A-42C_n77A <sup>10,11</sup><br>DC_19A-42C_n77C <sup>10,11</sup><br>DC_19A-42D_n77A <sup>10,11</sup><br>DC_19A-42D_n77C <sup>10,11</sup> | DC_19A_n77A                               |
| DC_19A-42A_n78A <sup>10,11</sup><br>DC_19A-42A_n78C <sup>10,11</sup><br>DC_19A-42C_n78A <sup>10,11</sup><br>DC_19A-42C_n78C <sup>10,11</sup><br>DC_19A-42D_n78A <sup>10,11</sup><br>DC_19A-42D_n78C <sup>10,11</sup> | DC_19A_n78A                               |
| DC_19A-42A_n79A<br>DC_19A-42A_n79C<br>DC_19A-42C_n79A<br>DC_19A-42C_n79C<br>DC_19A-42D_n79A<br>DC_19A-42D_n79C                                                                                                       | DC_19A_n79A                               |
| DC_19A_n77A-n79A <sup>13</sup>                                                                                                                                                                                       | DC_19A_n77A<br>DC_19A_n79A                |
| DC_19A_n78A-n79A <sup>14</sup>                                                                                                                                                                                       | DC_19A_n78A<br>DC_19A_n79A                |
| DC_20A_n1A-n7A                                                                                                                                                                                                       | DC_20A_n1A<br>DC_20A_n7A                  |
| DC_20A_n1A-n28A <sup>11,12</sup>                                                                                                                                                                                     | DC_20A_n1A<br>DC_20A_n28A                 |
| DC_20A_n1A-n78A                                                                                                                                                                                                      | DC_20A_n1A<br>DC_20A_n78A                 |
| DC_20A_n3A-n78A                                                                                                                                                                                                      | DC_20A_n3A<br>DC_20A_n78A                 |
| DC_20A_n7A-n28A <sup>5,6,11,12</sup>                                                                                                                                                                                 | DC_20A_n7A<br>DC_20A_n28A                 |
| DC_20A_n8A-n75A <sup>6</sup>                                                                                                                                                                                         | DC_20A_n8A                                |
| DC_20A_n28A-n75A <sup>6,11,12</sup>                                                                                                                                                                                  | DC_20A_n28A                               |
| DC_20A_n28A-n78A <sup>5,6,11,12</sup>                                                                                                                                                                                | DC_20A_n28A<br>DC_20A_n78A                |
| DC_20A-32A_n78A<br>DC_20A-32A_n78(2A)                                                                                                                                                                                | DC_20A_n78A                               |
| DC_20A-(n)38AA                                                                                                                                                                                                       | DC_20A_n38A                               |
| DC_20A-38A_n78A                                                                                                                                                                                                      | DC_20A_n78A<br>DC_38A_n78A                |
| DC_20A_n41A-n78A                                                                                                                                                                                                     | DC_20A_n41A<br>DC_20A_n78A                |
| DC_20A-(n)41AA<br>DC_20A-(n)41CA<br>DC_20A-(n)41DA                                                                                                                                                                   | DC_20A_n41A                               |

| EN-DC configuration                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| DC_20A_n75A-n78A <sup>5</sup>                                                                                                                                                                                                                                                                | DC_20A_n78A                               |
| DC_20A_n76A-n78A <sup>5</sup>                                                                                                                                                                                                                                                                | DC_20A_n78A                               |
| DC_20A_SUL_n78A-n80A                                                                                                                                                                                                                                                                         | DC_20A_n78A<br>DC_20A_n80A                |
| DC_20A_SUL_n78A-n82A <sup>5</sup>                                                                                                                                                                                                                                                            | DC_20A_n78A<br>DC_20A_n82A_ULSUP-TDM_n78A |
| DC_20A_SUL_n78A-n83A <sup>5</sup>                                                                                                                                                                                                                                                            | DC_20A_n78A<br>DC_20A_n83A                |
| DC_20A_n78A-n92A<br>DC_20A_n78(2A)-n92A                                                                                                                                                                                                                                                      | DC_20A_n78A<br>DC_20A_n92A_ULSUP-TDM_n78A |
| DC_21A-28A_n77A<br>DC_21A-28A_n77C                                                                                                                                                                                                                                                           | DC_21A_n77A<br>DC_28A_n77A                |
| DC_21A-28A_n78A<br>DC_21A-28A_n78C                                                                                                                                                                                                                                                           | DC_21A_n78A<br>DC_28A_n78A                |
| DC_21A-28A_n79A<br>DC_21A-28A_n79C                                                                                                                                                                                                                                                           | DC_21A_n79A<br>DC_28A_n79A                |
| DC_21A-42A_n77A <sup>10,11</sup><br>DC_21A-42A_n77C <sup>10,11</sup><br>DC_21A-42C_n77A <sup>10,11</sup><br>DC_21A-42C_n77C <sup>10,11</sup><br>DC_21A-42D_n77A <sup>10,11</sup><br>DC_21A-42D_n77C <sup>10,11</sup><br>DC_21A-42E_n77A <sup>10,11</sup><br>DC_21A-42E_n77C <sup>10,11</sup> | DC_21A_n77A                               |
| DC_21A-42A_n78A <sup>10,11</sup><br>DC_21A-42A_n78C <sup>10,11</sup><br>DC_21A-42C_n78A <sup>10,11</sup><br>DC_21A-42C_n78C <sup>10,11</sup><br>DC_21A-42D_n78A <sup>10,11</sup><br>DC_21A-42D_n78C <sup>10,11</sup><br>DC_21A-42E_n78A <sup>10,11</sup><br>DC_21A-42E_n78C <sup>10,11</sup> | DC_21A_n78A                               |
| DC_21A-42A_n79A<br>DC_21A-42A_n79C<br>DC_21A-42C_n79A<br>DC_21A-42C_n79C<br>DC_21A-42D_n79A<br>DC_21A-42D_n79C<br>DC_21A-42E_n79A<br>DC_21A-42E_n79C                                                                                                                                         | DC_21A_n79A                               |
| DC_21A_n77A-n79A <sup>13</sup>                                                                                                                                                                                                                                                               | DC_21A_n77A<br>DC_21A_n79A                |
| DC_21A_n78A-n79A <sup>14</sup>                                                                                                                                                                                                                                                               | DC_21A_n78A<br>DC_21A_n79A                |
| DC_25A-41A_n41A<br>DC_25A-41C_n41A<br>DC_25A-41D_n41A<br>DC_25A-25A-41A_n41A<br>DC_25A-25A-41C_n41A<br>DC_25A-25A-41D_n41A                                                                                                                                                                   | DC_25A_n41A<br>DC_41A_n41A                |
| DC_25A-(n)41AA<br>DC_25A-25A-(n)41AA                                                                                                                                                                                                                                                         | DC_25A_n41A<br>DC_(n)41AA                 |
| DC_25A-(n)41CA<br>DC_25A-(n)41DA<br>DC_25A-25A-(n)41CA<br>DC_25A-25A-(n)41DA                                                                                                                                                                                                                 | DC_25A_n41A<br>DC_(n)41AA<br>DC_41A_n41A  |
| DC_28A-41A_n77A<br>DC_28A-41C_n77A                                                                                                                                                                                                                                                           | DC_28A_n77A<br>DC_41A_n77A                |
| DC_28A-41A_n78A<br>DC_28A-41C_n78A                                                                                                                                                                                                                                                           | DC_28A_n78A<br>DC_41A_n78A                |
| DC_28A-41A_n79A <sup>5</sup><br>DC_28A-41C_n79A <sup>5</sup>                                                                                                                                                                                                                                 | DC_28A_n79A<br>DC_41A_n79A                |
| DC_28A_n3A-n77A <sup>5</sup>                                                                                                                                                                                                                                                                 | DC_28A_n3A<br>DC_28A_n77A                 |

| EN-DC configuration                                                                                      | Uplink EN-DC configuration (NOTE 1)                      |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| DC_28A_n3A-n78A <sup>5</sup>                                                                             | DC_28A_n3A<br>DC_28A_n78A                                |
| DC_28A_n5A-n78A                                                                                          | DC_28A_n5A<br>DC_28A_n78A                                |
| DC_28A_n7A-n78A                                                                                          | DC_28A_n7A<br>DC_28A_n78A                                |
| DC_28A_n7B-n78A                                                                                          | DC_28A_n7A<br>DC_28A_n7B<br>DC_28A_n78A                  |
| DC_28A_n8A-n78A <sup>5</sup>                                                                             | DC_28A_n8A<br>DC_28A_n78A                                |
| DC_28A_n40A-n78A                                                                                         | DC_28A_n40A<br>DC_28A_n78A                               |
| DC_28A-42A_n77A <sup>10,11</sup><br>DC_28A-42A_n77C <sup>10,11</sup><br>DC_28A-42C_n77A <sup>10,11</sup> | DC_28A_n77A                                              |
| DC_28A-42A_n78A <sup>10,11</sup><br>DC_28A-42A_n78C <sup>10,11</sup><br>DC_28A-42C_n78A <sup>10,11</sup> | DC_28A_n78A                                              |
| DC_28A-42A_n79A<br>DC_28A-42A_n79C<br>DC_28A-42C_n79A                                                    | DC_28A_n79A                                              |
| DC_28A_SUL_n78A-n83A <sup>5</sup>                                                                        | DC_28A_n78A<br>DC_28A_n83A_ULSUP-TDM_n78A                |
| DC_29A-30A_n2A                                                                                           | DC_30A_n2A                                               |
| DC_29A-30A_n66A                                                                                          | DC_30A_n66A                                              |
| DC_29A-66A_n2A                                                                                           | DC_66A_n2A                                               |
| DC_29A-66A-66A_n2A                                                                                       | DC_66A_n2A                                               |
| DC_30A-66A_n2A                                                                                           | DC_30A_n2A<br>DC_66A_n2A                                 |
| DC_30A-66A-66A_n2A                                                                                       | DC_30A_n2A<br>DC_66A_n2A                                 |
| DC_30A-66A_n5A                                                                                           | DC_30A_n5A<br>DC_66A_n5A                                 |
| DC_30A-66A-66A_n5A<br>DC_30A-66A-66A-66A_n5A                                                             | DC_30A_n5A<br>DC_66A_n5A                                 |
| DC_30A-66A_n66A                                                                                          | DC_30A_n66A<br>DC_66A_n66A <sup>2</sup>                  |
| DC_39A_n40A-n41A                                                                                         | DC_39A_n40A<br>DC_39A_n41A                               |
| DC_39A_n40A-n79A                                                                                         | DC_39A_n40A<br>DC_39A_n79A                               |
| DC_39A_n41A-n79A                                                                                         | DC_39A_n41A<br>DC_39A_n79A                               |
| DC_40A_n41A-n79A                                                                                         | DC_40A_n41A<br>DC_40A_n79A                               |
| DC_41A_n3A-n77A                                                                                          | DC_41A_n3A<br>DC_41A_n77A                                |
| DC_41C_n3A-n77A                                                                                          | DC_41A_n3A<br>DC_41A_n77A<br>DC_41C_n3A<br>DC_41C_n77A   |
| DC_41A_n3A-n78A                                                                                          | DC_41A_n3A<br>DC_41A_n78A                                |
| DC_41C_n3A-n78A                                                                                          | DC_41A_n3A<br>DC_41A_n78A<br>DC_41C_n3A<br>DC_41C_n78A   |
| DC_41A_n28A-n77A                                                                                         | DC_41A_n28A<br>DC_41A_n77A                               |
| DC_41C_n28A-n77A                                                                                         | DC_41A_n28A<br>DC_41A_n77A<br>DC_41C_n28A<br>DC_41C_n77A |

| EN-DC configuration                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                      |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| DC_41A_n28A-n78A                                                                                                                             | DC_41A_n28A<br>DC_41A_n78A                               |
| DC_41C_n28A-n78A                                                                                                                             | DC_41A_n28A<br>DC_41A_n78A<br>DC_41C_n28A<br>DC_41C_n78A |
| DC_(n)41AA-n78A<br>DC_(n)41CA-n78A<br>DC_(n)41DA-n78A                                                                                        | DC_41A_n78A                                              |
| DC_41A-42A_n77A <sup>10,11</sup><br>DC_41A-42C_n77A <sup>10,11</sup><br>DC_41C-42A_n77A <sup>10,11</sup><br>DC_41C-42C_n77A <sup>10,11</sup> | DC_41A_n77A                                              |
| DC_41A-42A_n78A <sup>10,11</sup><br>DC_41A-42C_n78A <sup>10,11</sup><br>DC_41C-42A_n78A <sup>10,11</sup><br>DC_41C-42C_n78A <sup>10,11</sup> | DC_41A_n78A                                              |
| DC_41A-42A_n79A<br>DC_41A-42C_n79A<br>DC_41C-42A_n79A<br>DC_41C-42C_n79A                                                                     | DC_41A_n79A                                              |
| DC_42A_n28A-n77A <sup>10,11</sup>                                                                                                            | DC_42A_n28A                                              |
| DC_42A_n28A-n77(2A) <sup>10,11</sup>                                                                                                         | DC_42A_n28A                                              |
| DC_42C_n28A-n77A <sup>10,11</sup>                                                                                                            | DC_42A_n28A<br>DC_42C_n28A                               |
| DC_42C_n28A-n77(2A) <sup>10,11</sup>                                                                                                         | DC_42A_n28A<br>DC_42C_n28A                               |
| DC_46A-66A_n5A<br>DC_46C-66A_n5A<br>DC_46D-66A_n5A<br>DC_46E-66A_n5A                                                                         | DC_66A_n5A                                               |
| DC_46A-66A_n25A<br>DC_46C-66A_n25A<br>DC_46D-66A_n25A                                                                                        | DC_66A_n25A                                              |
| DC_46A-66A_n41A<br>DC_46C-66A_n41A<br>DC_46D-66A_n41A                                                                                        | DC_66A_n41A                                              |
| DC_46A-66A_n41(2A)<br>DC_46C-66A_n41(2A)<br>DC_46D-66A_n41(2A)                                                                               | DC_66A_n41A                                              |
| DC_46A-66A_n71A<br>DC_46C-66A_n71A<br>DC_46D-66A_n71A                                                                                        | DC_66A_n71A                                              |
| DC_48A-(n)5AA                                                                                                                                | DC_48A_n5A<br>DC_(n)5AA <sup>2</sup>                     |
| DC_48A-(n)12AA                                                                                                                               | DC_48A_n12A<br>DC_(n)12AA <sup>2</sup>                   |
| DC_48A-66A_n5A<br>DC_48B-66A_n5A<br>DC_48D-66A_n5A<br>DC_48E-66A_n5A                                                                         | DC_66A_n5A                                               |
| DC_48A-66A_n12A                                                                                                                              | DC_48A_n12A<br>DC_66A_n12A                               |
| DC_48A-66A_n71A                                                                                                                              | DC_48A_n71A<br>DC_66A_n71A                               |
| DC_66A_n7A-n78A<br>DC_66A-66A_n7A-n78A                                                                                                       | DC_66A_n7A<br>DC_66A_n78A                                |
| DC_66A_n7(2A)-n78A<br>DC_66A-66A_n7(2A)-n78A                                                                                                 | DC_66A_n7A<br>DC_66A_n78A                                |
| DC_66A_n7A-n78(2A)<br>DC_66A-66A_n7A-n78(2A)                                                                                                 | DC_66A_n7A<br>DC_66A_n78A                                |
| DC_66A_n7(2A)-n78(2A)<br>DC_66A-66A_n7(2A)-n78(2A)                                                                                           | DC_66A_n7A<br>DC_66A_n78A                                |
| DC_66A_n25A-n71A                                                                                                                             | DC_66A_n25A                                              |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Uplink EN-DC configuration (NOTE 1)       |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_66A_n71A                               |
| DC_66A_n38A-n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DC_66A_n38A<br>DC_66A_n78A                |
| DC_66A_n66A-n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DC_66A_n66A <sup>2</sup><br>DC_66A_n78A   |
| DC_66A-(n)12AA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_66A_n12A<br>DC_(n)12AA <sup>2</sup>    |
| DC_66A-(n)71AA<br>DC_66C-(n)71AA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DC_66A_n71A<br>DC_(n)71AA                 |
| DC_66A_n25A-n41A<br>DC_66A_n25A-n41C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DC_66A_n25A<br>DC_66A_n41A                |
| DC_66A_n25A-n41(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_66A_n25A<br>DC_66A_n41A                |
| DC_66A_n41A-n71A<br>DC_66A_n41C-n71A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DC_66A_n41A<br>DC_66A_n71A                |
| DC_66A_n41(2A)-n71A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_66A_n41A<br>DC_66A_n71A                |
| DC_66A-71A_n38A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_71A_n38A<br>DC_66A_n38A                |
| DC_66A-71A_n66A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_71A_n66A<br>DC_66A_n66A <sup>2</sup>   |
| DC_66A-71A_n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_71A_n78A<br>DC_66A_n78A                |
| DC_66A_SUL_n78A-n86A <sup>5</sup><br>DC_66A_SUL_n78(2A)-n86A <sup>5</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DC_66A_n78A<br>DC_66A_n86A ULSUP-TDM_n78A |
| <p>NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.</p> <p>NOTE 2: Only single switched UL is supported</p> <p>NOTE 3: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band for Band 46 is paired with the uplink operating band (external E-UTRA band) of the carrier aggregation configuration that is supporting the configured Pcell.</p> <p>NOTE 4: If a UE is configured with both NR UL and NR SUL carriers in a cell, the switching time between NR UL carrier and NR SUL carrier can be up to 140us and placed in SUL resources.</p> <p>NOTE 5: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability</p> <p>NOTE 6: The frequency range in band n28 is restricted for this band combination to 703-733 MHz for the UL and 758 – 788 MHz for the DL.</p> <p>NOTE 7: Void.</p> <p>NOTE 8: UL carrier shall be supported in Band 2 only. Power imbalance between downlink carriers on Band 7 and Band 38 is assumed to be within 6dB.</p> <p>NOTE 9: UL carrier shall be supported in Band 66 only. Power imbalance between downlink carriers on Band 7 and Band 38 is assumed to be within 6dB.</p> <p>NOTE 10: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, when UE capability <i>interBandContiguousMRDC</i> is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addition to intra-band non-contiguous EN-DC.</p> <p>NOTE 11: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.</p> <p>NOTE 12: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference <math>\leq 3</math> usec between overlapping or partially overlapping DL bands contained in different cell groups.</p> <p>NOTE 13: The minimum requirements apply only when there is non-simultaneous Rx/Tx operation between n77-n79 NR carriers. This restriction applies also for these carriers when applicable EN-DC configuration is part of a higher order configuration.</p> <p>NOTE 14: For UEs supporting band n77, the minimum requirements apply only when there is non-simultaneous Rx/Tx operation between n78-n79 NR carriers. This restriction applies also for these carriers when applicable EN-DC configuration is part of a higher order configuration.</p> |                                           |

## 5.5B.4.3 Inter-band EN-DC configurations within FR1 (four bands)

Table 5.5B.4.3-1: Inter-band EN-DC configurations within FR1 (four bands)

| EN-DC configuration                                                                                    | Uplink EN-DC configuration (NOTE 1)                                |
|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| DC_1A-3A-5A_n78A <sup>2</sup>                                                                          | DC_1A_n78A<br>DC_3A_n78A<br>DC_5A_n78A                             |
| DC_1A-3A_n5A-n78A <sup>2</sup><br>DC_1A-3C_n5A-n78A <sup>2</sup>                                       | DC_1A_n5A<br>DC_1A_n78A<br>DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A   |
| DC_1A-3A-5A_n79A <sup>2</sup>                                                                          | DC_1A_n79A<br>DC_3A_n79A<br>DC_5A_n79A                             |
| DC_1A-3A-7A_n5A<br>DC_1A-3A-7C_n5A<br>DC_1A-3C-7A_n5A<br>DC_1A-3C-7C_n5A                               | DC_1A_n5A<br>DC_3A_n5A<br>DC_7A_n5A<br>DC_7C_n5A                   |
| DC_1A-3A-7A_n7A<br>DC_1A-3C-7A_n7A                                                                     | DC_1A_n7A<br>DC_3A_n7A<br>DC_7A_n7A <sup>4</sup>                   |
| DC_1A-1A-3A-7A_n7A<br>DC_1A-1A-3C-7A_n7A<br>DC_1A-3A-3A-7A_n7A                                         | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_7A_n7A <sup>4</sup>      |
| DC_1A-3A-7A_n8A                                                                                        | DC_1A_n8A<br>DC_3A_n8A<br>DC_7A_n8A                                |
| DC_1A-3A-7A_n28A<br>DC_1A-3A-7C_n28A<br>DC_1A-3C-7A_n28A<br>DC_1A-3C-7C_n28A                           | DC_1A_n28A<br>DC_3A_n28A<br>DC_3C_n28A<br>DC_7A_n28A<br>DC_7C_n28A |
| DC_1A-3A-7A_n40A                                                                                       | DC_1A_n40A<br>DC_3A_n40A<br>DC_7A_n40A                             |
| DC_1A-3A-7A_n78A <sup>2</sup><br>DC_1A-3A-7C_n78A<br>DC_1A-3C-7A_n78A <sup>2</sup><br>DC_1A-3C-7C_n78A | DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A<br>DC_7C_n78A |
| DC_1A-3A-7A_n78(2A)<br>DC_1A-3C-7A_n78(2A)<br>DC_1A-3A-7C_n78(2A)<br>DC_1A-3C-7C_n78(2A)               | DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A<br>DC_7C_n78A |
| DC_1A-3A_n7A-n78A<br>DC_1A-3A_n7B-n78A                                                                 | DC_1A_n7A<br>DC_1A_n78A<br>DC_3A_n7A<br>DC_3A_n78A                 |
| DC_1A-3A_n7A-n78(2A)<br>DC_1A-3C_n7A-n78(2A)                                                           | DC_1A_n7A<br>DC_1A_n78A<br>DC_3A_n7A<br>DC_3A_n78A                 |
| DC_1A-3C_n7A-n78A                                                                                      | DC_1A_n7A<br>DC_1A_n78A<br>DC_3A_n7A<br>DC_3A_n78A<br>DC_3C_n7A    |
| DC_1A-3A-7A-7A_n78A <sup>2</sup>                                                                       | DC_1A_n78A<br>DC_3A_n78A<br>DC_7A_n78A                             |
| DC_1A-3A-8A_n28A                                                                                       | DC_1A_n28A                                                         |

| EN-DC configuration                                                          | Uplink EN-DC configuration (NOTE 1)                   |
|------------------------------------------------------------------------------|-------------------------------------------------------|
|                                                                              | DC_3A_n28A<br>DC_8A_n28A                              |
| DC_1A-3A-8A_n77A <sup>2</sup>                                                | DC_1A_n77A<br>DC_3A_n77A<br>DC_8A_n77A                |
| DC_1A-3A-8A_n77(2A) <sup>2</sup>                                             | DC_1A_n77A<br>DC_3A_n77A<br>DC_8A_n77A                |
| DC_1A-3A-8A_n78A <sup>2</sup><br>DC_1A-3C-8A_n78A                            | DC_1A_n78A<br>DC_3A_n78A<br>DC_8A_n78A                |
| DC_1A-3A-8A_n79A <sup>2</sup>                                                | DC_1A_n79A<br>DC_3A_n79A<br>DC_8A_n79A                |
| DC_1A-3A-18A_n77A                                                            | DC_1A_n77A<br>DC_3A_n77A<br>DC_18A_n77A               |
| DC_1A-3A-18A_n78A                                                            | DC_1A_n78A<br>DC_3A_n78A<br>DC_18A_n78A               |
| DC_1A-3A-18A_n79A                                                            | DC_1A_n79A<br>DC_3A_n79A<br>DC_18A_n79A               |
| DC_1A-3A-19A_n77A <sup>2</sup><br>DC_1A-3A-19A_n77C <sup>2</sup>             | DC_1A_n77A<br>DC_3A_n77A<br>DC_19A_n77A               |
| DC_1A-3A-19A_n78A <sup>2</sup><br>DC_1A-3A-19A_n78C <sup>2</sup>             | DC_1A_n78A<br>DC_3A_n78A<br>DC_19A_n78A               |
| DC_1A-3A-19A_n79A <sup>2</sup><br>DC_1A-3A-19A_n79C <sup>2</sup>             | DC_1A_n79A<br>DC_3A_n79A<br>DC_19A_n79A               |
| DC_1A-3A-20A_n8A                                                             | DC_1A_n8A<br>DC_3A_n8A<br>DC_20A_n8A                  |
| DC_1A-3A-20A_n28A <sup>3,7,8</sup>                                           | DC_1A_n28A<br>DC_3A_n28A<br>DC_20A_n28A               |
| DC_1A-3A-20A_n38A                                                            | DC_3A_n38A<br>DC_20A_n38A                             |
| DC_1A-3A-20A_n41A<br>DC_1A-3C-20A_n41A                                       | DC_1A_n41A<br>DC_3A_n41A<br>DC_3C_n41A<br>DC_20A_n41A |
| DC_1A-3A-20A_n78A <sup>2</sup>                                               | DC_1A_n78A<br>DC_3A_n78A<br>DC_20A_n78A               |
| DC_1A-3A-21A_n77A <sup>2</sup><br>DC_1A-3A-21A_n77C <sup>2</sup>             | DC_1A_n77A<br>DC_3A_n77A<br>DC_21A_n77A               |
| DC_1A-3A-21A_n78A <sup>2</sup><br>DC_1A-3A-21A_n78C <sup>2</sup>             | DC_1A_n78A<br>DC_3A_n78A<br>DC_21A_n78A               |
| DC_1A-3A-21A_n79A <sup>2</sup><br>DC_1A-3A-21A_n79C <sup>2</sup>             | DC_1A_n79A<br>DC_3A_n79A<br>DC_21A_n79A               |
| DC_1A-3A-28A_n5A<br>DC_1A-3C-28A_n5A                                         | DC_1A_n5A<br>DC_3A_n5A<br>DC_28A_n5A                  |
| DC_1A-3A-28A_n7A<br>DC_1A-3C-28A_n7A<br>DC_1A-3A-28A_n7B<br>DC_1A-3C-28A_n7B | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_28A_n7A     |
| DC_1A-3A-3A-28A_n7A                                                          | DC_1A_n7A                                             |

| EN-DC configuration                                                                                                                                                 | Uplink EN-DC configuration (NOTE 1)                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| DC_1A-1A-3A-28A_n7A<br>DC_1A-1A-3C-28A_n7A<br>DC_1A-1A-3A-3A-28A_n7A<br>DC_1A-3A-3A-28A_n7B<br>DC_1A-1A-3A-28A_n7B<br>DC_1A-1A-3C-28A_n7B<br>DC_1A-1A-3A-3A-28A_n7B | DC_3A_n7A<br>DC_3C_n7A<br>DC_28A_n7A                               |
| DC_1A-3A-28A_n40A                                                                                                                                                   | DC_1A_n40A<br>DC_3A_n40A<br>DC_28A_n40A                            |
| DC_1A-3A-28A_n77A <sup>2</sup><br>DC_1A-3A-28A_n77C <sup>2</sup>                                                                                                    | DC_1A_n77A<br>DC_3A_n77A<br>DC_28A_n77A                            |
| DC_1A-3A_n28A-n77A <sup>2</sup>                                                                                                                                     | DC_1A_n28A<br>DC_1A_n77A<br>DC_3A_n28A<br>DC_3A_n77A               |
| DC_1A-3A_n28A-n77(2A) <sup>2</sup>                                                                                                                                  | DC_1A_n28A<br>DC_1A_n77A<br>DC_3A_n28A<br>DC_3A_n77A               |
| DC_1A-3A-28A_n78A <sup>2</sup><br>DC_1A-3C-28A_n78A <sup>2</sup><br>DC_1A-3A-28A_n78C <sup>2</sup>                                                                  | DC_1A_n78A<br>DC_3A_n78A<br>DC_28A_n78A                            |
| DC_1A-3A-28A_n79A <sup>2</sup><br>DC_1A-3A-28A_n79C <sup>2</sup>                                                                                                    | DC_1A_n79A<br>DC_3A_n79A<br>DC_28A_n79A                            |
| DC_1A-3A_n28A-n78A <sup>2</sup><br>DC_1A-3C_n28A-n78A <sup>2</sup>                                                                                                  | DC_1A_n28A<br>DC_1A_n78A<br>DC_3A_n28A<br>DC_3A_n78A<br>DC_3C_n28A |
| DC_1A-3A-32A_n78A<br>DC_1A-3A-32A_n78(2A)                                                                                                                           | DC_1A_n78A<br>DC_3A_n78A                                           |
| DC_1A-3A_n38A-n78A                                                                                                                                                  | DC_3A_n38A<br>DC_3A_n78A                                           |
| DC_1A-3A_n40A-n78A                                                                                                                                                  | DC_1A_n40A<br>DC_1A_n78A<br>DC_3A_n40A<br>DC_3A_n78A               |
| DC_1A-3A-41A_n77A<br>DC_1A-3A-41C_n77A                                                                                                                              | DC_1A_n77A<br>DC_3A_n77A<br>DC_41A_n77A                            |
| DC_1A-3A-41A_n77(2A)<br>DC_1A-3A-41C_n77(2A)                                                                                                                        | DC_1A_n77A<br>DC_3A_n77A<br>DC_41A_n77A<br>DC_41C_n77A             |
| DC_1A-3A-41A_n78A<br>DC_1A-3A-41C_n78A                                                                                                                              | DC_1A_n78A<br>DC_3A_n78A<br>DC_41A_n78A                            |
| DC_1A-3A_n41A-n78A                                                                                                                                                  | DC_1A_n41A<br>DC_1A_n78A<br>DC_3A_n41A<br>DC_3A_n78A               |
| DC_1A-3A-41A_n78(2A)<br>DC_1A-3A-41C_n78(2A)                                                                                                                        | DC_1A_n78A<br>DC_3A_n78A<br>DC_41A_n78A<br>DC_41C_n78A             |
| DC_1A-3A-41A_n79A <sup>2</sup><br>DC_1A-3A-41C_n79A <sup>2</sup>                                                                                                    | DC_1A_n79A<br>DC_3A_n79A<br>DC_41A_n79A                            |
| DC_1A-3A-42A_n77A <sup>6,7</sup><br>DC_1A-3A-42A_n77C <sup>6,7</sup><br>DC_1A-3A-42C_n77A <sup>6,7</sup><br>DC_1A-3A-42C_n77C <sup>6,7</sup>                        | DC_1A_n77A<br>DC_3A_n77A                                           |

| EN-DC configuration                                                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| DC_1A-3A-42D_n77A <sup>6,7</sup>                                                                                                                                                 |                                                                               |
| DC_1A-3A-42A_n78A <sup>6,7</sup><br>DC_1A-3A-42A_n78C <sup>6,7</sup><br>DC_1A-3A-42C_n78A <sup>6,7</sup><br>DC_1A-3A-42C_n78C <sup>6,7</sup><br>DC_1A-3A-42D_n78A <sup>6,7</sup> | DC_1A_n78A<br>DC_3A_n78A                                                      |
| DC_1A-3A-42A_n79A<br>DC_1A-3A-42A_n79C<br>DC_1A-3A-42C_n79A<br>DC_1A-3A-42C_n79C<br>DC_1A-3A-42D_n79A                                                                            | DC_1A_n79A<br>DC_3A_n79A                                                      |
| DC_1A-3A_n77A-n79A                                                                                                                                                               | DC_1A_n77A<br>DC_1A_n79A<br>DC_3A_n77A<br>DC_3A_n79A                          |
| DC_1A-3A_n78A-n79A                                                                                                                                                               | DC_1A_n78A<br>DC_1A_n79A<br>DC_3A_n78A<br>DC_3A_n79A                          |
| DC_1A-3A_SUL_n78A-n80A                                                                                                                                                           | DC_1A_n78A<br>DC_1A_n80A<br>DC_3A_n78A<br>DC_3A_n80A_ULSUP-TDM_n78A           |
| DC_1A-5A-7A_n78A                                                                                                                                                                 | DC_1A_n78A<br>DC_5A_n78A<br>DC_7A_n78A                                        |
| DC_1A-5A-7A-7A_n78A                                                                                                                                                              | DC_1A_n78A<br>DC_5A_n78A<br>DC_7A_n78A                                        |
| DC_1A-5A-41A_n79A                                                                                                                                                                | DC_1A_n79A<br>DC_5A_n79A<br>DC_41A_n79A                                       |
| DC_1A-7A_n3A-n78A                                                                                                                                                                | DC_1A_n3A<br>DC_1A_n78A<br>DC_7A_n3A<br>DC_7A_n78A                            |
| DC_1A-7A_n5A-n78A<br>DC_1A-7C_n5A-n78A                                                                                                                                           | DC_1A_n5A<br>DC_1A_n78A<br>DC_7A_n5A<br>DC_7A_n78A<br>DC_7C_n5A<br>DC_7C_n78A |
| DC_1A-7A-8A_n3A                                                                                                                                                                  | DC_1A_n3A<br>DC_7A_n3A<br>DC_8A_n3A                                           |
| DC_1A-7A_n7A-n78A                                                                                                                                                                | DC_1A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_1A_n78A<br>DC_7A_n78A               |
| DC_1A-7A-8A_n78A                                                                                                                                                                 | DC_1A_n78A<br>DC_7A_n78A<br>DC_8A_n78A                                        |
| DC_1A-7A-20A_n3A<br>DC_1A-7C-20A_n3A                                                                                                                                             | DC_1A_n3A<br>DC_7A_n3A<br>DC_7C_n3A<br>DC_20A_n3A                             |
| DC_1A-7A-20A_n8A                                                                                                                                                                 | DC_1A_n8A<br>DC_7A_n8A<br>DC_20A_n8A                                          |
| DC_1A-7A-20A_n28A <sup>3,7,8</sup>                                                                                                                                               | DC_1A_n28A<br>DC_7A_n28A<br>DC_20A_n28A                                       |
| DC_1A-7A-20A_n78A <sup>2</sup>                                                                                                                                                   | DC_1A_n78A<br>DC_7A_n78A<br>DC_20A_n78A                                       |

| EN-DC configuration                                                        | Uplink EN-DC configuration (NOTE 1)                                              |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| DC_1A-7A-28A_n5A<br>DC_1A-7C-28A_n5A                                       | DC_1A_n5A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_28A_n5A                                |
| DC_1A-7A-28A_n7A                                                           | DC_1A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A                                |
| DC_1A-1A-7A-28A_n7A                                                        | DC_1A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A                                |
| DC_1A-7A-28A_n40A                                                          | DC_1A_n40A<br>DC_7A_n40A<br>DC_28A_n40A                                          |
| DC_1A-7A-28A_n78A<br>DC_1A-7C-28A_n78A                                     | DC_1A_n78A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n78A                            |
| DC_1A-7A_n28A-n78A <sup>2</sup><br>DC_1A-7C_n28A-n78A                      | DC_1A_n28A<br>DC_1A_n78A<br>DC_7A_n28A<br>DC_7A_n78A<br>DC_7C_n28A<br>DC_7C_n78A |
| DC_1A-8A_n3A-n28A                                                          | DC_1A_n3A<br>DC_1A_n28A<br>DC_8A_n3A<br>DC_8A_n28A                               |
| DC_1A-8A-11A_n77A <sup>2</sup>                                             | DC_1A_n77A<br>DC_8A_n77A<br>DC_11A_n77A                                          |
| DC_1A-8A-11A_n77(2A) <sup>2</sup>                                          | DC_1A_n77A<br>DC_8A_n77A<br>DC_11A_n77A                                          |
| DC_1A-8A-11A_n78A <sup>2</sup>                                             | DC_1A_n78A<br>DC_8A_n78A<br>DC_11A_n78A                                          |
| DC_1A-8A-20A_n78A                                                          | DC_1A_n78A<br>DC_8A_n78A<br>DC_20A_n78A                                          |
| DC_1A-8A_n28A-n77A <sup>2</sup>                                            | DC_1A_n28A<br>DC_1A_n77A<br>DC_8A_n28A<br>DC_8A_n77A                             |
| DC_1A-8A_n28A-n77(2A) <sup>2</sup>                                         | DC_1A_n28A<br>DC_1A_n77A<br>DC_8A_n28A<br>DC_8A_n77A                             |
| DC_1A-8A-42A_n77A <sup>6,7</sup><br>DC_1A-8A-42C_n77A <sup>6,7</sup>       | DC_1A_n77A<br>DC_8A_n77A                                                         |
| DC_1A-8A-42A_n77(2A) <sup>6,7</sup><br>DC_1A-8A-42C_n77(2A) <sup>6,7</sup> | DC_1A_n77A<br>DC_8A_n77A                                                         |
| DC_1A-11A-18A_n77A                                                         | DC_1A_n77A<br>DC_11A_n77A<br>DC_18A_n77A                                         |
| DC_1A-11A-18A_n78A                                                         | DC_1A_n78A<br>DC_11A_n78A<br>DC_18A_n78A                                         |
| DC_1A-18A_n3A-n77A                                                         | DC_18A_n3A<br>DC_18A_n77A                                                        |
| DC_1A-18A_n3A-n78A                                                         | DC_1A_n3A<br>DC_1A_n78A<br>DC_18A_n3A<br>DC_18A_n78A                             |
| DC_1A-18A-28A_n77A                                                         | DC_1A_n77A                                                                       |

| EN-DC configuration                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
|                                                                                                                                                  | DC_18A_n77A<br>DC_28A_n77A                              |
| DC_1A-18A-28A_n78A                                                                                                                               | DC_1A_n78A<br>DC_18A_n78A<br>DC_28A_n78A                |
| DC_1A-18A-28A_n79A <sup>2</sup>                                                                                                                  | DC_1A_n79A<br>DC_18A_n79A<br>DC_28A_n79A                |
| DC_1A-18A-41A_n3A<br>DC_1A-18A-41C_n3A                                                                                                           | DC_1A_n3A<br>DC_18A_n3A<br>DC_41A_n3A<br>DC_41C_n3A     |
| DC_1A-18A-41A_n77A<br>DC_1A-18A-41C_n77A                                                                                                         | DC_1A_n77A<br>DC_18A_n77A<br>DC_41A_n77A<br>DC_41C_n77A |
| DC_1A-18A-41A_n78A<br>DC_1A-18A-41C_n78A                                                                                                         | DC_1A_n78A<br>DC_18A_n78A<br>DC_41A_n78A<br>DC_41C_n78A |
| DC_1A-18A-42A_n77A <sup>6,7</sup><br>DC_1A-18A-42C_n77A <sup>6,7</sup>                                                                           | DC_1A_n77A<br>DC_18A_n77A                               |
| DC_1A-18A-42A_n78A <sup>6,7</sup><br>DC_1A-18A-42C_n78A <sup>6,7</sup>                                                                           | DC_1A_n78A<br>DC_18A_n78A                               |
| DC_1A-18A-42A_n79A<br>DC_1A-18A-42C_n79A                                                                                                         | DC_1A_n79A<br>DC_18A_n79A                               |
| DC_1A-19A-21A_n77A <sup>2</sup><br>DC_1A-19A-21A_n77C <sup>2</sup>                                                                               | DC_1A_n77A<br>DC_19A_n77A<br>DC_21A_n77A                |
| DC_1A-19A-21A_n78A <sup>2</sup><br>DC_1A-19A-21A_n78C <sup>2</sup>                                                                               | DC_1A_n78A<br>DC_19A_n78A<br>DC_21A_n78A                |
| DC_1A-19A-21A_n79A <sup>2</sup><br>DC_1A-19A-21A_n79C <sup>2</sup>                                                                               | DC_1A_n79A<br>DC_19A_n79A<br>DC_21A_n79A                |
| DC_1A-19A-42A_n77A <sup>6,7</sup><br>DC_1A-19A-42A_n77C <sup>6,7</sup><br>DC_1A-19A-42C_n77A <sup>6,7</sup><br>DC_1A-19A-42C_n77C <sup>6,7</sup> | DC_1A_n77A<br>DC_19A_n77A                               |
| DC_1A-19A-42A_n78A <sup>6,7</sup><br>DC_1A-19A-42A_n78C <sup>6,7</sup><br>DC_1A-19A-42C_n78A <sup>6,7</sup><br>DC_1A-19A-42C_n78C <sup>6,7</sup> | DC_1A_n78A<br>DC_19A_n78A                               |
| DC_1A-19A-42A_n79A<br>DC_1A-19A-42A_n79C<br>DC_1A-19A-42C_n79A<br>DC_1A-19A-42C_n79C                                                             | DC_1A_n79A<br>DC_19A_n79A                               |
| DC_1A-19A_n77A-n79A                                                                                                                              | DC_19A_n77A<br>DC_19A_n79A                              |
| DC_1A-19A_n78A-n79A                                                                                                                              | DC_19A_n78A<br>DC_19A_n79A                              |
| DC_1A-20A_n3A-n38A                                                                                                                               | DC_1A_n3A<br>DC_20A_n3A<br>DC_1A_n38A<br>DC_20A_n38A    |
| DC_1A-20A_n3A-n78A                                                                                                                               | DC_1A_n3A<br>DC_20A_n3A<br>DC_1A_n78A<br>DC_20A_n78A    |
| DC_1A-20A_n28A-n78A <sup>2,3,7,8</sup>                                                                                                           | DC_1A_n28A<br>DC_1A_n78A<br>DC_20A_n28A<br>DC_20A_n78A  |
| DC_1A-20A-(n)38AA                                                                                                                                | DC_1A_n38A                                              |

| EN-DC configuration                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|                                                                                                                                                                                                                            | DC_20A_n38A                                                                     |
| DC_1A-20A-38A_n78A                                                                                                                                                                                                         | DC_1A_n78A                                                                      |
| DC_1A-20A_n41A-n78A                                                                                                                                                                                                        | DC_1A_n41A<br>DC_1A_n78A<br>DC_20A_n41A<br>DC_20A_n78A                          |
| DC_1A-21A-28A_n77A <sup>2</sup>                                                                                                                                                                                            | DC_1A_n77A<br>DC_21A_n77A<br>DC_28A_n77A                                        |
| DC_1A-21A-28A_n78A <sup>2</sup>                                                                                                                                                                                            | DC_1A_n78A<br>DC_21A_n78A<br>DC_28A_n78A                                        |
| DC_1A-21A-28A_n79A <sup>2</sup>                                                                                                                                                                                            | DC_1A_n79A<br>DC_21A_n79A<br>DC_28A_n79A                                        |
| DC_1A-21A-42A_n77A <sup>6,7</sup><br>DC_1A-21A-42A_n77C <sup>6,7</sup><br>DC_1A-21A-42C_n77A <sup>6,7</sup><br>DC_1A-21A-42C_n77C <sup>6,7</sup><br>DC_1A-21A-42D_n77A <sup>6,7</sup><br>DC_1A-21A-42D_n77C <sup>6,7</sup> | DC_1A_n77A<br>DC_21A_n77A                                                       |
| DC_1A-21A-42A_n78A <sup>6,7</sup><br>DC_1A-21A-42A_n78C <sup>6,7</sup><br>DC_1A-21A-42C_n78A <sup>6,7</sup><br>DC_1A-21A-42C_n78C <sup>6,7</sup><br>DC_1A-21A-42D_n78A <sup>6,7</sup><br>DC_1A-21A-42D_n78C <sup>6,7</sup> | DC_1A_n78A<br>DC_21A_n78A                                                       |
| DC_1A-21A-42A_n79A<br>DC_1A-21A-42A_n79C<br>DC_1A-21A-42C_n79A<br>DC_1A-21A-42C_n79C<br>DC_1A-21A-42D_n79A<br>DC_1A-21A-42D_n79C                                                                                           | DC_1A_n79A<br>DC_21A_n79A                                                       |
| DC_1A-21A_n77A-n79A                                                                                                                                                                                                        | DC_1A_n77A<br>DC_1A_n79A                                                        |
| DC_1A-21A_n78A-n79A                                                                                                                                                                                                        | DC_1A_n78A<br>DC_1A_n79A                                                        |
| DC_1A-28A_n3A-n77A <sup>2</sup>                                                                                                                                                                                            | DC_28A_n3A<br>DC_28A_n77A                                                       |
| DC_1A-28A_n3A-n78A <sup>2</sup>                                                                                                                                                                                            | DC_1A_n3A<br>DC_1A_n78A<br>DC_28A_n3A<br>DC_28A_n78A                            |
| DC_1A-28A_n5A-n78A <sup>2</sup>                                                                                                                                                                                            | DC_1A_n5A<br>DC_1A_n78A<br>DC_28A_n5A<br>DC_28A_n78A                            |
| DC_1A-28A_n7A-n78A                                                                                                                                                                                                         | DC_1A_n7A<br>DC_28A_n7A<br>DC_1A_n78A<br>DC_28A_n78A                            |
| DC_1A-28A_n7B-n78A                                                                                                                                                                                                         | DC_1A_n7A<br>DC_1A_n7B<br>DC_28A_n7A<br>DC_28A_n7B<br>DC_1A_n78A<br>DC_28A_n78A |
| DC_1A-28A_n40A-n78A                                                                                                                                                                                                        | DC_1A_n40A<br>DC_1A_n78A<br>DC_28A_n40A<br>DC_28A_n78A                          |
| DC_1A-28A-42A_n77A <sup>6,7</sup><br>DC_1A-28A-42C_n77A <sup>6,7</sup>                                                                                                                                                     | DC_1A_n77A<br>DC_28A_n77A                                                       |
| DC_1A-28A-42A_n78A <sup>6,7</sup><br>DC_1A-28A-42C_n78A <sup>6,7</sup>                                                                                                                                                     | DC_1A_n78A<br>DC_28A_n78A                                                       |

| EN-DC configuration                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| DC_1A-28A-42A_n79A<br>DC_1A-28A-42C_n79A                                                                                                         | DC_1A_n79A<br>DC_28A_n79A                                                            |
| DC_1A-41A_n3A_n77A                                                                                                                               | DC_41A_n3A<br>DC_41A_n77A                                                            |
| DC_1A-41C_n3A_n77A                                                                                                                               | DC_41A_n3A<br>DC_41A_n77A<br>DC_41C_n3A<br>DC_41C_n77A                               |
| DC_1A-41A_n3A_n78A                                                                                                                               | DC_41A_n3A<br>DC_41A_n78A                                                            |
| DC_1A-41C_n3A_n78A                                                                                                                               | DC_41A_n3A<br>DC_41A_n78A<br>DC_41C_n3A<br>DC_41C_n78A                               |
| DC_1A-41A_n28A_n77A                                                                                                                              | DC_1A_n28A<br>DC_1A_n77A<br>DC_41A_n28A<br>DC_41A_n77A                               |
| DC_1A-41C_n28A_n77A                                                                                                                              | DC_1A_n28A<br>DC_1A_n77A<br>DC_41A_n28A<br>DC_41A_n77A<br>DC_41C_n28A<br>DC_41C_n77A |
| DC_1A-41A_n28A_n78A                                                                                                                              | DC_1A_n28A<br>DC_1A_n78A<br>DC_41A_n28A<br>DC_41A_n78A                               |
| DC_1A-41C_n28A_n78A                                                                                                                              | DC_1A_n28A<br>DC_1A_n78A<br>DC_41A_n28A<br>DC_41A_n78A<br>DC_41C_n28A<br>DC_41C_n78A |
| DC_1A-41A-42A_n77A <sup>6,7</sup><br>DC_1A-41A-42C_n77A <sup>6,7</sup><br>DC_1A-41C-42A_n77A <sup>6,7</sup><br>DC_1A-41C-42C_n77A <sup>6,7</sup> | DC_1A_n77A<br>DC_41A_n77A                                                            |
| DC_1A-41A-42A_n78A <sup>6,7</sup><br>DC_1A-41A-42C_n78A <sup>6,7</sup><br>DC_1A-41C-42A_n78A <sup>6,7</sup><br>DC_1A-41C-42C_n78A <sup>6,7</sup> | DC_1A_n78A<br>DC_41A_n78A                                                            |
| DC_1A-41A-42A_n79A<br>DC_1A-41A-42C_n79A<br>DC_1A-41C-42A_n79A<br>DC_1A-41C-42C_n79A                                                             | DC_1A_n79A<br>DC_41A_n79A                                                            |
| DC_1A-42A_n77A-n79A <sup>6,7</sup><br>DC_1A-42C_n77A-n79A <sup>6,7</sup>                                                                         | DC_1A_n77A<br>DC_1A_n79A                                                             |
| DC_1A-42A_n78A-n79A <sup>6,7</sup><br>DC_1A-42C_n78A-n79A <sup>6,7</sup>                                                                         | DC_1A_n78A<br>DC_1A_n79A                                                             |
| DC_2A-5A-(n)12AA                                                                                                                                 | DC_5A_n12A<br>DC_2A_n12A<br>DC_(n)12AA <sup>4</sup>                                  |
| DC_2A-12A-(n)5AA                                                                                                                                 | DC_2A_n5A<br>DC_12A_n5A<br>DC_(n)5AA <sup>4</sup>                                    |
| DC_2A-5A-48A_n12A                                                                                                                                | DC_2A_n12A<br>DC_5A_n12A<br>DC_48A_n12A                                              |
| DC_2A-5A-48A_n71A                                                                                                                                | DC_2A_n71A<br>DC_5A_n71A<br>DC_48A_n71A                                              |
| DC_2A-5A-66A_n2A<br>DC_2A-5B-66A_n2A                                                                                                             | DC_2A_n2A <sup>4</sup><br>DC_5A_n2A<br>DC_66A_n2A                                    |

| EN-DC configuration                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| DC_2A-5A-5A-66A_n2A<br>DC_2A-5A-66A-66A_n2A<br>DC_2A-5B-66A-66A_n2A<br>DC_2A-5A-5A-66A-66A_n2A                                                                                                                                                                       | DC_2A_n2A <sup>4</sup><br>DC_5A_n2A<br>DC_66A_n2A    |
| DC_2A-5A-66A_n5A                                                                                                                                                                                                                                                     | DC_2A_n5A<br>DC_66A_n5A                              |
| DC_2A-2A-5A-66A_n5A<br>DC_2A-2A-5A-66A-66A_n5A<br>DC_2A-5A-66A-66A_n5A                                                                                                                                                                                               | DC_2A_n5A<br>DC_66A_n5A                              |
| DC_2A-5A-66A_n12A                                                                                                                                                                                                                                                    | DC_2A_n12A<br>DC_5A_n12A<br>DC_66A_n12A              |
| DC_2A-5A-66A_n66A<br>DC_2A-5B-66A_n66A                                                                                                                                                                                                                               | DC_5A_n66A                                           |
| DC_2A-5A-5A-66A_n66A<br>DC_2A-5A-66A-66A_n66A<br>DC_2A-5B-66A-66A_n66A<br>DC_2A-2A-5A-66A-66A_n66A<br>DC_2A-5A-5A-66A-66A_n66A                                                                                                                                       | DC_5A_n66A                                           |
| DC_2A-5A-66A_n71A                                                                                                                                                                                                                                                    | DC_2A_n71A<br>DC_5A_n71A<br>DC_66A_n71A              |
| DC_2A-7A-13A_n66A<br>DC_2A-7A-7A-13A_n66A<br>DC_2A-7C-13A_n66A                                                                                                                                                                                                       | DC_2A_n66A<br>DC_7A_n66A<br>DC_13A_n66A              |
| DC_2A-7A_n38A-n78A<br>DC_2A-7A-7A_n38A-n78A<br>DC_2A-7C_n38A-n78A                                                                                                                                                                                                    | DC_2A_n78A                                           |
| DC_2A-7A-66A_n38A<br>DC_2A-2A-7A-66A_n38A                                                                                                                                                                                                                            | 2A <sup>5</sup><br>66A <sup>5</sup>                  |
| DC_2A-7A-66A_n66A<br>DC_2A-7C-66A_n66A<br>DC_2A-7A-7A-66A_n66A                                                                                                                                                                                                       | DC_2A_n66A<br>DC_7A_n66A<br>DC_66A_n66A <sup>4</sup> |
| DC_2A-7A-66A_n71A                                                                                                                                                                                                                                                    | DC_2A_n71A<br>DC_7A_n71A<br>DC_66A_n71A              |
| DC_2A-7A-66A_n78A<br>DC_2A-7C-66A_n78A                                                                                                                                                                                                                               | DC_2A_n78A<br>DC_7A_n78A<br>DC_66A_n78A              |
| DC_2A-7A_n66A-n78A<br>DC_2A-7A-7A_n66A-n78A<br>DC_2A-7C_n66A-n78A                                                                                                                                                                                                    | DC_2A_n66A<br>DC_2A_n78A<br>DC_7A_n66A<br>DC_7A_n78A |
| DC_2A-7A-66A_n78(2A)<br>DC_2A-7A-7A-66A_n78A<br>DC_2A-7A-7A-66A_n78(2A)<br>DC_2A-7C-66A_n78(2A)<br>DC_2A-7A-66A-66A_n78A<br>DC_2A-7A-66A-66A_n78(2A)<br>DC_2A-7A-7A-66A-66A_n78A<br>DC_2A-7A-7A-66A-66A_n78(2A)<br>DC_2A-7C-66A-66A_n78A<br>DC_2A-7C-66A-66A_n78(2A) | DC_2A_n78A<br>DC_7A_n78A<br>DC_66A_n78A              |
| DC_2A-12A-30A_n2A                                                                                                                                                                                                                                                    | DC_12A_n2A<br>DC_30A_n2A                             |
| DC_2A-12A-48A_n5A                                                                                                                                                                                                                                                    | DC_2A_n5A<br>DC_12A_n5A<br>DC_48A_n5A                |
| DC_2A-12A-66A_n5A                                                                                                                                                                                                                                                    | DC_2A_n5A<br>DC_12A_n5A<br>DC_66A_n5A                |
| DC_2A-12A-30A_n66A<br>DC_2A-2A-12A-30A_n66A                                                                                                                                                                                                                          | DC_2A_n66A<br>DC_12A_n66A<br>DC_30A_n66A             |

| EN-DC configuration                                                                                | Uplink EN-DC configuration (NOTE 1)                   |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| DC_2A-12A-66A_n2A                                                                                  | DC_12A_n2A<br>DC_66A_n2A                              |
| DC_2A-12A-66A-66A_n2A                                                                              | DC_12A_n2A<br>DC_66A_n2A                              |
| DC_2A-12A-66A_n66A                                                                                 | DC_2A_n66A<br>DC_12A_n66A<br>DC_66A_n66A <sup>4</sup> |
| DC_2A-2A-12A-66A_n66A                                                                              | DC_2A_n66A<br>DC_12A_n66A<br>DC_66A_n66A <sup>4</sup> |
| DC_2A-13A-66A_n2A                                                                                  | DC_13A_n2A                                            |
| DC_2A-13A-66A-66A_n2A                                                                              | DC_13A_n2A                                            |
| DC_2A-13A-66A_n5A<br>DC_2A-2A-13A-66A_n5A<br>DC_2A-13A-66A-66A_n5A<br>DC_2A-2A-13A-66A-66A_n5A     | DC_2A_n5A<br>DC_66A_n5A                               |
| DC_2A-13A-66A_n48A<br>DC_2A-13A-66A_n48B                                                           | DC_2A_n48A<br>DC_13A_n48A<br>DC_66A_n48A              |
| DC_2A-13A-66A-66A_n48A<br>DC_2A-13A-66A-66A_n48B                                                   | DC_2A_n48A<br>DC_13A_n48A<br>DC_66A_n48A              |
| DC_2A-13A-66A_n66A<br>DC_2A-2A-13A-66A_n66A<br>DC_2A-13A-66A-66A_n66A<br>DC_2A-2A-13A-66A-66A_n66A | DC_2A_n66A<br>DC_13A_n66A<br>DC_66A_n66A <sup>4</sup> |
| DC_2A-14A-66A_n2A                                                                                  | DC_2A_n2A <sup>4</sup><br>DC_14A_n2A<br>DC_66A_n2A    |
| DC_2A-14A-66A-66A_n2A                                                                              | DC_2A_n2A <sup>4</sup><br>DC_14A_n2A<br>DC_66A_n2A    |
| DC_2A-14A-66A_n66A                                                                                 | DC_2A_n66A<br>DC_14A_n66A<br>DC_66A_n66A <sup>4</sup> |
| DC_2A-2A-14A-66A_n66A                                                                              | DC_2A_n66A<br>DC_14A_n66A<br>DC_66A_n66A <sup>4</sup> |
| DC_2A-29A-30A_n2A                                                                                  | DC_2A_n2A <sup>4</sup><br>DC_30A_n2A                  |
| DC_2A-29A-66A_n2A                                                                                  | DC_2A_n2A <sup>4</sup><br>DC_66A_n2A                  |
| DC_2A-29A-66A-66A_n2A                                                                              | DC_2A_n2A <sup>4</sup><br>DC_66A_n2A                  |
| DC_2A-29A-66A_n66A                                                                                 | DC_2A_n66A<br>DC_66A_n66A <sup>4</sup>                |
| DC_2A-30A-66A_n2A                                                                                  | DC_2A_n2A <sup>4</sup><br>DC_30A_n2A<br>DC_66A_n2A    |
| DC_2A-30A-66A-66A_n2A                                                                              | DC_2A_n2A <sup>4</sup><br>DC_30A_n2A<br>DC_66A_n2A    |
| DC_2A-30A-66A_n5A<br>DC_2A-2A-30A-66A_n5A<br>DC_2A-30A-66A-66A_n5A                                 | DC_2A_n5A<br>DC_30A_n5A<br>DC_66A_n5A                 |
| DC_2A-30A-66A_n66A                                                                                 | DC_2A_n66A<br>DC_30A_n66A<br>DC_66A_n66A <sup>4</sup> |
| DC_2A-46A_n41A-n66A<br>DC_2A-46C_n41A-n66A<br>DC_2A-46D_n41A-n66A                                  | DC_2A_n41A<br>DC_2A_n66A                              |
| DC_2A-46A_n41A-n71A<br>DC_2A-46C_n41A-n71A<br>DC_2A-46D_n41A-n71A                                  | DC_2A_n41A<br>DC_2A_n71A                              |

| EN-DC configuration                                                                  | Uplink EN-DC configuration (NOTE 1)                    |
|--------------------------------------------------------------------------------------|--------------------------------------------------------|
| DC_2A-46A_n41(2A)-n71A<br>DC_2A-46C_n41(2A)-n71A<br>DC_2A-46D_n41(2A)-n71A           | DC_2A_n41A<br>DC_2A_n71A                               |
| DC_2A-46A-48A_n5A<br>DC_2A-46C-48A_n5A<br>DC_2A-46D-48A_n5A<br>DC_2A-46E-48A_n5A     | DC_2A_n5A<br>DC_48A_n5A                                |
| DC_2A-46A-48A_n66A<br>DC_2A-46C-48A_n66A<br>DC_2A-46D-48A_n66A<br>DC_2A-46E-48A_n66A | DC_2A_n66A<br>DC_48A_n66A                              |
| DC_2A-46A-66A_n41A<br>DC_2A-46C-66A_n41A<br>DC_2A-46D-66A_n41A                       | DC_2A_n41A<br>DC_66A_n41A                              |
| DC_2A-46A-66A_n41(2A)<br>DC_2A-46C-66A_n41(2A)<br>DC_2A-46D-66A_n41(2A)              | DC_2A_n41A<br>DC_66A_n41A                              |
| DC_2A-46A-66A_n71A<br>DC_2A-46C-66A_n71A<br>DC_2A-46D-66A_n71A                       | DC_2A_n71A<br>DC_66A_n71A                              |
| DC_2A-48A-(n)5AA                                                                     | DC_2A_n5A<br>DC_48A_n5A<br>DC_(n)5AA <sup>4</sup>      |
| DC_2A-46A_n66A-n71A<br>DC_2A-46C_n66A-n71A<br>DC_2A-46D_n66A-n71A                    | DC_2A_n66A<br>DC_2A_n71A                               |
| DC_2A-48A-66A_n5A                                                                    | DC_2A_n5A<br>DC_48A_n5A<br>DC_66A_n5A                  |
| DC_2A-48A-66A_n12A                                                                   | DC_2A_n12A<br>DC_48A_n12A<br>DC_66A_n12A               |
| DC_2A-48A-66A_n71A                                                                   | DC_2A_n71A<br>DC_48A_n71A<br>DC_66A_n71A               |
| DC_2A-66A-(n)5AA                                                                     | DC_2A_n5A<br>DC_66A_n5A<br>DC_(n)5AA <sup>4</sup>      |
| DC_2A-66A_n38A-n78A                                                                  | DC_2A_n38A<br>DC_2A_n78A<br>DC_66A_n38A<br>DC_66A_n78A |
| DC_2A-66A-71A_n38A<br>DC_2A-2A-66A-71A_n38A                                          | DC_2A_n38A<br>DC_66A_n38A<br>DC_71A_n38A               |
| DC_2A-66A-71A_n66A                                                                   | DC_2A_n66A<br>DC_66A_n66A <sup>4</sup><br>DC_71A_n66A  |
| DC_2A-66A-71A_n78A<br>DC_2A-2A-66A-71A_n78A                                          | DC_2A_n78A<br>DC_66A_n78A<br>DC_71A_n78A               |
| DC_2A-66A-(n)71AA<br>DC_2A-66C-(n)71AA                                               | DC_2A_n71A<br>DC_66A_n71A<br>DC_(n)71AA                |
| DC_2A-66A_n41A-n71A<br>DC_2A-66A_n41C-n71A                                           | DC_2A_n41A<br>DC_2A_n71A<br>DC_66A_n41A<br>DC_66A_n71A |
| DC_2A-66A_n41(2A)-n71A                                                               | DC_2A_n41A<br>DC_2A_n71A<br>DC_66A_n41A<br>DC_66A_n71A |
| DC_2A-66A_n66A-n78A                                                                  | DC_2A_n66A<br>DC_2A_n78A                               |

| EN-DC configuration                                                                                                                                                                | Uplink EN-DC configuration (NOTE 1)                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
|                                                                                                                                                                                    | DC_66A_n66A <sup>4</sup>                                                                    |
| DC_3A-5A-7A_n78A<br>DC_3A-5A-7A-7A_n78A                                                                                                                                            | DC_3A_n78A<br>DC_5A_n78A<br>DC_7A_n78A                                                      |
| DC_3A-7A_n1A-n78A <sup>2</sup><br>DC_3C-7A_n1A-n78A <sup>2</sup><br>DC_3A-3A-7A_n1A-n78A <sup>2</sup><br>DC_3A-7A-7A_n1A-n78A <sup>2</sup><br>DC_3A-3A-7A-7A_n1A-n78A <sup>2</sup> | DC_3A_n1A<br>DC_3A_n78A<br>DC_7A_n1A<br>DC_7A_n78A                                          |
| DC_3A-7C_n1A-n78A<br>DC_3C-7C_n1A-n78A                                                                                                                                             | DC_3A_n1A<br>DC_3A_n78A<br>DC_7A_n1A<br>DC_7A_n78A<br>DC_7C_n1A<br>DC_7C_n78A               |
| DC_3A-5A-41A_n79A                                                                                                                                                                  | DC_3A_n79A<br>DC_5A_n79A<br>DC_41A_n79A                                                     |
| DC_3A-7A_n5A-n78A<br>DC_3A-7C_n5A-n78A<br>DC_3C-7A_n5A-n78A<br>DC_3C-7C_n5A-n78A                                                                                                   | DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_7A_n78A<br>DC_7C_n78A |
| DC_3A-7A_n7A-n78A <sup>2</sup><br>DC_3A-3A-7A_n7A-n78A <sup>2</sup>                                                                                                                | DC_3A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_3A_n78A<br>DC_7A_n78A                             |
| DC_3C-7A_n7A-n78A                                                                                                                                                                  | DC_3A_n7A<br>DC_3C_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A  |
| DC_3A-7A-8A_n1A<br>DC_3C-7A-8A_n1A                                                                                                                                                 | DC_3A_n1A<br>DC_3C_n1A<br>DC_7A_n1A<br>DC_8A_n1A                                            |
| DC_3A-3A-7A-8A_n1A<br>DC_3A-7A-7A-8A_n1A<br>DC_3A-3A-7A-7A-8A_n1A                                                                                                                  | DC_3A_n1A<br>DC_7A_n1A<br>DC_8A_n1A                                                         |
| DC_3A-7A-8A_n77A <sup>2</sup>                                                                                                                                                      | DC_3A_n77A<br>DC_7A_n77A<br>DC_8A_n77A                                                      |
| DC_3A-7A-8A_n78A <sup>2</sup>                                                                                                                                                      | DC_3A_n78A,<br>DC_7A_n78A,<br>DC_8A_n78A                                                    |
| DC_3A-3A-7A-8A_n78A <sup>2</sup><br>DC_3A-7A-7A-8A_n78A <sup>2</sup><br>DC_3A-3A-7A-7A-8A_n78A <sup>2</sup>                                                                        | DC_3A_n78A<br>DC_7A_n78A<br>DC_8A_n78A                                                      |
| DC_3A-7A-20A_n1A<br>DC_3C-7A-20A_n1A<br>DC_3A-7C-20A_n1A<br>DC_3C-7C-20A_n1A                                                                                                       | DC_3A_n1A<br>DC_3C_n1A<br>DC_7A_n1A<br>DC_7C_n1A<br>DC_20A_n1A                              |
| DC_3A-7A-20A_n8A                                                                                                                                                                   | DC_3A_n8A<br>DC_7A_n8A<br>DC_20A_n8A                                                        |
| DC_3A-7A-20A_n28A <sup>3,7,8</sup>                                                                                                                                                 | DC_3A_n28A<br>DC_7A_n28A<br>DC_20A_n28A                                                     |
| DC_3A-7A-20A_n78A <sup>2</sup><br>DC_3C-7A-20A_n78A <sup>2</sup>                                                                                                                   | DC_3A_n78A<br>DC_20A_n78A<br>DC_7A_n78A                                                     |

| EN-DC configuration                                                                                        | Uplink EN-DC configuration (NOTE 1)                                                            |
|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| DC_3A-7A-28A_n5A<br>DC_3A-7C-28A_n5A<br>DC_3C-7A-28A_n5A<br>DC_3C-7C-28A_n5A                               | DC_3A_n5A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_28A_n5A                                              |
| DC_3A-7A-28A_n7A<br>DC_3C-7A-28A_n7A                                                                       | DC_3A_n7A<br>DC_3C_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A                                 |
| DC_3A-3A-7A-28A_n7A                                                                                        | DC_3A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A                                              |
| DC_3A-7A-28A_n40A                                                                                          | DC_3A_n40A<br>DC_7A_n40A<br>DC_28A_n40A                                                        |
| DC_3A-7A-28A_n78A <sup>2</sup><br>DC_3A-7C-28A_n78A <sup>2</sup><br>DC_3C-7A-28A_n78A<br>DC_3C-7C-28A_n78A | DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n78A                            |
| DC_3A-7A_n28A-n78A <sup>2</sup><br>DC_3A-7C_n28A-n78A<br>DC_3C-7A_n28A-n78A<br>DC_3C-7C_n28A-n78A          | DC_3A_n28A<br>DC_3A_n78A<br>DC_3C_n28A<br>DC_7A_n28A<br>DC_7A_n78A<br>DC_7C_n28A<br>DC_7C_n78A |
| DC_3A-7A-40A_n1A                                                                                           | DC_3A_n1A<br>DC_7A_n1A<br>DC_40A_n1A                                                           |
| DC_3A-7A_SUL_n78A-n80A<br>DC_3C-7A_SUL_n78A-n80A                                                           | DC_3A_n78A<br>DC_3A_n80A_ULSUP-TDM_n78A<br>DC_7A_n78A<br>DC_7A_n80A                            |
| DC_3A-8A_n1A-n78A <sup>2</sup><br>DC_3A-3A-8A_n1A-n78A <sup>2</sup>                                        | DC_3A_n1A<br>DC_3A_n78A<br>DC_8A_n1A<br>DC_8A_n78A                                             |
| DC_3A-8A-20A_n78A                                                                                          | DC_3A_n78A<br>DC_8A_n78A<br>DC_20A_n78A                                                        |
| DC_3A-8A_n28A-n77A <sup>2</sup>                                                                            | DC_3A_n28A<br>DC_3A_n77A<br>DC_8A_n28A<br>DC_8A_n77A                                           |
| DC_3A-8A_n28A-n77(2A) <sup>2</sup>                                                                         | DC_3A_n28A<br>DC_3A_n77A<br>DC_8A_n28A<br>DC_8A_n77A                                           |
| DC_3A-8A-42A_n77A <sup>6,7</sup><br>DC_3A-8A-42C_n77A <sup>6,7</sup>                                       | DC_3A_n77A<br>DC_8A_n77A                                                                       |
| DC_3A-8A_SUL_n78A-n80A                                                                                     | DC_3A_n78A<br>DC_3A_n80A_ULSUP-TDM_n78A<br>DC_8A_n78A<br>DC_8A_n80A                            |
| DC_3A-18A-42A_n77A <sup>6,7</sup><br>DC_3A-18A-42C_n77A <sup>6,7</sup>                                     | DC_3A_n77A<br>DC_18A_n77A                                                                      |
| DC_3A-18A-42A_n78A <sup>6,7</sup><br>DC_3A-18A-42C_n78A <sup>6,7</sup>                                     | DC_3A_n78A<br>DC_18A_n78A                                                                      |
| DC_3A-18A-42A_n79A<br>DC_3A-18A-42C_n79A                                                                   | DC_3A_n79A<br>DC_18A_n79A                                                                      |
| DC_3A-19A-21A_n77A <sup>2</sup><br>DC_3A-19A-21A_n77C <sup>2</sup>                                         | DC_3A_n77A<br>DC_19A_n77A<br>DC_21A_n77A                                                       |
| DC_3A-19A-21A_n78A <sup>2</sup><br>DC_3A-19A-21A_n78C <sup>2</sup>                                         | DC_3A_n78A<br>DC_19A_n78A                                                                      |

| EN-DC configuration                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|                                                                                                                                                                                                                            | DC_21A_n78A                                                                     |
| DC_3A-19A-21A_n79A <sup>2</sup><br>DC_3A-19A-21A_n79C <sup>2</sup>                                                                                                                                                         | DC_3A_n79A<br>DC_19A_n79A<br>DC_21A_n79A                                        |
| DC_3A-19A-42A_n77A <sup>6,7</sup><br>DC_3A-19A-42A_n77C <sup>6,7</sup><br>DC_3A-19A-42C_n77A <sup>6,7</sup><br>DC_3A-19A-42C_n77C <sup>6,7</sup><br>DC_3A-19A-42D_n77A <sup>6,7</sup><br>DC_3A-19A-42D_n77C <sup>6,7</sup> | DC_3A_n77A<br>DC_19A_n77A                                                       |
| DC_3A-19A-42A_n78A <sup>6,7</sup><br>DC_3A-19A-42A_n78C <sup>6,7</sup><br>DC_3A-19A-42C_n78A <sup>6,7</sup><br>DC_3A-19A-42C_n78C <sup>6,7</sup><br>DC_3A-19A-42D_n78A <sup>6,7</sup><br>DC_3A-19A-42D_n78C <sup>6,7</sup> | DC_3A_n78A<br>DC_19A_n78A                                                       |
| DC_3A-19A-42A_n79A <sup>2</sup><br>DC_3A-19A-42A_n79C <sup>2</sup><br>DC_3A-19A-42C_n79A <sup>2</sup><br>DC_3A-19A-42C_n79C <sup>2</sup><br>DC_3A-19A-42D_n79A<br>DC_3A-19A-42D_n79C                                       | DC_3A_n79A<br>DC_19A_n79A                                                       |
| DC_3A-19A_n77A-n79A                                                                                                                                                                                                        | DC_19A_n77A<br>DC_19A_n79A                                                      |
| DC_3A-19A_n78A-n79A                                                                                                                                                                                                        | DC_19A_n78A<br>DC_19A_n79A                                                      |
| DC_3A-20A_n1A-n7A                                                                                                                                                                                                          | DC_3A_n1A<br>DC_3A_n7A<br>DC_20A_n1A<br>DC_20A_n7A                              |
| DC_3C-20A_n1A-n7A                                                                                                                                                                                                          | DC_3A_n1A<br>DC_3C_n1A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_20A_n1A<br>DC_20A_n7A    |
| DC_3A-20A_n1A-n28A <sup>7,8</sup>                                                                                                                                                                                          | DC_3A_n1A<br>DC_3A_n28A<br>DC_20A_n1A<br>DC_20A_n28A                            |
| DC_3C-20A_n1A-n28A <sup>7,8</sup>                                                                                                                                                                                          | DC_3A_n1A<br>DC_3A_n28A<br>DC_20A_n1A<br>DC_3C_n1A<br>DC_3C_n28A<br>DC_20A_n28A |
| DC_3A-20A_n7A-n28A <sup>7,8</sup>                                                                                                                                                                                          | DC_3A_n7A<br>DC_3A_n28A<br>DC_20A_n7A<br>DC_20A_n28A                            |
| DC_3C-20A_n7A-n28A <sup>7,8</sup>                                                                                                                                                                                          | DC_3A_n7A<br>DC_3A_n28A<br>DC_3C_n7A<br>DC_3C_n28A<br>DC_20A_n7A<br>DC_20A_n28A |
| DC_3A-20A_n28A-n78A <sup>2,3,7,8</sup><br>DC_3C-20A_n28A-n78A <sup>2,3,7,8</sup>                                                                                                                                           | DC_3A_n28A<br>DC_3A_n78A<br>DC_20A_n28A<br>DC_20A_n78A                          |
| DC_3A-20A-38A_n78A                                                                                                                                                                                                         | DC_3A_n78A                                                                      |
| DC_3A-20A_n38A-n78A                                                                                                                                                                                                        | DC_3A_n78A<br>DC_20A_n78A<br>DC_3A_n38A<br>DC_20A_n38A                          |

| EN-DC configuration                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| DC_3A-20A_n41A-n78A                                                                                                                                                                                                        | DC_3A_n41A<br>DC_3A_n78A<br>DC_20A_n41A<br>DC_20A_n78A                                                                  |
| DC_3A-20A_SUL_n78A-n80A<br>DC_3C-20A_SUL_n78A-n80A                                                                                                                                                                         | DC_3A_n78A<br>DC_3A_n80A_ULSUP-TDM_n78A<br>DC_20A_n78A<br>DC_20A_n80A                                                   |
| DC_3A-21A-42A_n77A <sup>6,7</sup><br>DC_3A-21A-42A_n77C <sup>6,7</sup><br>DC_3A-21A-42C_n77A <sup>6,7</sup><br>DC_3A-21A-42C_n77C <sup>6,7</sup><br>DC_3A-21A-42D_n77A <sup>6,7</sup><br>DC_3A-21A-42D_n77C <sup>6,7</sup> | DC_3A_n77A<br>DC_21A_n77A                                                                                               |
| DC_3A-21A-42A_n78A <sup>6,7</sup><br>DC_3A-21A-42A_n78C <sup>6,7</sup><br>DC_3A-21A-42C_n78A <sup>6,7</sup><br>DC_3A-21A-42C_n78C <sup>6,7</sup><br>DC_3A-21A-42D_n78A <sup>6,7</sup><br>DC_3A-21A-42D_n78C <sup>6,7</sup> | DC_3A_n78A<br>DC_21A_n78A                                                                                               |
| DC_3A-21A-42A_n79A<br>DC_3A-21A-42A_n79C<br>DC_3A-21A-42C_n79A<br>DC_3A-21A-42C_n79C<br>DC_3A-21A-42D_n79A<br>DC_3A-21A-42D_n79C                                                                                           | DC_3A_n79A<br>DC_21A_n79A                                                                                               |
| DC_3A-21A_n77A-n79A                                                                                                                                                                                                        | DC_3A_n77A<br>DC_3A_n79A<br>DC_21A_n77A<br>DC_21A_n79A                                                                  |
| DC_3A-21A_n78A-n79A                                                                                                                                                                                                        | DC_3A_n78A<br>DC_3A_n79A<br>DC_21A_n78A<br>DC_21A_n79A                                                                  |
| DC_3A-28A_n5A-n78A <sup>2</sup><br>DC_3C-28A_n5A-n78A <sup>2</sup>                                                                                                                                                         | DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_28A_n5A<br>DC_28A_n78A                                                      |
| DC_3A-28A_n7A-n78A<br>DC_3A-3A-28A_n7A-n78A                                                                                                                                                                                | DC_3A_n7A<br>DC_28A_n7A<br>DC_3A_n78A<br>DC_28A_n78A                                                                    |
| DC_3A-28A_n7B-n78A<br>DC_3A-3A-28A_n7B-n78A                                                                                                                                                                                | DC_3A_n7A<br>DC_3A_n7B<br>DC_28A_n7A<br>DC_28A_n7B<br>DC_3A_n78A<br>DC_28A_n78A                                         |
| DC_3C-28A_n7A-n78A                                                                                                                                                                                                         | DC_3A_n7A<br>DC_3C_n7A<br>DC_28A_n7A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_28A_n78A                                         |
| DC_3C-28A_n7B-n78A                                                                                                                                                                                                         | DC_3A_n7A<br>DC_3C_n7A<br>DC_3A_n7B<br>DC_3C_n7B<br>DC_28A_n7A<br>DC_28A_n7B<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_28A_n78A |
| DC_3A-28A_n40A-n78A                                                                                                                                                                                                        | DC_3A_n40A                                                                                                              |

| EN-DC configuration                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|                                                                                                                                                  | DC_3A_n78A<br>DC_28A_n40A<br>DC_28A_n78A                                             |
| DC_3A-28A-41A_n78A<br>DC_3A-28A-41C_n78A                                                                                                         | DC_3A_n78A<br>DC_28A_n78A<br>DC_41A_n78A<br>DC_41C_n78A                              |
| DC_3A-28A-42A_n77A <sup>6,7</sup><br>DC_3A-28A-42C_n77A <sup>6,7</sup>                                                                           | DC_3A_n77A<br>DC_28A_n77A                                                            |
| DC_3A-28A-42A_n78A <sup>6,7</sup><br>DC_3A-28A-42C_n78A <sup>6,7</sup>                                                                           | DC_3A_n78A<br>DC_28A_n78A                                                            |
| DC_3A-28A-42A_n79A<br>DC_3A-28A-42C_n79A                                                                                                         | DC_3A_n79A<br>DC_28A_n79A                                                            |
| DC_3A-41A_n28A-n77A                                                                                                                              | DC_3A_n28A<br>DC_3A_n77A<br>DC_41A_n28A<br>DC_41A_n77A                               |
| DC_3A-41C_n28A-n77A                                                                                                                              | DC_3A_n28A<br>DC_3A_n77A<br>DC_41A_n28A<br>DC_41A_n77A<br>DC_41C_n28A<br>DC_41C_n77A |
| DC_3A-41A_n28A-n78A                                                                                                                              | DC_3A_n28A<br>DC_3A_n78A<br>DC_41A_n28A<br>DC_41A_n78A                               |
| DC_3A-41C_n28A-n78A                                                                                                                              | DC_3A_n28A<br>DC_3A_n78A<br>DC_41A_n28A<br>DC_41A_n78A<br>DC_41C_n28A<br>DC_41C_n78A |
| DC_3A-41A-42A_n77A <sup>6,7</sup><br>DC_3A-41A-42C_n77A <sup>6,7</sup><br>DC_3A-41C-42A_n77A <sup>6,7</sup><br>DC_3A-41C-42C_n77A <sup>6,7</sup> | DC_3A_n77A<br>DC_41A_n77A                                                            |
| DC_3A-41A-42A_n78A <sup>6,7</sup><br>DC_3A-41A-42C_n78A <sup>6,7</sup><br>DC_3A-41C-42A_n78A <sup>6,7</sup><br>DC_3A-41C-42C_n78A <sup>6,7</sup> | DC_3A_n78A<br>DC_41A_n78A                                                            |
| DC_3A-41A-42A_n79A<br>DC_3A-41A-42C_n79A<br>DC_3A-41C-42A_n79A<br>DC_3A-41C-42C_n79A                                                             | DC_3A_n79A<br>DC_41A_n79A                                                            |
| DC_3A-42A_n77A-n79A <sup>6,7</sup><br>DC_3A-42C_n77A-n79A <sup>6,7</sup>                                                                         | DC_3A_n77A<br>DC_3A_n79A                                                             |
| DC_3A-42A_n78A-n79A <sup>6,7</sup><br>DC_3A-42C_n78A-n79A <sup>6,7</sup>                                                                         | DC_3A_n78A<br>DC_3A_n79A                                                             |
| DC_5A-48A-(n)12AA                                                                                                                                | DC_5A_n12A<br>DC_48A_n12A<br>DC_(n)12AA <sup>4</sup>                                 |
| DC_5A-48A-66A_n12A                                                                                                                               | DC_5A_n12A<br>DC_48A_n12A<br>DC_66A_n12A                                             |
| DC_5A-48A-66A_n71A                                                                                                                               | DC_5A_n71A<br>DC_48A_n71A<br>DC_66A_n71A                                             |
| DC_5A-66A-(n)12AA                                                                                                                                | DC_5A_n12A<br>DC_66A_n12A<br>DC_(n)12AA <sup>4</sup>                                 |
| DC_7A-8A_n1A-n78A <sup>2</sup><br>DC_7A-7A-8A_n1A-n78A <sup>2</sup>                                                                              | DC_7A_n1A<br>DC_7A_n78A<br>DC_8A_n1A<br>DC_8A_n78A                                   |

| EN-DC configuration                                                  | Uplink EN-DC configuration (NOTE 1)                                                 |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DC_7A-13A-66A_n66A<br>DC_7C-13A-66A_n66A                             | DC_7A_n66A<br>DC_13A_n66A<br>DC_66A_n66A <sup>4</sup>                               |
| DC_7A-20A_n3A-n78A                                                   | DC_7A_n3A<br>DC_20A_n3A<br>DC_7A_n78A<br>DC_20A_n78A                                |
| DC_7A-20A_n28A-n78A <sup>2,3,7,8</sup>                               | DC_7A_n28A<br>DC_7A_n78A<br>DC_20A_n28A<br>DC_20A_n78A                              |
| DC_7A-28A_n3A-n78A                                                   | DC_7A_n3A<br>DC_28A_n3A<br>DC_7A_n78A<br>DC_28A_n78A                                |
| DC_7C-28A_n3A-n78A                                                   | DC_7A_n3A<br>DC_7C_n3A<br>DC_28A_n3A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n78A     |
| DC_7A-28A_n5A-n78A<br>DC_7C-28A_n5A-n78A                             | DC_7A_n5A<br>DC_7C_n5A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n5A<br>DC_28A_n78A     |
| DC_7A-28A_n7A-n78A                                                   | DC_7A_n7A <sup>4</sup><br>DC_28A_n7A<br>DC_7A_n78A<br>DC_28A_n78A                   |
| DC_7A-66A_n66A-n78A<br>DC_7A-7A-66A_n66A-n78A<br>DC_7C-66A_n66A-n78A | DC_7A_n66A<br>DC_7A_n78A<br>DC_66A_n66A <sup>4</sup><br>DC_66A_n78A                 |
| DC_12A-30A-66A_n2A<br>DC_12A-30A-66A-66A_n2A                         | DC_12A_n2A<br>DC_30A_n2A<br>DC_66A_n2A                                              |
| DC_12A-30A-66A_n66A                                                  | DC_12A_n66A<br>DC_30A_n66A<br>DC_66A_n66A <sup>4</sup>                              |
| DC_12A-48A-(n)5AA                                                    | DC_12A_n5A<br>DC_48A_n5A<br>DC_(n)5AA <sup>4</sup>                                  |
| DC_12A-48A-66A_n5A                                                   | DC_12A_n5A<br>DC_48A_n5A<br>DC_66A_n5A                                              |
| DC_12A-66A-(n)5AA                                                    | DC_12A_n5A<br>DC_66A_n5A<br>DC_(n)5AA <sup>4</sup>                                  |
| DC_18A-41A_n3A-n77A                                                  | DC_18A_n3A<br>DC_18A_n77A<br>DC_41A_n3A<br>DC_41A_n77A                              |
| DC_18A-41C_n3A-n77A                                                  | DC_18A_n3A<br>DC_18A_n77A<br>DC_41A_n3A<br>DC_41A_n77A<br>DC_41C_n3A<br>DC_41C_n77A |
| DC_18A-41A_n3A-n78A                                                  | DC_18A_n3A<br>DC_18A_n78A<br>DC_41A_n3A<br>DC_41A_n78A                              |
| DC_18A-41C_n3A-n78A                                                  | DC_18A_n3A                                                                          |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                           | Uplink EN-DC configuration (NOTE 1)                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                               | DC_18A_n78A<br>DC_41A_n3A<br>DC_41A_n78A<br>DC_41C_n3A<br>DC_41C_n78A   |
| DC_19A-21A-42A_n77A <sup>6,7</sup><br>DC_19A-21A-42A_n77C <sup>6,7</sup><br>DC_19A-21A-42C_n77A <sup>6,7</sup><br>DC_19A-21A-42C_n77C <sup>6,7</sup>                                                                                                                                                                                                          | DC_19A_n77A<br>DC_21A_n77A                                              |
| DC_19A-21A-42A_n78A <sup>6,7</sup><br>DC_19A-21A-42A_n78C <sup>6,7</sup><br>DC_19A-21A-42C_n78A <sup>6,7</sup><br>DC_19A-21A-42C_n78C <sup>6,7</sup>                                                                                                                                                                                                          | DC_19A_n78A<br>DC_21A_n78A                                              |
| DC_19A-21A-42A_n79A<br>DC_19A-21A-42A_n79C<br>DC_19A-21A-42C_n79A<br>DC_19A-21A-42C_n79C                                                                                                                                                                                                                                                                      | DC_19A_n79A<br>DC_21A_n79A                                              |
| DC_19A-21A_n77A-n79A                                                                                                                                                                                                                                                                                                                                          | DC_19A_n77A<br>DC_19A_n79A                                              |
| DC_19A-21A_n78A-n79A                                                                                                                                                                                                                                                                                                                                          | DC_19A_n78A<br>DC_19A_n79A                                              |
| DC_19A-42A_n77A-n79A <sup>6,7</sup><br>DC_19A-42C_n77A-n79A <sup>6,7</sup>                                                                                                                                                                                                                                                                                    | DC_19A_n77A<br>DC_19A_n79A                                              |
| DC_19A-42A_n78A-n79A <sup>6,7</sup><br>DC_19A-42C_n78A-n79A <sup>6,7</sup>                                                                                                                                                                                                                                                                                    | DC_19A_n78A<br>DC_19A_n79A                                              |
| DC_21A-28A-42A_n77A <sup>6,7</sup><br>DC_21A-28A-42C_n77A <sup>6,7</sup>                                                                                                                                                                                                                                                                                      | DC_21A_n77A<br>DC_28A_n77A                                              |
| DC_21A-28A-42A_n78A <sup>6,7</sup><br>DC_21A-28A-42C_n78A <sup>6,7</sup>                                                                                                                                                                                                                                                                                      | DC_21A_n78A<br>DC_28A_n78A                                              |
| DC_21A-28A-42A_n79A<br>DC_21A-28A-42C_n79A                                                                                                                                                                                                                                                                                                                    | DC_21A_n79A<br>DC_28A_n79A                                              |
| DC_21A-42A_n77A-n79A <sup>6,7</sup><br>DC_21A-42C_n77A-n79A <sup>6,7</sup>                                                                                                                                                                                                                                                                                    | DC_21A_n77A<br>DC_21A_n79A                                              |
| DC_21A-42A_n78A-n79A <sup>6,7</sup><br>DC_21A-42C_n78A-n79A <sup>6,7</sup>                                                                                                                                                                                                                                                                                    | DC_21A_n78A<br>DC_21A_n79A                                              |
| DC_28A-41A-42A_n78A <sup>6,7</sup><br>DC_28A-41C-42A_n78A <sup>6,7</sup><br>DC_28A-41A-42C_n78A <sup>6,7</sup><br>DC_28A-41C-42C_n78A <sup>6,7</sup>                                                                                                                                                                                                          | DC_28A_n78A<br>DC_41A_n78A<br>DC_41C_n78A<br>DC_42A_n78A<br>DC_42C_n78A |
| DC_29A-30A-66A_n2A                                                                                                                                                                                                                                                                                                                                            | DC_30A_n2A<br>DC_66A_n2A                                                |
| DC_29A-30A-66A-66A_n2A                                                                                                                                                                                                                                                                                                                                        | DC_30A_n2A<br>DC_66A_n2A                                                |
| DC_29A-30A-66A_n66A                                                                                                                                                                                                                                                                                                                                           | DC_30A_n66A<br>DC_66A_n66A <sup>4</sup>                                 |
| DC_46A-66A_n25A-n41A<br>DC_46C-66A_n25A-n41A<br>DC_46D-66A_n25A-n41A                                                                                                                                                                                                                                                                                          | DC_66A_n25A<br>DC_66A_n41A                                              |
| DC_46A-66A_n25A-n71A<br>DC_46C-66A_n25A-n71A<br>DC_46D-66A_n25A-n71A                                                                                                                                                                                                                                                                                          | DC_66A_n25A<br>DC_66A_n71A                                              |
| DC_46A-66A_n41A-n71A<br>DC_46C-66A_n41A-n71A<br>DC_46D-66A_n41A-n71A                                                                                                                                                                                                                                                                                          | DC_66A_n41A<br>DC_66A_n71A                                              |
| DC_46A-66A_n41(2A)-n71A<br>DC_46C-66A_n41(2A)-n71A<br>DC_46D-66A_n41(2A)-n71A                                                                                                                                                                                                                                                                                 | DC_66A_n41A<br>DC_66A_n71A                                              |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.<br>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability<br>NOTE 3: The frequency range in band n28 is restricted for this band combination to 703-733 MHz for the UL and 758-788 MHz for the DL. |                                                                         |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                              | Uplink EN-DC configuration (NOTE 1) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| NOTE 4: Only single switched UL is supported.                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |
| NOTE 5: UL carrier shall be supported in Band 2 or band 66 only. Power imbalance between downlink carriers on Band 7 and Band 38 is assumed to be within 6dB.                                                                                                                                                                                                                                                                                                    |                                     |
| NOTE 6: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i> , the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i> , when UE capability <i>interBandContiguousMRDC</i> is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addition to intra-band non-contiguous EN-DC. |                                     |
| NOTE 7: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i> , the minimum requirements for inter-band EN-DC apply for when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.                                                                                                                                                                     |                                     |
| NOTE 8: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i> , the minimum requirements apply for synchronized DL carriers with a maximum receive time difference $\leq 3$ usec between overlapping or partially overlapping DL bands contained in different cell groups.                                                                                                                                                                         |                                     |

#### 5.5B.4.4 Inter-band EN-DC configurations within FR1 (five bands)

**Table 5.5B.4.4-1: Inter-band EN-DC configurations within FR1 (five bands)**

| EN-DC configuration                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                    |
|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-5A-7A_n78A                                                                          | DC_1A_n78A<br>DC_3A_n78A<br>DC_5A_n78A<br>DC_7A_n78A                                                                   |
| DC_1A-3A-5A-7A-7A_n78A                                                                       | DC_1A_n78A<br>DC_3A_n78A<br>DC_5A_n78A<br>DC_7A_n78A                                                                   |
| DC_1A-3A-5A-41A_n79A                                                                         | DC_1A_n79A<br>DC_3A_n79A<br>DC_5A_n79A<br>DC_41A_n79A                                                                  |
| DC_1A-3A-7A_n5A-n78A<br>DC_1A-3C-7A_n5A-n78A<br>DC_1A-3A-7C_n5A-n78A<br>DC_1A-3C-7C_n5A-n78A | DC_1A_n5A<br>DC_1A_n78A<br>DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_7A_n78A<br>DC_7C_n78A |
| DC_1A-3A-7A_n7A-n78A                                                                         | DC_1A_n7A<br>DC_3A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_1A_n78A<br>DC_3A_n78A<br>DC_7A_n78A                             |
| DC_1A-3C-7A_n7A-n78A                                                                         | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A  |
| DC_1A-3A-7A-8A_n78A                                                                          | DC_1A_n78A                                                                                                             |

| EN-DC configuration                                                                                                                                   | Uplink EN-DC configuration (NOTE 1)                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                       | DC_3A_n78A<br>DC_7A_n78A<br>DC_8A_n78A                                                                                     |
| DC_1A-3A-7A-20A_n8A                                                                                                                                   | DC_1A_n8A<br>DC_3A_n8A<br>DC_7A_n8A<br>DC_20A_n8A                                                                          |
| DC_1A-3A-7A-20A_n28A <sup>3,6,7</sup>                                                                                                                 | DC_1A_n28A<br>DC_3A_n28A<br>DC_7A_n28A<br>DC_20A_n28A                                                                      |
| DC_1A-3A-7A-20A_n78A <sup>2</sup>                                                                                                                     | DC_1A_n78A<br>DC_3A_n78A<br>DC_7A_n78A<br>DC_20A_n78A                                                                      |
| DC_1A-3A-7A-28A_n5A<br>DC_1A-3C-7A-28A_n5A<br>DC_1A-3A-7C-28A_n5A<br>DC_1A-3C-7C-28A_n5A                                                              | DC_1A_n5A<br>DC_3A_n5A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_28A_n5A                                                             |
| DC_1A-3A-7A-28A_n7A<br>DC_1A-3C-7A-28A_n7A<br>DC_1A-1A-3A-7A-28A_n7A<br>DC_1A-1A-3A-3A-7A-28A_n7A<br>DC_1A-3A-3A-7A-28A_n7A<br>DC_1A-1A-3C-7A-28A_n7A | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A                                                |
| DC_1A-3A-7A-28A_n40A                                                                                                                                  | DC_1A_n40A<br>DC_3A_n40A<br>DC_7A_n40A<br>DC_28A_n40A                                                                      |
| DC_1A-3A-7A-28A_n78A<br>DC_1A-3A-7C-28A_n78A<br>DC_1A-3C-7A-28A_n78A<br>DC_1A-3C-7C-28A_n78A                                                          | DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n78A                                          |
| DC_1A-3A-7A_n28A-n78A <sup>2</sup><br>DC_1A-3A-7C_n28A-n78A<br>DC_1A-3C-7A_n28A-n78A<br>DC_1A-3C-7C_n28A-n78A                                         | DC_1A_n28A<br>DC_1A_n78A<br>DC_3A_n28A<br>DC_3C_n28A<br>DC_3A_n78A<br>DC_7A_n28A<br>DC_7A_n78A<br>DC_7C_n28A<br>DC_7C_n78A |
| DC_1A-3A-8A-42A_n77A <sup>5,6</sup><br>DC_1A-3A-8A-42C_n77A <sup>5,6</sup>                                                                            | DC_1A_n77A<br>DC_3A_n77A<br>DC_8A_n77A                                                                                     |
| DC_1A-3A-18A-42A_n77A <sup>5,6</sup><br>DC_1A-3A-18A-42C_n77A <sup>5,6</sup>                                                                          | DC_1A_n77A<br>DC_3A_n77A<br>DC_18A_n77A                                                                                    |
| DC_1A-3A-18A-42A_n78A <sup>5,6</sup><br>DC_1A-3A-18A-42C_n78A <sup>5,6</sup>                                                                          | DC_1A_n78A<br>DC_3A_n78A<br>DC_18A_n78A                                                                                    |
| DC_1A-3A-18A-42A_n79A<br>DC_1A-3A-18A-42C_n79A                                                                                                        | DC_1A_n79A<br>DC_3A_n79A<br>DC_18A_n79A                                                                                    |
| DC_1A-3A-19A-21A_n77A <sup>2</sup><br>DC_1A-3A-19A-21A_n77C <sup>2</sup>                                                                              | DC_1A_n77A<br>DC_3A_n77A<br>DC_19A_n77A<br>DC_21A_n77A                                                                     |
| DC_1A-3A-19A-21A_n78A <sup>2</sup><br>DC_1A-3A-19A-21A_n78C <sup>2</sup>                                                                              | DC_1A_n78A<br>DC_3A_n78A<br>DC_19A_n78A<br>DC_21A_n78A                                                                     |

| EN-DC configuration                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| DC_1A-3A-19A-21A_n79A <sup>2</sup><br>DC_1A-3A-19A-21A_n79C <sup>2</sup>                                                                                     | DC_1A_n79A<br>DC_3A_n79A<br>DC_19A_n79A<br>DC_21A_n79A                                        |
| DC_1A-3A-19A-42A_n77A <sup>5,6</sup><br>DC_1A-3A-19A-42A_n77C <sup>5,6</sup><br>DC_1A-3A-19A-42C_n77A <sup>5,6</sup><br>DC_1A-3A-19A-42C_n77C <sup>5,6</sup> | DC_1A_n77A<br>DC_3A_n77A<br>DC_19A_n77A                                                       |
| DC_1A-3A-19A-42A_n78A <sup>5,6</sup><br>DC_1A-3A-19A-42A_n78C <sup>5,6</sup><br>DC_1A-3A-19A-42C_n78A <sup>5,6</sup><br>DC_1A-3A-19A-42C_n78C <sup>5,6</sup> | DC_1A_n78A<br>DC_3A_n78A<br>DC_19A_n78A                                                       |
| DC_1A-3A-19A-42A_n79A<br>DC_1A-3A-19A-42A_n79C<br>DC_1A-3A-19A-42C_n79A<br>DC_1A-3A-19A-42C_n79C                                                             | DC_1A_n79A<br>DC_3A_n79A<br>DC_19A_n79A                                                       |
| DC_1A-3A-20A_n28A-n78A <sup>2,3,6,7</sup>                                                                                                                    | DC_1A_n28A<br>DC_1A_n78A<br>DC_3A_n28A<br>DC_3A_n78A<br>DC_20A_n28A<br>DC_20A_n78A            |
| DC_1A-3A-20A-38A_n78A                                                                                                                                        | DC_3A_n78A<br>DC_20A_n78A                                                                     |
| DC_1A-3A-20A_n38A-n78A                                                                                                                                       | DC_1A_n78A<br>DC_3A_n78A<br>DC_20A_n78A<br>DC_1A_n38A<br>DC_3A_n38A<br>DC_20A_n38A            |
| DC_1A-3A-20A_n41A-n78A                                                                                                                                       | DC_1A_n41A<br>DC_1A_n78A<br>DC_3A_n41A<br>DC_3A_n78A<br>DC_20A_n41A<br>DC_20A_n78A            |
| DC_1A-3A-21A-42A_n77A <sup>5,6</sup><br>DC_1A-3A-21A-42A_n77C <sup>5,6</sup><br>DC_1A-3A-21A-42C_n77A <sup>5,6</sup><br>DC_1A-3A-21A-42C_n77C <sup>5,6</sup> | DC_1A_n77A<br>DC_3A_n77A<br>DC_21A_n77A                                                       |
| DC_1A-3A-21A-42A_n78A <sup>5,6</sup><br>DC_1A-3A-21A-42A_n78C <sup>5,6</sup><br>DC_1A-3A-21A-42C_n78A <sup>5,6</sup><br>DC_1A-3A-21A-42C_n78C <sup>5,6</sup> | DC_1A_n78A<br>DC_3A_n78A<br>DC_21A_n78A                                                       |
| DC_1A-3A-21A-42A_n79A<br>DC_1A-3A-21A-42A_n79C<br>DC_1A-3A-21A-42C_n79A<br>DC_1A-3A-21A-42C_n79C                                                             | DC_1A_n79A<br>DC_3A_n79A<br>DC_21A_n79A                                                       |
| DC_1A-3A-21A_n77A-n79A                                                                                                                                       | DC_3A_n77A<br>DC_3A_n79A                                                                      |
| DC_1A-3A-21A_n78A-n79A                                                                                                                                       | DC_3A_n78A<br>DC_3A_n79A                                                                      |
| DC_1A-3A-28A_n5A-n78A <sup>2</sup><br>DC_1A-3C-28A_n5A-n78A <sup>2</sup>                                                                                     | DC_1A_n5A<br>DC_1A_n78A<br>DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_28A_n5A<br>DC_28A_n78A |
| DC_1A-3A-28A_n7A-n78A                                                                                                                                        | DC_1A_n7A<br>DC_3A_n7A<br>DC_28A_n7A<br>DC_1A_n78A<br>DC_3A_n78A<br>DC_28A_n78A               |

| EN-DC configuration                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-28A_n7B-n78A                                                                                                                                        | DC_1A_n7A<br>DC_3A_n7A<br>DC_28A_n7A<br>DC_1A-n7B<br>DC_3A-n7B<br>DC_28A_n7B<br>DC_1A_n78A<br>DC_3A_n78A<br>DC_28A_n78A                                         |
| DC_1A-3C-28A_n7A-n78A                                                                                                                                        | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_28A_n7A<br>DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_28A_n78A                                                      |
| DC_1A-3C-28A_n7B-n78A                                                                                                                                        | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_28A_n7A<br>DC_1A_n7B<br>DC_3A_n7B<br>DC_3C_n7B<br>DC_28A_n7B<br>DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_28A_n78A |
| DC_1A-3A-28A_n40A-n78A                                                                                                                                       | DC_1A_n40A<br>DC_1A_n78A<br>DC_3A_n40A<br>DC_3A_n78A<br>DC_28A_n40A<br>DC_28A_n78A                                                                              |
| DC_1A-3A-28A-42A_n77A <sup>5,6</sup><br>DC_1A-3A-28A-42A_n77C <sup>5,6</sup><br>DC_1A-3A-28A-42C_n77A <sup>5,6</sup><br>DC_1A-3A-28A-42C_n77C <sup>5,6</sup> | DC_1A_n77A<br>DC_3A_n77A<br>DC_28A_n77A                                                                                                                         |
| DC_1A-3A-28A-42A_n78A <sup>5,6</sup><br>DC_1A-3A-28A-42A_n78C <sup>5,6</sup><br>DC_1A-3A-28A-42C_n78A <sup>5,6</sup><br>DC_1A-3A-28A-42C_n78C <sup>5,6</sup> | DC_1A_n78A<br>DC_3A_n78A<br>DC_28A_n78A                                                                                                                         |
| DC_1A-3A-28A-42A_n79A<br>DC_1A-3A-28A-42A_n79C<br>DC_1A-3A-28A-42C_n79A<br>DC_1A-3A-28A-42C_n79C                                                             | DC_1A_n79A<br>DC_3A_n79A<br>DC_28A_n79A                                                                                                                         |
| DC_1A-3A-41A_n28A-n77A                                                                                                                                       | DC_1A_n28A<br>DC_1A_n77A<br>DC_3A_n28A<br>DC_3A_n77A<br>DC_41A_n28A<br>DC_41A_n77A                                                                              |
| DC_1A-3A-41C_n28A-n77A                                                                                                                                       | DC_1A_n28A<br>DC_1A_n77A<br>DC_3A_n28A<br>DC_3A_n77A<br>DC_41A_n28A<br>DC_41A_n77A<br>DC_41C_n28A<br>DC_41C_n77A                                                |
| DC_1A-3A-41A_n28A-n78A                                                                                                                                       | DC_1A_n28A<br>DC_1A_n78A<br>DC_3A_n28A<br>DC_3A_n78A                                                                                                            |

| EN-DC configuration                                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                  | DC_41A_n28A<br>DC_41A_n78A                                                                                       |
| DC_1A-3A-41C_n28A-n78A                                                                                                                                           | DC_1A_n28A<br>DC_1A_n78A<br>DC_3A_n28A<br>DC_3A_n78A<br>DC_41A_n28A<br>DC_41A_n78A<br>DC_41C_n28A<br>DC_41C_n78A |
| DC_1A-3A-41A-42A_n77A <sup>5,6</sup><br>DC_1A-3A-41A-42C_n77A <sup>5,6</sup><br>DC_1A-3A-41C-42A_n77A <sup>5,6</sup><br>DC_1A-3A-41C-42C_n77A <sup>5,6</sup>     | DC_1A_n77A<br>DC_3A_n77A<br>DC_41A_n77A                                                                          |
| DC_1A-3A-41A-42A_n78A <sup>5,6</sup><br>DC_1A-3A-41A-42C_n78A <sup>5,6</sup><br>DC_1A-3A-41C-42A_n78A <sup>5,6</sup><br>DC_1A-3A-41C-42C_n78A <sup>5,6</sup>     | DC_1A_n78A<br>DC_3A_n78A<br>DC_41A_n78A                                                                          |
| DC_1A-3A-41A-42A_n79A<br>DC_1A-3A-41A-42C_n79A<br>DC_1A-3A-41C-42A_n79A<br>DC_1A-3A-41C-42C_n79A                                                                 | DC_1A_n79A<br>DC_3A_n79A<br>DC_41A_n79A                                                                          |
| DC_1A-7A-20A_n3A-n78A                                                                                                                                            | DC_1A_n3A                                                                                                        |
| DC_1A-7A-28A_n5A-n78A<br>DC_1A-7C-28A_n5A-n78A                                                                                                                   | DC_1A_n5A<br>DC_1A_n78A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n5A<br>DC_28A_n78A       |
| DC_1A-7A-28A_n7A-n78A                                                                                                                                            | DC_1A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A<br>DC_1A_n78A<br>DC_7A_n78A<br>DC_28A_n78A                     |
| DC_1A-7A-20A_n28A-n78A <sup>2,3,6,7</sup>                                                                                                                        | DC_1A_n28A<br>DC_1A_n78A<br>DC_7A_n28A<br>DC_7A_n78A<br>DC_20A_n28A<br>DC_20A_n78A                               |
| DC_1A-19A-21A-42A_n77A <sup>5,6</sup><br>DC_1A-19A-21A-42A_n77C <sup>5,6</sup><br>DC_1A-19A-21A-42C_n77A <sup>5,6</sup><br>DC_1A-19A-21A-42C_n77C <sup>5,6</sup> | DC_1A_n77A<br>DC_19A_n77A<br>DC_21A_n77A                                                                         |
| DC_1A-19A-21A-42A_n78A <sup>5,6</sup><br>DC_1A-19A-21A-42A_n78C <sup>5,6</sup><br>DC_1A-19A-21A-42C_n78A <sup>5,6</sup><br>DC_1A-19A-21A-42C_n78C <sup>5,6</sup> | DC_1A_n78A<br>DC_19A_n78A<br>DC_21A_n78A                                                                         |
| DC_1A-19A-21A-42A_n79A<br>DC_1A-19A-21A-42A_n79C<br>DC_1A-19A-21A-42C_n79A<br>DC_1A-19A-21A-42C_n79C                                                             | DC_1A_n79A<br>DC_19A_n79A<br>DC_21A_n79A                                                                         |
| DC_1A-19A-42A_n77A-n79A <sup>5,6</sup><br>DC_1A-19A-42C_n77A-n79A <sup>5,6</sup>                                                                                 | DC_19A_n77A<br>DC_19A_n79A                                                                                       |
| DC_1A-19A-42A_n78A-n79A <sup>5,6</sup><br>DC_1A-19A-42C_n78A-n79A <sup>5,6</sup>                                                                                 | DC_19A_n78A<br>DC_19A_n79A                                                                                       |
| DC_1A-20A-38A_n3A-n78A                                                                                                                                           | DC_1A_n3A<br>DC_20A_n3A<br>DC_38A_n3A<br>DC_1A_n78A<br>DC_20A_n78A<br>DC_38A_n78A                                |

| EN-DC configuration                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| DC_1A-21A-28A-42A_n77A <sup>5,6</sup><br>DC_1A-21A-28A-42C_n77A <sup>5,6</sup>                                                                               | DC_1A_n77A<br>DC_21A_n77A<br>DC_28A_n77A                                                                                 |
| DC_1A-21A-28A-42A_n78A <sup>5,6</sup><br>DC_1A-21A-28A-42C_n78A <sup>5,6</sup>                                                                               | DC_1A_n78A<br>DC_21A_n78A<br>DC_28A_n78A                                                                                 |
| DC_1A-21A-28A-42A_n79A<br>DC_1A-21A-28A-42C_n79A                                                                                                             | DC_1A_n79A<br>DC_21A_n79A<br>DC_28A_n79A                                                                                 |
| DC_1A-21A-42A_n77A-n79A <sup>5,6</sup><br>DC_1A-21A-42C_n77A-n79A <sup>5,6</sup>                                                                             | DC_1A_n77A<br>DC_1A_n79A                                                                                                 |
| DC_1A-21A-42A_n78A-n79A <sup>5,6</sup><br>DC_1A-21A-42C_n78A-n79A <sup>5,6</sup>                                                                             | DC_1A_n78A<br>DC_1A_n79A                                                                                                 |
| DC_2A-7A-13A-66A_n66A<br>DC_2A-7C-13A-66A_n66A                                                                                                               | DC_2A_n66A<br>DC_7A_n66A<br>DC_13A_n66A<br>DC_66A_n66A <sup>4</sup>                                                      |
| DC_2A-7A-66A_n66A-n78A<br>DC_2A-7A-7A-66A_n66A-n78A<br>DC_2A-7C-66A_n66A-n78A                                                                                | DC_2A_n66A<br>DC_2A_n78A<br>DC_7A_n66A<br>DC_7A_n78A<br>DC_66A_n66A <sup>4</sup><br>DC_66A_n78A                          |
| DC_2A-12A-30A-66A_n2A                                                                                                                                        | DC_12A_n2A<br>DC_30A_n2A<br>DC_66A_n2A                                                                                   |
| DC_2A-12A-30A-66A_n66A                                                                                                                                       | DC_2A_n66A<br>DC_12A_n66A<br>DC_30A_n66A<br>DC_66A_n66A <sup>4</sup>                                                     |
| DC_2A-29A-30A-66A_n2A                                                                                                                                        | DC_2A_n2A<br>DC_30A_n2A<br>DC_66A_n2A                                                                                    |
| DC_2A-46A-66A_n41A-n71A<br>DC_2A-46C-66A_n41A-n71A<br>DC_2A-46D-66A_n41A-n71A                                                                                | DC_2A_n41A<br>DC_2A_n71A<br>DC_66A_n41A<br>DC_66A_n71A                                                                   |
| DC_3A-7A-8A_n1A-n78A <sup>2</sup><br>DC_3A-3A-7A-8A_n1A-n78A <sup>2</sup><br>DC_3A-7A-7A-8A_n1A-n78A <sup>2</sup><br>DC_3A-3A-7A-7A-8A_n1A-n78A <sup>2</sup> | DC_3A_n1A<br>DC_3A_n78A<br>DC_7A_n1A<br>DC_7A_n78A<br>DC_8A_n1A<br>DC_8A_n78A                                            |
| DC_3A-7A-20A_n28A-n78A <sup>2,3,6,7</sup>                                                                                                                    | DC_3A_n28A<br>DC_3A_n78A<br>DC_7A_n28A<br>DC_7A_n78A<br>DC_20A_n28A<br>DC_20A_n78A                                       |
| DC_3A-7A-28A_n5A-n78A<br>DC_3C-7A-28A_n5A-n78A<br>DC_3A-7C-28A_n5A-n78A<br>DC_3C-7C-28A_n5A-n78A                                                             | DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n5A<br>DC_28A_n78A |
| DC_3A-7A-28A_n7A-n78A                                                                                                                                        | DC_3A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A<br>DC_3A_n78A<br>DC_7A_n78A<br>DC_28A_n78A                             |
| DC_3C-7A-28A_n7A-n78A                                                                                                                                        | DC_3A_n7A                                                                                                                |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Uplink EN-DC configuration (NOTE 1)                                                                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_3C_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A<br>DC_28A_n78A |
| DC_3A-19A-21A-42A_n77A <sup>5,6</sup><br>DC_3A-19A-21A-42A_n77C <sup>5,6</sup><br>DC_3A-19A-21A-42C_n77A <sup>5,6</sup><br>DC_3A-19A-21A-42C_n77C <sup>5,6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_3A_n77A<br>DC_19A_n77A<br>DC_21A_n77A                                                                   |
| DC_3A-19A-21A-42A_n78A <sup>5,6</sup><br>DC_3A-19A-21A-42A_n78C <sup>5,6</sup><br>DC_3A-19A-21A-42C_n78A <sup>5,6</sup><br>DC_3A-19A-21A-42C_n78C <sup>5,6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_3A_n78A<br>DC_19A_n78A<br>DC_21A_n78A                                                                   |
| DC_3A-19A-21A-42A_n79A <sup>5,6</sup><br>DC_3A-19A-21A-42A_n79C <sup>5,6</sup><br>DC_3A-19A-21A-42C_n79A <sup>5,6</sup><br>DC_3A-19A-21A-42C_n79C <sup>5,6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_3A_n79A<br>DC_19A_n79A<br>DC_21A_n79A                                                                   |
| DC_3A-28A-41A-42A_n78A <sup>5,6</sup><br>DC_3A-28A-41A-42C_n78A <sup>5,6</sup> DC_3A-28A-41C-42A_n78A <sup>5,6</sup><br>DC_3A-28A-41C-42C_n78A <sup>5,6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DC_1A_n78A<br>DC_3A_n78A<br>DC_41A_n78A<br>DC_41C_n78A                                                     |
| DC_19A-21A-42A_n77A-n79A <sup>5,6</sup><br>DC_19A-21A-42C_n77A-n79A <sup>5,6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_19A_n77A<br>DC_19A_n79A                                                                                 |
| DC_19A-21A-42A_n78A-n79A <sup>5,6</sup><br>DC_19A-21A-42C_n78A-n79A <sup>5,6</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_19A_n78A<br>DC_19A_n79A                                                                                 |
| <p>NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.</p> <p>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability</p> <p>NOTE 3: The frequency range in band n28 is restricted for this band combination to 703-733 MHz for the UL and 758-788 MHz for the DL</p> <p>NOTE 4: Only single switched UL is supported.</p> <p>NOTE 5: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, when UE capability <i>interBandContiguousMRDC</i> is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addition to intra-band non-contiguous EN-DC.</p> <p>NOTE 6: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.</p> <p>NOTE 7: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference <math>\leq 3</math> usec between overlapping or partially overlapping DL bands contained in different cell groups.</p> |                                                                                                            |

#### 5.5B.4.5 Inter-band EN-DC configurations within FR1 (six bands)

**Table 5.5B.4.5-1: Inter-band EN-DC configurations within FR1 (six bands)**

| EN-DC configuration                          | Uplink EN-DC configuration (NOTE 1)                                              |
|----------------------------------------------|----------------------------------------------------------------------------------|
| DC_1A-3A-7A-20A_n28A-n78A <sup>2,3,5,6</sup> | DC_1A_n28A<br>DC_1A_n78A<br>DC_3A_n28A<br>DC_3A_n78A<br>DC_7A_n28A<br>DC_7A_n78A |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                     |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_20A_n28A<br>DC_20A_n78A                                                                                                                          |
| DC_1A-3A-7A-28A_n5A-n78A<br>DC_1A-3A-7C-28A_n5A-n78A<br>DC_1A-3C-7A-28A_n5A-n78A<br>DC_1A-3C-7C-28A_n5A-n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_1A_n5A<br>DC_1A_n78A<br>DC_3A_n5A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n5A<br>DC_7C_n5A<br>DC_7A_n78A<br>DC_7C_n78A<br>DC_28A_n5A<br>DC_28A_n78A |
| DC_1A-3A-7A-28A_n7A-n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_1A_n7A<br>DC_3A_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A<br>DC_1A_n78A<br>DC_3A_n78A<br>DC_7A_n78A<br>DC_28A_n78A                             |
| DC_1A-3C-7A-28A_n7A-n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_1A_n7A<br>DC_3A_n7A<br>DC_3C_n7A<br>DC_7A_n7A <sup>4</sup><br>DC_28A_n7A<br>DC_1A_n78A<br>DC_3A_n78A<br>DC_3C_n78A<br>DC_7A_n78A<br>DC_28A_n78A  |
| <p>NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.</p> <p>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability.</p> <p>NOTE 3: The frequency range in band n28 is restricted for this band combination to 703-733 MHz for the UL and 758-788 MHz for the DL.</p> <p>NOTE 4: Only single switched UL is supported.</p> <p>NOTE 5: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.</p> <p>NOTE 6: For UEs not indicating <i>interBandMRDC-WithOverlapDL-Bands-r16</i>, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference <math>\leq 3</math> usec between overlapping or partially overlapping DL bands contained in different cell groups.</p> |                                                                                                                                                     |

## 5.5B.4a Inter-band NE-DC within FR1

### 5.5B.4a.1 Inter-band NE-DC configurations within FR1 (two bands)

**Table 5.5B.4a.1-1: Inter-band NE-DC configurations within FR1 (two bands)**

| NE-DC configuration                                                                                            | Uplink NE-DC configuration (NOTE 1) | Single UL allowed |
|----------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------|
| DC n1A 28A                                                                                                     | DC n1A 28A                          | No                |
| NOTE 1: Uplink NE-DC configurations are the configurations supported by the present release of specifications. |                                     |                   |

## 5.5B.5 Inter-band EN-DC including FR2

### 5.5B.5.1 Inter-band EN-DC configurations including FR2 (two bands)

**Table 5.5B.5.1-1: Inter-band EN-DC configurations including FR2 (two bands)**

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                         | Uplink EN-DC configuration<br>(NOTE 1)                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257E<br>DC_1A_n257F<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M                                                                                                                                                                                                                                                                                           | DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M |
| DC_1A_n258A<br>DC_1A_n258D                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_1A_n258A<br>DC_1A_n258D                                                                                                          |
| DC_2A_n257A<br>DC_2C_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_2A_n257A                                                                                                                         |
| DC_2A_n257(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_2A_n257A                                                                                                                         |
| DC_2A-2A_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_2A_n257A                                                                                                                         |
| DC_2A_n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_2A_n258A                                                                                                                         |
| DC_2A_n258(2A)<br>DC_2A_n258(3A)<br>DC_2A_n258(4A)<br>DC_2A_n258(5A)                                                                                                                                                                                                                                                                                                                                                                                        | DC_2A_n258A                                                                                                                         |
| DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M<br>DC_2A_n260O<br>DC_2A_n260P<br>DC_2A_n260Q<br>DC_2C_n260A                                                                                                                                                                                                                                                                            | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260O<br>DC_2A_n260P<br>DC_2A_n260Q                                              |
| DC_2A_n260(2A)<br>DC_2A_n260(3A)<br>DC_2A_n260(4A)<br>DC_2A_n260(5A)<br>DC_2A_n260(6A)<br>DC_2A_n260(7A)<br>DC_2A_n260(8A)<br>DC_2A_n260(2D)<br>DC_2A_n260(2G)<br>DC_2A_n260(3G)<br>DC_2A_n260(4G)<br>DC_2A_n260(2H)<br>DC_2A_n260(2O)<br>DC_2A_n260(3O)<br>DC_2A_n260(4O)<br>DC_2A_n260(A-G)<br>DC_2A_n260(A-H)<br>DC_2A_n260(A-P)<br>DC_2A_n260(A-Q)<br>DC_2A_n260(A-2G)<br>DC_2A_n260(A-2H)<br>DC_2A_n260(2A-G)<br>DC_2A_n260(2A-H)<br>DC_2A_n260(2A-2G) | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260O<br>DC_2A_n260P<br>DC_2A_n260Q                                              |

|                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_2A_n260(2A-2H)<br>DC_2A_n260(3A-G)<br>DC_2A_n260(3A-O)<br>DC_2A_n260(3A-2O)<br>DC_2A_n260(3A-P)<br>DC_2A_n260(4A-O)<br>DC_2A_n260(4A-2O)<br>DC_2A_n260(G-H)<br>DC_2A_n260(P-Q)<br>DC_2A_n260(A-P-Q)<br>DC_2A_n260(2A-O-P)<br>DC_2A_n260(3A-O-P)                                                                                                                          |                                                                                                                                                                   |
| DC_2A-2A_n260A<br>DC_2A-2A_n260G<br>DC_2A-2A_n260H<br>DC_2A-2A_n260I<br>DC_2A-2A_n260J<br>DC_2A-2A_n260K<br>DC_2A-2A_n260L<br>DC_2A-2A_n260M                                                                                                                                                                                                                                | DC_2A_n260A                                                                                                                                                       |
| DC_2A_n261A<br>DC_2A_n261(2A)<br>DC_2A_n261(3A)<br>DC_2A_n261(4A)                                                                                                                                                                                                                                                                                                           | DC_2A_n261A                                                                                                                                                       |
| DC_2A_n261G<br>DC_2A_n261H<br>DC_2A_n261I<br>DC_2A_n261J<br>DC_2A_n261K<br>DC_2A_n261L<br>DC_2A_n261M                                                                                                                                                                                                                                                                       | DC_2A_n261A<br>DC_2A_n261G<br>DC_2A_n261H<br>DC_2A_n261I                                                                                                          |
| DC_2A_n261(2I)<br>DC_2A_n261(2H)<br>DC_2A_n261(A-G)<br>DC_2A_n261(A-J)<br>DC_2A_n261(A-K)<br>DC_2A_n261(A-2G)<br>DC_2A_n261(A-H)<br>DC_2A_n261(A-I)<br>DC_2A_n261(2A-G)<br>DC_2A_n261(2A-I)<br>DC_2A_n261(2A-H)<br>DC_2A_n261(3A-G)<br>DC_2A_n261(G-H)<br>DC_2A_n261(G-I)<br>DC_2A_n261(G-J)<br>DC_2A_n261(2G)<br>DC_2A_n261(H-I)<br>DC_2A_n261(A-G-H)<br>DC_2A_n261(A-G-I) | DC_2A_n261A<br>DC_2A_n261G<br>DC_2A_n261H<br>DC_2A_n261I                                                                                                          |
| DC_3A_n257A<br>DC_3A_n257B<br>DC_3A_n257C<br>DC_3A_n257D<br>DC_3A_n257E<br>DC_3A_n257F<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_3C_n257A<br>DC_3C_n257D<br>DC_3C_n257E<br>DC_3C_n257F<br>DC_3C_n257G                                                                                                  | DC_3A_n257A<br>DC_3A_n257B<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_3C_n257A |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| DC_3C_n257H<br>DC_3C_n257I<br>DC_3C_n257J<br>DC_3C_n257K<br>DC_3C_n257L<br>DC_3C_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                        |
| DC_3A_n258A<br>DC_3A_n258B<br>DC_3A_n258C<br>DC_3A_n258D<br>DC_3A_n258E<br>DC_3A_n258F<br>DC_3A_n258G<br>DC_3A_n258H<br>DC_3A_n258I<br>DC_3A_n258J<br>DC_3A_n258K<br>DC_3A_n258L<br>DC_3A_n258M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DC_3A_n258A                                                                            |
| DC_3A-3A_n257A<br>DC_3A-3A_n257D<br>DC_3A-3A_n257E<br>DC_3A-3A_n257F<br>DC_3A-3A_n257G<br>DC_3A-3A_n257H<br>DC_3A-3A_n257I<br>DC_3A-3A_n257J<br>DC_3A-3A_n257K<br>DC_3A-3A_n257L<br>DC_3A-3A_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_3A_n257A                                                                            |
| DC_4A_n260(2A)<br>DC_4A_n260(3A)<br>DC_4A_n260(4A)<br>DC_4A_n260(5A)<br>DC_4A_n260(6A)<br>DC_4A_n260(7A)<br>DC_4A_n260(8A)<br>DC_4A_n260(2D)<br>DC_4A_n260(2G)<br>DC_4A_n260(3G)<br>DC_4A_n260(4G)<br>DC_4A_n260(2H)<br>DC_4A_n260(2O)<br>DC_4A_n260(3O)<br>DC_4A_n260(4O)<br>DC_4A_n260(A-D)<br>DC_4A_n260(2A-D)<br>DC_4A_n260(A-O)<br>DC_4A_n260(2A-O)<br>DC_4A_n260(A-D-O)<br>DC_4A_n260(2A-D-O)<br>DC_4A_n260(A-2O)<br>DC_4A_n260(D-2O)<br>DC_4A_n260(A-D-2O)<br>DC_4A_n260(2A-D-2O)<br>DC_4A_n260(A-2D)<br>DC_4A_n260(2A-2D)<br>DC_4A_n260(A-P)<br>DC_4A_n260(2A-P)<br>DC_4A_n260(A-2P)<br>DC_4A_n260(2A-2P)<br>DC_4A_n260(A-G)<br>DC_4A_n260(2A-G)<br>DC_4A_n260(A-2G)<br>DC_4A_n260(2A-2G)<br>DC_4A_n260(G-O)<br>DC_4A_n260(2G-O)<br>DC_4A_n260(A-G-O) | DC_4A_n260A<br>DC_4A_n260G<br>DC_4A_n260H<br>DC_4A_n260O<br>DC_4A_n260P<br>DC_4A_n260Q |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| DC_4A_n260(2A-G-O)<br>DC_4A_n260(A-2G-O)<br>DC_4A_n260(2A-2G-O)<br>DC_4A_n260(A-H)<br>DC_4A_n260(A-2H)<br>DC_4A_n260(2A-H)<br>DC_4A_n260(2A-2H)<br>DC_4A_n260(2A-2O)<br>DC_4A_n260(A-3O)<br>DC_4A_n260(2A-3O)<br>DC_4A_n260(A-4O)<br>DC_4A_n260(2A-4O)<br>DC_4A_n260(3A-O)<br>DC_4A_n260(3A-2O)<br>DC_4A_n260(3A-3O)<br>DC_4A_n260(3A-G)<br>DC_4A_n260(3A-2G)<br>DC_4A_n260(4A-G)<br>DC_4A_n260(4A-2G)<br>DC_4A_n260(4A-O)<br>DC_4A_n260(4A-2O)<br>DC_4A_n260(D-2G)<br>DC_4A_n260(2D-O)<br>DC_4A_n260(G-2O)<br>DC_4A_n260(2G-2O)<br>DC_4A_n260(G-3O)<br>DC_4A_n260(2G-3O)<br>DC_4A_n260(G-4O)<br>DC_4A_n260(2G-4O)<br>DC_4A_n260(3G-O)<br>DC_4A_n260(4G-O)<br>DC_4A_n260(H-O)<br>DC_4A_n260(2H-O)<br>DC_4A_n260(A-P-Q)<br>DC_4A_n260(3A-O-P) |                                                                                        |
| DC_4A_n260A<br>DC_4A_n260G<br>DC_4A_n260H<br>DC_4A_n260O<br>DC_4A_n260P<br>DC_4A_n260Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DC_4A_n260A<br>DC_4A_n260G<br>DC_4A_n260H<br>DC_4A_n260O<br>DC_4A_n260P<br>DC_4A_n260Q |
| DC_4A_n261(2A)<br>DC_4A_n261(3A)<br>DC_4A_n261(4A)<br>DC_4A_n261(2H)<br>DC_4A_n261(2I)<br>DC_4A_n261(A-D)<br>DC_4A_n261(A-H)<br>DC_4A_n261(A-2H)<br>DC_4A_n261(A-D-H)<br>DC_4A_n261(A-G)<br>DC_4A_n261(A-G-H)<br>DC_4A_n261(A-I)<br>DC_4A_n261(A-2I)<br>DC_4A_n261(G-I)<br>DC_4A_n261(A-G-I)<br>DC_4A_n261(A-H-I)<br>DC_4A_n261(G-H)<br>DC_4A_n261(H-I)<br>DC_4A_n261(D-H)                                                                                                                                                                                                                                                                                                                                                                   | DC_4A_n261A<br>DC_4A_n261H<br>DC_4A_n261I<br>DC_4A_n261G                               |
| DC_4A_n261A<br>DC_4A_n261D<br>DC_4A_n261G<br>DC_4A_n261H<br>DC_4A_n261I<br>DC_4A_n261J<br>DC_4A_n261K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC_4A_n261A<br>DC_4A_n261D<br>DC_4A_n261G<br>DC_4A_n261H<br>DC_4A_n261I                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| DC_4A_n261L<br>DC_4A_n261M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                       |
| DC_4A_n260(A-Q)<br>DC_4A_n260(P-Q)<br>DC_4A_n260(2A-O-P)<br>DC_4A_n260(3A-P)<br>DC_4A_n260(A-O-P)                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DC_4A_n260A<br>DC_4A_n260G<br>DC_4A_n260H<br>DC_4A_n260O<br>DC_4A_n260P<br>DC_4A_n260Q                |
| DC_5A_n257A<br>DC_5A_n257D<br>DC_5A_n257E<br>DC_5A_n257F<br>DC_5A_n257G<br>DC_5A_n257H<br>DC_5A_n257I<br>DC_5A_n257J<br>DC_5A_n257K<br>DC_5A_n257L<br>DC_5A_n257M<br>DC_5B_n257A                                                                                                                                                                                                                                                                                                                                                                          | DC_5A_n257A<br>DC_5B_n257A                                                                            |
| DC_5A-5A_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_5A_n257A                                                                                           |
| DC_5A_n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DC_5A_n258A                                                                                           |
| DC_5A_n260A<br>DC_5A_n260B<br>DC_5A_n260C<br>DC_5A_n260D<br>DC_5A_n260E<br>DC_5A_n260F<br>DC_5A_n260G<br>DC_5A_n260H<br>DC_5A_n260I<br>DC_5A_n260J<br>DC_5A_n260K<br>DC_5A_n260L<br>DC_5A_n260M<br>DC_5A_n260O<br>DC_5A_n260P<br>DC_5A_n260Q<br>DC_5B_n260A                                                                                                                                                                                                                                                                                               | DC_5A_n260A<br>DC_5A_n260G<br>DC_5A_n260H<br>DC_5A_n260O<br>DC_5A_n260P<br>DC_5A_n260Q<br>DC_5B_n260A |
| DC_5A_n260(2A)<br>DC_5A_n260(3A)<br>DC_5A_n260(4A)<br>DC_5A_n260(5A)<br>DC_5A_n260(6A)<br>DC_5A_n260(7A)<br>DC_5A_n260(8A)<br>DC_5A_n260(9A)<br>DC_5A_n260(10A)<br>DC_5A_n260(A-I)<br>DC_5A_n260(A-P-Q)<br>DC_5A_n260(3A-O-P)<br>DC_5A_n260(D-G)<br>DC_5A_n260(D-H)<br>DC_5A_n260(D-I)<br>DC_5A_n260(D-O)<br>DC_5A_n260(D-P)<br>DC_5A_n260(D-Q)<br>DC_5A_n260(E-O)<br>DC_5A_n260(E-P)<br>DC_5A_n260(E-Q)<br>DC_5A_n260(G-I)<br>DC_5A_n260(2G)<br>DC_5A_n260(2H)<br>DC_5A_n260(2O)<br>DC_5A_n260(3O)<br>DC_5A_n260(4O)<br>DC_5A_n260(2P)<br>DC_5A_n260(3P) | DC_5A_n260A<br>DC_5A_n260G<br>DC_5A_n260H<br>DC_5A_n260O<br>DC_5A_n260P<br>DC_5A_n260Q                |

|                     |  |
|---------------------|--|
| DC_5A_n260(4P)      |  |
| DC_5A_n260(2A-O)    |  |
| DC_5A_n260(A-2O)    |  |
| DC_5A_n260(2A-G)    |  |
| DC_5A_n260(A-2G)    |  |
| DC_5A_n260(2A-2G)   |  |
| DC_5A_n260(2G-O)    |  |
| DC_5A_n260(2A-2G-O) |  |
| DC_5A_n260(A-2H)    |  |
| DC_5A_n260(2A-H)    |  |
| DC_5A_n260(2A-2H)   |  |
| DC_5A_n260(2A-2O)   |  |
| DC_5A_n260(2A-3O)   |  |
| DC_5A_n260(A-4O)    |  |
| DC_5A_n260(2A-4O)   |  |
| DC_5A_n260(3A-2O)   |  |
| DC_5A_n260(3A-2G)   |  |
| DC_5A_n260(4A-G)    |  |
| DC_5A_n260(4A-2G)   |  |
| DC_5A_n260(4A-O)    |  |
| DC_5A_n260(4A-2O)   |  |
| DC_5A_n260(A-O)     |  |
| DC_5A_n260(A-G)     |  |
| DC_5A_n260(G-O)     |  |
| DC_5A_n260(A-G-O)   |  |
| DC_5A_n260(2A-G-O)  |  |
| DC_5A_n260(A-2G-O)  |  |
| DC_5A_n260(A-H)     |  |
| DC_5A_n260(A-3O)    |  |
| DC_5A_n260(3A-O)    |  |
| DC_5A_n260(3A-G)    |  |
| DC_5A_n260(2D)      |  |
| DC_5A_n260(3G)      |  |
| DC_5A_n260(4G)      |  |
| DC_5A_n260(A-D)     |  |
| DC_5A_n260(2A-D)    |  |
| DC_5A_n260(A-D-O)   |  |
| DC_5A_n260(2A-D-O)  |  |
| DC_5A_n260(D-2O)    |  |
| DC_5A_n260(A-D-2O)  |  |
| DC_5A_n260(2A-D-2O) |  |
| DC_5A_n260(A-2D)    |  |
| DC_5A_n260(2A-2D)   |  |
| DC_5A_n260(A-P)     |  |
| DC_5A_n260(2A-P)    |  |
| DC_5A_n260(A-2P)    |  |
| DC_5A_n260(2A-2P)   |  |
| DC_5A_n260(3A-3O)   |  |
| DC_5A_n260(D-2G)    |  |
| DC_5A_n260(2D-O)    |  |
| DC_5A_n260(G-2O)    |  |
| DC_5A_n260(2G-2O)   |  |
| DC_5A_n260(G-3O)    |  |
| DC_5A_n260(2G-3O)   |  |
| DC_5A_n260(G-4O)    |  |
| DC_5A_n260(2G-4O)   |  |
| DC_5A_n260(3G-O)    |  |
| DC_5A_n260(4G-O)    |  |
| DC_5A_n260(H-O)     |  |
| DC_5A_n260(2H-O)    |  |
| DC_5A_n260(A-Q)     |  |
| DC_5A_n260(P-Q)     |  |
| DC_5A_n260(2A-4P)   |  |
| DC_5A_n260(2O-2P)   |  |
| DC_5A_n260(3A-P)    |  |
| DC_5A_n260(4A-4O)   |  |
| DC_5A_n260(4A-2Q)   |  |
| DC_5A_n260(6A-2O)   |  |

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| DC_5A_n260(6A-2P)<br>DC_5A_n260(6A-3O)<br>DC_5A_n260(8A-2O)<br>DC_5A_n260(2A-O-P)<br>DC_5A_n260(2A-2G-2O)<br>DC_5A_n260(2A-2O-2P)<br>DC_5A_n260(2A-2O-2Q)<br>DC_5A_n260(O-P)<br>DC_5A_n260(A-O-P)<br>DC_5A-5A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                          |
| DC_5A_n261A<br>DC_5A_n261B<br>DC_5A_n261C<br>DC_5A_n261D<br>DC_5A_n261E<br>DC_5A_n261F<br>DC_5A_n261G<br>DC_5A_n261H<br>DC_5A_n261I<br>DC_5A_n261J<br>DC_5A_n261K<br>DC_5A_n261L<br>DC_5A_n261M<br>DC_5A_n261O<br>DC_5A_n261P<br>DC_5A_n261Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DC_5A_n261A<br>DC_5A_n261G<br>DC_5A_n261H<br>DC_5A_n261I |
| DC_5A_n261(2A)<br>DC_5A_n261(2G)<br>DC_5A_n261(3A)<br>DC_5A_n261(4A)<br>DC_5A_n261(D-G)<br>DC_5A_n261(D-H)<br>DC_5A_n261(D-I)<br>DC_5A_n261(D-O)<br>DC_5A_n261(D-P)<br>DC_5A_n261(D-Q)<br>DC_5A_n261(E-O)<br>DC_5A_n261(E-P)<br>DC_5A_n261(E-Q)<br>DC_5A_n261(2H)<br>DC_5A_n261(2I)<br>DC_5A_n261(A-H)<br>DC_5A_n261(A-I)<br>DC_5A_n261(2A-H)<br>DC_5A_n261(A-K)<br>DC_5A_n261(A-D)<br>DC_5A_n261(A-D-H)<br>DC_5A_n261(A-D-2O)<br>DC_5A_n261(A-G)<br>DC_5A_n261(A-G-H)<br>DC_5A_n261(G-I)<br>DC_5A_n261(A-G-I)<br>DC_5A_n261(A-H-I)<br>DC_5A_n261(G-H)<br>DC_5A_n261(G-J)<br>DC_5A_n261(H-I)<br>DC_5A_n261(A-2D)<br>DC_5A_n261(A-2H)<br>DC_5A_n261(A-2P)<br>DC_5A_n261(A-2Q)<br>DC_5A_n261(A-2I)<br>DC_5A_n261(A-4G)<br>DC_5A_n261(A-4O)<br>DC_5A_n261(A-7O)<br>DC_5A_n261(A-2G-2O)<br>DC_5A_n261(A-3G-O)<br>DC_5A_n261(2A-G)<br>DC_5A_n261(2A-H) | DC_5A_n261A<br>DC_5A_n261G<br>DC_5A_n261H<br>DC_5A_n261I |

|                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                    |
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| DC_5A_n261(2A-I)<br>DC_5A_n261(3A-G)                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                    |
| DC_7A_n257A<br>DC_7A_n257D<br>DC_7A_n257E<br>DC_7A_n257F<br>DC_7A_n257G<br>DC_7A_n257H<br>DC_7A_n257I<br>DC_7A_n257J<br>DC_7A_n257K<br>DC_7A_n257L<br>DC_7A_n257M                                                                                                                                                                                                                                  | DC_7A_n257A                                                                                                                                                                                                                                                                                                                                                                                        |
| DC_7A-7A_n257A<br>DC_7A-7A_n257D<br>DC_7A-7A_n257E<br>DC_7A-7A_n257F<br>DC_7A-7A_n257G<br>DC_7A-7A_n257H<br>DC_7A-7A_n257I<br>DC_7A-7A_n257J<br>DC_7A-7A_n257K<br>DC_7A-7A_n257L<br>DC_7A-7A_n257M                                                                                                                                                                                                 | DC_7A_n257A                                                                                                                                                                                                                                                                                                                                                                                        |
| DC_7A_n258A<br>DC_7A_n258B<br>DC_7A_n258C<br>DC_7A_n258D<br>DC_7A_n258E<br>DC_7A_n258F<br>DC_7A_n258G<br>DC_7A_n258H<br>DC_7A_n258I<br>DC_7A_n258J<br>DC_7A_n258K<br>DC_7A_n258L<br>DC_7A_n258M<br>DC_7C_n258A<br>DC_7C_n258B<br>DC_7C_n258C<br>DC_7C_n258D<br>DC_7C_n258E<br>DC_7C_n258F<br>DC_7C_n258G<br>DC_7C_n258H<br>DC_7C_n258I<br>DC_7C_n258J<br>DC_7C_n258K<br>DC_7C_n258L<br>DC_7C_n258M | DC_7A_n258A<br>DC_7A_n258B<br>DC_7A_n258C<br>DC_7A_n258D<br>DC_7A_n258E<br>DC_7A_n258F<br>DC_7A_n258G<br>DC_7A_n258H<br>DC_7A_n258I<br>DC_7A_n258J<br>DC_7A_n258K<br>DC_7A_n258L<br>DC_7A_n258M<br>DC_7C_n258A<br>DC_7C_n258B<br>DC_7C_n258C<br>DC_7C_n258D<br>DC_7C_n258E<br>DC_7C_n258F<br>DC_7C_n258G<br>DC_7C_n258H<br>DC_7C_n258I<br>DC_7C_n258J<br>DC_7C_n258K<br>DC_7C_n258L<br>DC_7C_n258M |
| DC_8A_n257A<br>DC_8A_n257D<br>DC_8A_n257E<br>DC_8A_n257F<br>DC_8A_n257G<br>DC_8A_n257H<br>DC_8A_n257I<br>DC_8A_n257J<br>DC_8A_n257K<br>DC_8A_n257L<br>DC_8A_n257M                                                                                                                                                                                                                                  | DC_8A_n257A                                                                                                                                                                                                                                                                                                                                                                                        |
| DC_8A_n258A                                                                                                                                                                                                                                                                                                                                                                                        | DC_8A_n258A                                                                                                                                                                                                                                                                                                                                                                                        |
| DC_11A_n257A<br>DC_11A_n257D<br>DC_11A_n257G<br>DC_11A_n257H<br>DC_11A_n257I                                                                                                                                                                                                                                                                                                                       | DC_11A_n257A                                                                                                                                                                                                                                                                                                                                                                                       |
| DC_12A_n257A                                                                                                                                                                                                                                                                                                                                                                                       | DC_12A_n257A                                                                                                                                                                                                                                                                                                                                                                                       |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| DC_12A_n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_12A_n258A                                                                                 |
| DC_12A_n260A<br>DC_12A_n260G<br>DC_12A_n260H<br>DC_12A_n260I<br>DC_12A_n260J<br>DC_12A_n260K<br>DC_12A_n260L<br>DC_12A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_12A_n260A                                                                                 |
| DC_12A_n260(A-I)<br>DC_12A_n260(G-I)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_12A_n260A                                                                                 |
| DC_12A_n261A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_12A_n261A                                                                                 |
| DC_13A_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_13A_n257A                                                                                 |
| DC_13A_n260A<br>DC_13A_n260G<br>DC_13A_n260H<br>DC_13A_n260I<br>DC_13A_n260J<br>DC_13A_n260K<br>DC_13A_n260L<br>DC_13A_n260M<br>DC_13A_n260O<br>DC_13A_n260P<br>DC_13A_n260Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_13A_n260A<br>DC_13A_n260G<br>DC_13A_n260H<br>DC_13A_n260O<br>DC_13A_n260P<br>DC_13A_n260Q |
| DC_13A_n260(2A)<br>DC_13A_n260(3A)<br>DC_13A_n260(4A)<br>DC_13A_n260(5A)<br>DC_13A_n260(6A)<br>DC_13A_n260(7A)<br>DC_13A_n260(8A)<br>DC_13A_n260(2D)<br>DC_13A_n260(2G)<br>DC_13A_n260(3G)<br>DC_13A_n260(4G)<br>DC_13A_n260(2H)<br>DC_13A_n260(2O)<br>DC_13A_n260(3O)<br>DC_13A_n260(4O)<br>DC_13A_n260(A-G)<br>DC_13A_n260(A-2G)<br>DC_13A_n260(A-P)<br>DC_13A_n260(A-Q)<br>DC_13A_n260(2A-G)<br>DC_13A_n260(2A-H)<br>DC_13A_n260(2A-2G)<br>DC_13A_n260(2A-2H)<br>DC_13A_n260(3A-G)<br>DC_13A_n260(3A-O)<br>DC_13A_n260(3A-P)<br>DC_13A_n260(3A-2O)<br>DC_13A_n260(4A-O)<br>DC_13A_n260(4A-2O)<br>DC_13A_n260(P-Q)<br>DC_13A_n260(A-P-Q)<br>DC_13A_n260(2A-O-P)<br>DC_13A_n260(3A-O-P)<br>DC_13A_n260(A-H)<br>DC_13A_n260(A-2H)<br>DC_13A_n260(2A-O)<br>DC_13A_n260(A-O)<br>DC_13A_n260(2A-P)<br>DC_13A_n260(A-O-P)<br>DC_13A_n260(O-P)<br>DC_13A_n260(2A-2O)<br>DC_13A_n260(A-2O)<br>DC_13A_n260(G-H) | DC_13A_n260A<br>DC_13A_n260G<br>DC_13A_n260H<br>DC_13A_n260O<br>DC_13A_n260P<br>DC_13A_n260Q |
| DC_13A_n261A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_13A_n261A                                                                                 |

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| DC_13A_n261G<br>DC_13A_n261H<br>DC_13A_n261J<br>DC_13A_n261K<br>DC_13A_n261I<br>DC_13A_n261L<br>DC_13A_n261M                                                                                                                                                                                                                                                                                                                                            | DC_13A_n261G<br>DC_13A_n261H<br>DC_13A_n261I                                                                                 |
| DC_13A_n261(2A)<br>DC_13A_n261(2G)<br>DC_13A_n261(3A)<br>DC_13A_n261(4A)<br>DC_13A_n261(2H)<br>DC_13A_n261(2I)<br>DC_13A_n261(A-G)<br>DC_13A_n261(A-K)<br>DC_13A_n261(A-2G)<br>DC_13A_n261(A-H)<br>DC_13A_n261(A-I)<br>DC_13A_n261(A-J)<br>DC_13A_n261(2A-G)<br>DC_13A_n261(2A-H)<br>DC_13A_n261(2A-I)<br>DC_13A_n261(3A-G)<br>DC_13A_n261(G-H)<br>DC_13A_n261(G-I)<br>DC_13A_n261(G-J)<br>DC_13A_n261(H-I)<br>DC_13A_n261(A-G-H)<br>DC_13A_n261(A-G-I) | DC_13A_n261A<br>DC_13A_n261G<br>DC_13A_n261H<br>DC_13A_n261I                                                                 |
| DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M                                                                                                                                                                                                                                                                                                                            | DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M |
| DC_18A_n257A<br>DC_18A_n257D<br>DC_18A_n257E<br>DC_18A_n257F<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_18A_n257J<br>DC_18A_n257K<br>DC_18A_n257L<br>DC_18A_n257M                                                                                                                                                                                                                                                                            | DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                 |
| DC_19A_n257A<br>DC_19A_n257D<br>DC_19A_n257E<br>DC_19A_n257F<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_19A_n257J<br>DC_19A_n257K<br>DC_19A_n257L<br>DC_19A_n257M                                                                                                                                                                                                                                                                            | DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_19A_n257J<br>DC_19A_n257K<br>DC_19A_n257L<br>DC_19A_n257M |
| DC_20A_n258A                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_20A_n258A                                                                                                                 |
| DC_21A_n257A<br>DC_21A_n257D<br>DC_21A_n257E<br>DC_21A_n257F<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J                                                                                                                                                                                                                                                                                                                            | DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J<br>DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M |

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| DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M                                                                                                                                                                                                                                                 |                                                                                                                                                              |
| DC_26A_n257A                                                                                                                                                                                                                                                                                 | DC_26A_n257A                                                                                                                                                 |
| DC_28A_n257A<br>DC_28A_n257D<br>DC_28A_n257E<br>DC_28A_n257F<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_28A_n257J<br>DC_28A_n257K<br>DC_28A_n257L<br>DC_28A_n257M                                                                                                                 | DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_28A_n257J<br>DC_28A_n257K<br>DC_28A_n257L<br>DC_28A_n257M                                 |
| DC_28A_n258A<br>DC_28A_n258B<br>DC_28A_n258C<br>DC_28A_n258D<br>DC_28A_n258E<br>DC_28A_n258F<br>DC_28A_n258G<br>DC_28A_n258H<br>DC_28A_n258I<br>DC_28A_n258J<br>DC_28A_n258K<br>DC_28A_n258L<br>DC_28A_n258M                                                                                 | DC_28A_n258A                                                                                                                                                 |
| DC_30A_n260A<br>DC_30A_n260G<br>DC_30A_n260H<br>DC_30A_n260I<br>DC_30A_n260J<br>DC_30A_n260K<br>DC_30A_n260L<br>DC_30A_n260M                                                                                                                                                                 | DC_30A_n260A                                                                                                                                                 |
| DC_30A_n260(A-I)<br>DC_30A_n260(G-I)                                                                                                                                                                                                                                                         | DC_30A_n260A                                                                                                                                                 |
| DC_39A_n257A<br>DC_39A_n257D<br>DC_39A_n257E<br>DC_39A_n257F<br>DC_39A_n257G<br>DC_39A_n257H<br>DC_39A_n257I<br>DC_39A_n257J<br>DC_39A_n257K<br>DC_39A_n257L<br>DC_39A_n257M                                                                                                                 | DC_39A_n257A                                                                                                                                                 |
| DC_39A_n258A                                                                                                                                                                                                                                                                                 | DC_39A_n258A                                                                                                                                                 |
| DC_41A_n257A<br>DC_41A_n257D<br>DC_41A_n257E<br>DC_41A_n257F<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41A_n257J<br>DC_41A_n257K<br>DC_41A_n257L<br>DC_41A_n257M<br>DC_41C_n257A<br>DC_41C_n257D<br>DC_41C_n257E<br>DC_41C_n257F<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I | DC_41A_n257A<br>DC_41A_n257D<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257D<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |

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|------------------|--------------|
| DC_41C_n257J     |              |
| DC_41C_n257K     |              |
| DC_41C_n257L     |              |
| DC_41C_n257M     |              |
| DC_41A_n258A     | DC_41A_n258A |
| DC_42A_n257A     | DC_42A_n257A |
| DC_42A_n257D     | DC_42A_n257D |
| DC_42A_n257E     | DC_42A_n257E |
| DC_42A_n257F     | DC_42A_n257F |
| DC_42A_n257G     | DC_42A_n257G |
| DC_42A_n257H     | DC_42A_n257H |
| DC_42A_n257I     | DC_42A_n257I |
| DC_42A_n257J     | DC_42A_n257J |
| DC_42A_n257K     | DC_42A_n257K |
| DC_42A_n257L     | DC_42A_n257L |
| DC_42A_n257M     | DC_42A_n257M |
| DC_42C_n257A     | DC_42C_n257A |
| DC_42C_n257D     | DC_42C_n257D |
| DC_42C_n257E     | DC_42C_n257E |
| DC_42C_n257F     | DC_42C_n257F |
| DC_42C_n257G     | DC_42D_n257A |
| DC_42C_n257H     | DC_42D_n257D |
| DC_42C_n257I     | DC_42D_n257E |
| DC_42C_n257J     | DC_42D_n257F |
| DC_42C_n257K     | DC_42E_n257A |
| DC_42C_n257L     | DC_42E_n257D |
| DC_42C_n257M     | DC_42E_n257E |
| DC_42D_n257A     | DC_42E_n257F |
| DC_42D_n257D     |              |
| DC_42D_n257E     |              |
| DC_42D_n257F     |              |
| DC_42D_n257G     |              |
| DC_42D_n257H     |              |
| DC_42D_n257I     |              |
| DC_42D_n257J     |              |
| DC_42D_n257K     |              |
| DC_42D_n257L     |              |
| DC_42D_n257M     |              |
| DC_42E_n257A     |              |
| DC_42E_n257D     |              |
| DC_42E_n257E     |              |
| DC_42E_n257F     |              |
| DC_42E_n257G     |              |
| DC_42E_n257H     |              |
| DC_42E_n257I     |              |
| DC_42E_n257J     |              |
| DC_42E_n257K     |              |
| DC_42E_n257L     |              |
| DC_42E_n257M     |              |
| DC_48A_n257A     | DC_48A_n257A |
| DC_48C_n257A     | DC_48C_n257A |
| DC_48A-48A_n257A | DC_48A_n257A |
| DC_48A_n260A     | DC_48A_n260A |
| DC_48A_n260G     | DC_48C_n260A |
| DC_48A_n260H     |              |
| DC_48A_n260I     |              |
| DC_48A_n260J     |              |
| DC_48A_n260K     |              |
| DC_48A_n260L     |              |
| DC_48A_n260M     |              |
| DC_48C_n260A     |              |
| DC_48D_n260A     |              |
| DC_48A_n260(2A)  |              |
| DC_48C_n260(2A)  |              |
| DC_48D_n260(2A)  |              |
| DC_48A_n260(3A)  |              |
| DC_48C_n260(3A)  |              |
| DC_48D_n260(3A)  |              |

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| DC_48A_n260(4A)<br>DC_48C_n260(4A)<br>DC_48D_n260(4A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                              |
| DC_48A-48A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DC_48A_n260A                                                                                 |
| DC_48A_n261A<br>DC_48A_n261G<br>DC_48A_n261H<br>DC_48A_n261I<br>DC_48A_n261J<br>DC_48A_n261K<br>DC_48A_n261L<br>DC_48A_n261M<br>DC_48C_n261A<br>DC_48D_n261A<br>DC_48A_n261(A-G)<br>DC_48A_n261(A-H)<br>DC_48A_n261(A-I)<br>DC_48A_n261(A-J)<br>DC_48A_n261(A-K)<br>DC_48A_n261(G-H)<br>DC_48A_n261(G-I)<br>DC_48A_n261(G-J)<br>DC_48A_n261(H-I)<br>DC_48A_n261(2A)<br>DC_48C_n261(2A)<br>DC_48D_n261(2A)<br>DC_48A_n261(3A)<br>DC_48A_n261(2A-G)<br>DC_48A_n261(2A-H)<br>DC_48A_n261(2A-I)<br>DC_48A_n261(2G)<br>DC_48A_n261(2H)<br>DC_48A_n261(4A)<br>DC_48A_n261(3A-G) | DC_48A_n261A<br>DC_48A_n261G<br>DC_48A_n261H<br>DC_48A_n261I<br>DC_48C_n261A                 |
| DC_66A_n257A<br>DC_66A_n257G<br>DC_66A_n257H<br>DC_66A_n257I<br>DC_66A_n257J<br>DC_66A_n257K<br>DC_66A_n257L<br>DC_66A_n257M<br>DC_66C_n257A                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_66A_n257A                                                                                 |
| DC_66A_n257(2A)<br>DC_66A-66A_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DC_66A_n257A                                                                                 |
| DC_66A_n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_66A_n258A                                                                                 |
| DC_66A_n258(2A)<br>DC_66A_n258(3A)<br>DC_66A_n258(4A)<br>DC_66A_n258(5A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_66A_n258A                                                                                 |
| DC_66A_n260A<br>DC_66A_n260D<br>DC_66A_n260E<br>DC_66A_n260F<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M<br>DC_66A_n260O<br>DC_66A_n260P<br>DC_66A_n260Q                                                                                                                                                                                                                                                                                                                                              | DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260O<br>DC_66A_n260P<br>DC_66A_n260Q |
| DC_66A_n260(2A)<br>DC_66A_n260(3A)<br>DC_66A_n260(4A)<br>DC_66A_n260(5A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I                                 |

|                      |              |
|----------------------|--------------|
| DC_66A_n260(6A)      | DC_66A_n260O |
| DC_66A_n260(7A)      | DC_66A_n260P |
| DC_66A_n260(8A)      | DC_66A_n260Q |
| DC_66A_n260(9A)      |              |
| DC_66A_n260(10A)     |              |
| DC_66A_n260(A-I)     |              |
| DC_66A_n260(D-G)     |              |
| DC_66A_n260(D-H)     |              |
| DC_66A_n260(D-I)     |              |
| DC_66A_n260(D-O)     |              |
| DC_66A_n260(D-P)     |              |
| DC_66A_n260(D-Q)     |              |
| DC_66A_n260(E-O)     |              |
| DC_66A_n260(E-P)     |              |
| DC_66A_n260(E-Q)     |              |
| DC_66A_n260(G-I)     |              |
| DC_66A_n260(2G)      |              |
| DC_66A_n260(2H)      |              |
| DC_66A_n260(2O)      |              |
| DC_66A_n260(3O)      |              |
| DC_66A_n260(4O)      |              |
| DC_66A_n260(2P)      |              |
| DC_66A_n260(3P)      |              |
| DC_66A_n260(4P)      |              |
| DC_66A_n260(2A-O)    |              |
| DC_66A_n260(A-2O)    |              |
| DC_66A_n260(2A-G)    |              |
| DC_66A_n260(A-2G)    |              |
| DC_66A_n260(2A-2G)   |              |
| DC_66A_n260(2G-O)    |              |
| DC_66A_n260(2A-2G-O) |              |
| DC_66A_n260(A-2H)    |              |
| DC_66A_n260(2A-H)    |              |
| DC_66A_n260(2A-2H)   |              |
| DC_66A_n260(2A-2O)   |              |
| DC_66A_n260(2A-3O)   |              |
| DC_66A_n260(A-4O)    |              |
| DC_66A_n260(2A-4O)   |              |
| DC_66A_n260(3A-2O)   |              |
| DC_66A_n260(3A-2G)   |              |
| DC_66A_n260(4A-G)    |              |
| DC_66A_n260(4A-2G)   |              |
| DC_66A_n260(4A-O)    |              |
| DC_66A_n260(4A-2O)   |              |
| DC_66A_n260(A-O)     |              |
| DC_66A_n260(A-G)     |              |
| DC_66A_n260(G-O)     |              |
| DC_66A_n260(A-G-O)   |              |
| DC_66A_n260(2A-G-O)  |              |
| DC_66A_n260(A-2G-O)  |              |
| DC_66A_n260(A-H)     |              |
| DC_66A_n260(A-3O)    |              |
| DC_66A_n260(3A-O)    |              |
| DC_66A_n260(3A-O-P)  |              |
| DC_66A_n260(3A-P)    |              |
| DC_66A_n260(3A-G)    |              |
| DC_66A_n260(2D)      |              |
| DC_66A_n260(3G)      |              |
| DC_66A_n260(4G)      |              |
| DC_66A_n260(A-D)     |              |
| DC_66A_n260(2A-D)    |              |
| DC_66A_n260(A-D-O)   |              |
| DC_66A_n260(2A-D-O)  |              |
| DC_66A_n260(D-2O)    |              |
| DC_66A_n260(A-D-2O)  |              |
| DC_66A_n260(2A-D-2O) |              |
| DC_66A_n260(2A-O-P)  |              |
| DC_66A_n260(A-2D)    |              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| DC_66A_n260(2A-2D)<br>DC_66A_n260(A-P)<br>DC_66A_n260(A-P-Q)<br>DC_66A_n260(2A-P)<br>DC_66A_n260(A-2P)<br>DC_66A_n260(2A-2P)<br>DC_66A_n260(3A-3O)<br>DC_66A_n260(D-2G)<br>DC_66A_n260(2D-O)<br>DC_66A_n260(G-H)<br>DC_66A_n260(G-2O)<br>DC_66A_n260(2G-2O)<br>DC_66A_n260(G-3O)<br>DC_66A_n260(2G-3O)<br>DC_66A_n260(G-4O)<br>DC_66A_n260(2G-4O)<br>DC_66A_n260(3G-O)<br>DC_66A_n260(4G-O)<br>DC_66A_n260(H-O)<br>DC_66A_n260(2H-O)<br>DC_66A_n260(2A-2G-2O)<br>DC_66A_n260(6A-2O)<br>DC_66A_n260(8A-2O)<br>DC_66A_n260(2A-2O-2P)<br>DC_66A_n260(6A-3O)<br>DC_66A_n260(4A-4O)<br>DC_66A_n260(6A-2P)<br>DC_66A_n260(2O-2P)<br>DC_66A_n260(2A-4P)<br>DC_66A_n260(2A-2Q-2O)<br>DC_66A_n260(4A-2Q)<br>DC_66A_n260(2A-2O-2Q)<br>DC_66A_n260(A-Q)<br>DC_66A_n260(P-Q)<br>DC_66A-66A_n260A<br>DC_66A-66A_n260G<br>DC_66A-66A_n260H<br>DC_66A-66A_n260I<br>DC_66A-66A_n260J<br>DC_66A-66A_n260K<br>DC_66A-66A_n260L<br>DC_66A-66A_n260M<br>DC_66A_n260(A-O-P)<br>DC_66A_n260(O-P)<br>DC_66A-66A_n260(2A)<br>DC_66A-66A_n260(2G)<br>DC_66A-66A_n260(2H)<br>DC_66A-66A_n260(3A)<br>DC_66A-66A_n260(4A)<br>DC_66A-66A_n260(5A)<br>DC_66A-66A_n260(6A)<br>DC_66A-66A_n260(A-G)<br>DC_66A-66A_n260(A-H)<br>DC_66A-66A_n260(A-2G)<br>DC_66A-66A_n260(G-H)<br>DC_66A-66A_n260(2A-G)<br>DC_66A-66A_n260(2A-2G)<br>DC_66A-66A_n260(3A-G) |                                                              |
| DC_66A_n261A<br>DC_66A_n261D<br>DC_66A_n261E<br>DC_66A_n261F<br>DC_66A_n261G<br>DC_66A_n261H<br>DC_66A_n261I<br>DC_66A_n261J<br>DC_66A_n261K<br>DC_66A_n261L                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_66A_n261A<br>DC_66A_n261G<br>DC_66A_n261H<br>DC_66A_n261I |

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| DC_66A_n261M<br>DC_66A_n261O<br>DC_66A_n261P<br>DC_66A_n261Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                              |
| DC_66A_n261(2A)<br>DC_66A_n261(3A)<br>DC_66A_n261(4A)<br>DC_66A_n261(2G)<br>DC_66A_n261(D-G)<br>DC_66A_n261(D-H)<br>DC_66A_n261(D-I)<br>DC_66A_n261(D-O)<br>DC_66A_n261(D-P)<br>DC_66A_n261(D-Q)<br>DC_66A_n261(E-O)<br>DC_66A_n261(E-P)<br>DC_66A_n261(E-Q)<br>DC_66A_n261(2H)<br>DC_66A_n261(2I)<br>DC_66A_n261(A-H)<br>DC_66A_n261(A-I)<br>DC_66A_n261(A-J)<br>DC_66A_n261(A-K)<br>DC_66A_n261(A-D)<br>DC_66A_n261(A-D-H)<br>DC_66A_n261(A-G)<br>DC_66A_n261(A-G-H)<br>DC_66A_n261(G-I)<br>DC_66A_n261(G-J)<br>DC_66A_n261(A-G-I)<br>DC_66A_n261(A-H-I)<br>DC_66A_n261(G-H)<br>DC_66A_n261(H-I)<br>DC_66A_n261(A-D-2O)<br>DC_66A_n261(A-2D)<br>DC_66A_n261(A-2G)<br>DC_66A_n261(A-2G-2O)<br>DC_66A_n261(A-3G-O)<br>DC_66A_n261(A-4G)<br>DC_66A_n261(A-2H)<br>DC_66A_n261(A-2I)<br>DC_66A_n261(A-4O)<br>DC_66A_n261(A-7O)<br>DC_66A_n261(A-2P)<br>DC_66A_n261(A-2Q)<br>DC_66A_n261(2A-G)<br>DC_66A_n261(2A-H)<br>DC_66A_n261(2A-I)<br>DC_66A_n261(3A-G) | DC_66A_n261A<br>DC_66A_n261G<br>DC_66A_n261H<br>DC_66A_n261I |
| DC_66A-66A_n261A<br>DC_66A-66A_n261G<br>DC_66A-66A_n261H<br>DC_66A-66A_n261I<br>DC_66A-66A_n261J<br>DC_66A-66A_n261K<br>DC_66A-66A_n261L<br>DC_66A-66A_n261M<br>DC_66A-66A_n261(2A)<br>DC_66A-66A_n261(2G)<br>DC_66A-66A_n261(3A)<br>DC_66A-66A_n261(4A)<br>DC_66A-66A_n261(A-G)<br>DC_66A-66A_n261(A-G-H)<br>DC_66A-66A_n261(A-G-I)<br>DC_66A-66A_n261(A-2G)<br>DC_66A-66A_n261(A-H)<br>DC_66A-66A_n261(A-I)<br>DC_66A-66A_n261(A-J)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_66A_n261A<br>DC_66A_n261G<br>DC_66A_n261H<br>DC_66A_n261I |

|                                                                                                                                      |              |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------|
| DC_66A-66A_n261(A-K)                                                                                                                 |              |
| DC_66A-66A_n261(G-H)                                                                                                                 |              |
| DC_66A-66A_n261(G-I)                                                                                                                 |              |
| DC_66A-66A_n261(G-J)                                                                                                                 |              |
| DC_66A-66A_n261(H-I)                                                                                                                 |              |
| DC_66A-66A_n261(2H)                                                                                                                  |              |
| DC_66A-66A_n261(2A-G)                                                                                                                |              |
| DC_66A-66A_n261(2A-H)                                                                                                                |              |
| DC_66A-66A_n261(2A-I)                                                                                                                |              |
| DC_66A-66A_n261(3A-G)                                                                                                                |              |
| DC_71A_n257A                                                                                                                         | DC_71A_n257A |
| DC_71A_n258A                                                                                                                         | DC_71A_n258A |
| DC_71A_n260A                                                                                                                         | DC_71A_n260A |
| DC_71A_n261A                                                                                                                         | DC_71A_n261A |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.                       |              |
| NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability for all of the above combinations |              |

### 5.5B.5.2 Inter-band EN-DC configurations including FR2 (three bands)

**Table 5.5B.5.2-1: Inter-band EN-DC configurations including FR2 (three bands)**

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A_n257A <sup>2</sup><br>DC_1A-3A_n257D <sup>2</sup><br>DC_1A-3A_n257E <sup>2</sup><br>DC_1A-3A_n257F <sup>2</sup><br>DC_1A-3A_n257G<br>DC_1A-3A_n257H<br>DC_1A-3A_n257I<br>DC_1A-3A_n257J<br>DC_1A-3A_n257K<br>DC_1A-3A_n257L<br>DC_1A-3A_n257M<br>DC_1A-3C_n257A<br>DC_1A-3C_n257D<br>DC_1A-3C_n257E<br>DC_1A-3C_n257F<br>DC_1A-3C_n257G<br>DC_1A-3C_n257H<br>DC_1A-3C_n257I<br>DC_1A-3C_n257J<br>DC_1A-3C_n257K<br>DC_1A-3C_n257L<br>DC_1A-3C_n257M | DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M |
| DC_1A-5A_n257A <sup>2</sup><br>DC_1A-5A_n257D<br>DC_1A-5A_n257E<br>DC_1A-5A_n257F<br>DC_1A-5A_n257G<br>DC_1A-5A_n257H<br>DC_1A-5A_n257I<br>DC_1A-5A_n257J<br>DC_1A-5A_n257K<br>DC_1A-5A_n257L<br>DC_1A-5A_n257M                                                                                                                                                                                                                                              | DC_1A_n257A<br>DC_5A_n257A                                                                                                                                                                                     |
| DC_1A-7A_n257A <sup>2</sup><br>DC_1A-7A_n257D<br>DC_1A-7A_n257E<br>DC_1A-7A_n257F<br>DC_1A-7A_n257G<br>DC_1A-7A_n257H<br>DC_1A-7A_n257I                                                                                                                                                                                                                                                                                                                      | DC_1A_n257A<br>DC_7A_n257A                                                                                                                                                                                     |

| EN-DC configuration                                                                                                                                                                                                                                               | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-7A_n257J<br>DC_1A-7A_n257K<br>DC_1A-7A_n257L<br>DC_1A-7A_n257M                                                                                                                                                                                              |                                                                                                                                                                                                                     |
| DC_1A-7A-7A_n257A <sup>2</sup><br>DC_1A-7A-7A_n257D<br>DC_1A-7A-7A_n257E<br>DC_1A-7A-7A_n257F<br>DC_1A-7A-7A_n257G<br>DC_1A-7A-7A_n257H<br>DC_1A-7A-7A_n257I<br>DC_1A-7A-7A_n257J<br>DC_1A-7A-7A_n257K<br>DC_1A-7A-7A_n257L<br>DC_1A-7A-7A_n257M                  | DC_1A_n257A<br>DC_7A_n257A<br>DC_7A-7A_n257A                                                                                                                                                                        |
| DC_1A-8A_n257A <sup>2</sup><br>DC_1A-8A_n257D<br>DC_1A-8A_n257E<br>DC_1A-8A_n257F<br>DC_1A-8A_n257G<br>DC_1A-8A_n257H<br>DC_1A-8A_n257I<br>DC_1A-8A_n257J<br>DC_1A-8A_n257K<br>DC_1A-8A_n257L<br>DC_1A-8A_n257M                                                   | DC_1A_n257A<br>DC_8A_n257A                                                                                                                                                                                          |
| DC_1A-11A_n257A<br>DC_1A-11A_n257D<br>DC_1A-11A_n257G<br>DC_1A-11A_n257H<br>DC_1A-11A_n257I                                                                                                                                                                       | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_11A_n257A<br>DC_11A_n257G<br>DC_11A_n257H<br>DC_11A_n257I                                                                                            |
| DC_1A-18A_n257A <sup>2</sup><br>DC_1A-18A_n257D<br>DC_1A-18A_n257E<br>DC_1A-18A_n257F<br>DC_1A-18A_n257G<br>DC_1A-18A_n257H<br>DC_1A-18A_n257I<br>DC_1A-18A_n257J<br>DC_1A-18A_n257K<br>DC_1A-18A_n257L<br>DC_1A-18A_n257M                                        | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                                            |
| DC_1A-19A_n257A <sup>2</sup><br>DC_1A-19A_n257D <sup>2</sup><br>DC_1A-19A_n257E <sup>2</sup><br>DC_1A-19A_n257F <sup>2</sup><br>DC_1A-19A_n257G<br>DC_1A-19A_n257H<br>DC_1A-19A_n257I<br>DC_1A-19A_n257J<br>DC_1A-19A_n257K<br>DC_1A-19A_n257L<br>DC_1A-19A_n257M | DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M<br>DC_19A_n257A<br>DC_19A_n257D<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I |
| DC_1A-21A_n257A <sup>2</sup><br>DC_1A-21A_n257D <sup>2</sup><br>DC_1A-21A_n257E <sup>2</sup><br>DC_1A-21A_n257F <sup>2</sup><br>DC_1A-21A_n257G<br>DC_1A-21A_n257H                                                                                                | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K                                                                                                                              |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-21A_n257I<br>DC_1A-21A_n257J<br>DC_1A-21A_n257K<br>DC_1A-21A_n257L<br>DC_1A-21A_n257M                                                                                                                                                                                                                                                                                                                                                                          | DC_1A_n257L<br>DC_1A_n257M<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J<br>DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M                                                                                                                                         |
| DC_1A-28A_n257A <sup>2</sup><br>DC_1A-28A_n257D <sup>2</sup><br>DC_1A-28A_n257E <sup>2</sup><br>DC_1A-28A_n257F <sup>2</sup><br>DC_1A-28A_n257G <sup>2</sup><br>DC_1A-28A_n257H <sup>2</sup><br>DC_1A-28A_n257I <sup>2</sup>                                                                                                                                                                                                                                         | DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_28A_n257A<br>DC_28A_n257D<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                                                                            |
| DC_1A-41A_n257A<br>DC_1A-41A_n257D<br>DC_1A-41A_n257E<br>DC_1A-41A_n257F<br>DC_1A-41A_n257G<br>DC_1A-41A_n257H<br>DC_1A-41A_n257I<br>DC_1A-41A_n257J<br>DC_1A-41A_n257K<br>DC_1A-41A_n257L<br>DC_1A-41A_n257M<br>DC_1A-41C_n257A<br>DC_1A-41C_n257D<br>DC_1A-41C_n257E<br>DC_1A-41C_n257F<br>DC_1A-41C_n257G<br>DC_1A-41C_n257H<br>DC_1A-41C_n257I<br>DC_1A-41C_n257J<br>DC_1A-41C_n257K<br>DC_1A-41C_n257L<br>DC_1A-41C_n257M                                       | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I                                                                                                           |
| DC_1A-42A_n257A<br>DC_1A-42A_n257D<br>DC_1A-42A_n257E<br>DC_1A-42A_n257F<br>DC_1A-42A_n257G<br>DC_1A-42A_n257H<br>DC_1A-42A_n257I<br>DC_1A-42A_n257J<br>DC_1A-42A_n257K<br>DC_1A-42A_n257L<br>DC_1A-42A_n257M<br>DC_1A-42C_n257A<br>DC_1A-42C_n257D<br>DC_1A-42C_n257E<br>DC_1A-42C_n257F<br>DC_1A-42C_n257G<br>DC_1A-42C_n257H<br>DC_1A-42C_n257I<br>DC_1A-42C_n257J<br>DC_1A-42C_n257K<br>DC_1A-42C_n257L<br>DC_1A-42C_n257M<br>DC_1A-42D_n257A<br>DC_1A-42D_n257D | DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                                                  |
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| DC_1A-42D_n257E<br>DC_1A-42D_n257F<br>DC_1A-42D_n257G<br>DC_1A-42D_n257H<br>DC_1A-42D_n257I<br>DC_1A-42D_n257J<br>DC_1A-42D_n257K<br>DC_1A-42D_n257L<br>DC_1A-42D_n257M<br>DC_1A-42E_n257A<br>DC_1A-42E_n257D<br>DC_1A-42E_n257E<br>DC_1A-42E_n257F<br>DC_1A-42E_n257G<br>DC_1A-42E_n257H<br>DC_1A-42E_n257I<br>DC_1A-42E_n257J<br>DC_1A-42E_n257K<br>DC_1A-42E_n257L<br>DC_1A-42E_n257M |                                                                                                                      |
| DC_2A-5A_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                              | DC_2A_n257A<br>DC_5A_n257A                                                                                           |
| DC_2A-5A_n260A<br>DC_2A-5A_n260G<br>DC_2A-5A_n260H<br>DC_2A-5A_n260I<br>DC_2A-5A_n260J<br>DC_2A-5A_n260K<br>DC_2A-5A_n260L<br>DC_2A-5A_n260M<br>DC_2A-2A-5A_n260A<br>DC_2A-2A-5A_n260G<br>DC_2A-2A-5A_n260H<br>DC_2A-2A-5A_n260I<br>DC_2A-2A-5A_n260J<br>DC_2A-2A-5A_n260K<br>DC_2A-2A-5A_n260L<br>DC_2A-2A-5A_n260M                                                                     | DC_2A_n260A<br>DC_5A_n260A<br>DC_2A_n260G<br>DC_5A_n260G<br>DC_2A_n260H<br>DC_5A_n260H<br>DC_2A_n260I<br>DC_5A_n260I |
| DC_2A-5A_n261A<br>DC_2A-5A_n261G<br>DC_2A-5A_n261H<br>DC_2A-5A_n261I<br>DC_2A-5A_n261J<br>DC_2A-5A_n261K<br>DC_2A-5A_n261L<br>DC_2A-5A_n261M                                                                                                                                                                                                                                             | DC_2A_n261A<br>DC_5A_n261A<br>DC_2A_n261G<br>DC_5A_n261G<br>DC_2A_n261H<br>DC_5A_n261H<br>DC_2A_n261I<br>DC_5A_n261I |
| DC_2A-5A_n261(A-G)<br>DC_2A-5A_n261(A-H)<br>DC_2A-5A_n261(A-J)<br>DC_2A-5A_n261(A-K)<br>DC_2A-5A_n261(2A-G)<br>DC_2A-5A_n261(2A-H)<br>DC_2A-5A_n261(2A-I)<br>DC_2A-5A_n261(3A-G)<br>DC_2A-5A_n261(G-H)<br>DC_2A-5A_n261(G-I)<br>DC_2A-5A_n261(G-J)<br>DC_2A-5A_n261(2G)<br>DC_2A-5A_n261(2H)<br>DC_2A-5A_n261(H-I)                                                                       | DC_2A_n261A<br>DC_5A_n261A<br>DC_2A_n261G<br>DC_5A_n261G<br>DC_2A_n261H<br>DC_5A_n261H<br>DC_2A_n261I<br>DC_5A_n261I |
| DC_2A-12A_n260A<br>DC_2A-12A_n260G<br>DC_2A-12A_n260H<br>DC_2A-12A_n260I<br>DC_2A-12A_n260J                                                                                                                                                                                                                                                                                              | DC_2A_n260A<br>DC_12A_n260A                                                                                          |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Uplink EN-DC configuration (NOTE 1)                                                                                      |
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| DC_2A-12A_n260K<br>DC_2A-12A_n260L<br>DC_2A-12A_n260M<br>DC_2A-2A-12A_n260A<br>DC_2A-2A-12A_n260G<br>DC_2A-2A-12A_n260H<br>DC_2A-2A-12A_n260I<br>DC_2A-2A-12A_n260J<br>DC_2A-2A-12A_n260K<br>DC_2A-2A-12A_n260L<br>DC_2A-2A-12A_n260M                                                                                                                                                                                                                                                               |                                                                                                                          |
| DC_2A-13A_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC_2A_n257A<br>DC_13A_n257A                                                                                              |
| DC_2A-13A_n260A <sup>2</sup><br>DC_2A-13A_n260G<br>DC_2A-13A_n260H<br>DC_2A-13A_n260I<br>DC_2A-13A_n260J<br>DC_2A-13A_n260K<br>DC_2A-13A_n260L<br>DC_2A-13A_n260M                                                                                                                                                                                                                                                                                                                                   | DC_2A_n260A<br>DC_13A_n260A<br>DC_2A_n260G<br>DC_13A_n260G<br>DC_2A_n260H<br>DC_13A_n260H<br>DC_2A_n260I<br>DC_13A_n260I |
| DC_2A-13A_n260(2A)<br>DC_2A-13A_n260(3A)<br>DC_2A-13A_n260(4A)<br>DC_2A-13A_n260(5A)<br>DC_2A-13A_n260(6A)<br>DC_2A-13A_n260(2G)<br>DC_2A-13A_n260(2H)<br>DC_2A-13A_n260(A-G)<br>DC_2A-13A_n260(A-H)<br>DC_2A-13A_n260(A-2G)<br>DC_2A-13A_n260(2A-G)<br>DC_2A-13A_n260(2A-2G)<br>DC_2A-13A_n260(3A-G)<br>DC_2A-13A_n260(G-H)                                                                                                                                                                        | DC_2A_n260A<br>DC_13A_n260A                                                                                              |
| DC_2A-13A_n261A<br>DC_2A-13A_n261G<br>DC_2A-13A_n261H<br>DC_2A-13A_n261I<br>DC_2A-13A_n261J<br>DC_2A-13A_n261K<br>DC_2A-13A_n261L<br>DC_2A-13A_n261M                                                                                                                                                                                                                                                                                                                                                | DC_2A_n261A<br>DC_13A_n261A<br>DC_2A_n261G<br>DC_13A_n261G<br>DC_2A_n261H<br>DC_13A_n261H                                |
| DC_2A-13A_n261(2A)<br>DC_2A-13A_n261(3A)<br>DC_2A-13A_n261(4A)<br>DC_2A-13A_n261(2G)<br>DC_2A-13A_n261(2H)<br>DC_2A-13A_n261(A-G)<br>DC_2A-13A_n261(A-H)<br>DC_2A-13A_n261(A-I)<br>DC_2A-13A_n261(A-J)<br>DC_2A-13A_n261(A-K)<br>DC_2A-13A_n261(A-2G)<br>DC_2A-13A_n261(A-G-H)<br>DC_2A-13A_n261(A-G-I)<br>DC_2A-13A_n261(2A-G)<br>DC_2A-13A_n261(2A-H)<br>DC_2A-13A_n261(2A-I)<br>DC_2A-13A_n261(3A-G)<br>DC_2A-13A_n261(G-H)<br>DC_2A-13A_n261(G-I)<br>DC_2A-13A_n261(G-J)<br>DC_2A-13A_n261(H-I) | DC_2A_n261A<br>DC_13A_n261A<br>DC_2A_n261G<br>DC_13A_n261G<br>DC_2A_n261H<br>DC_13A_n261H                                |
| DC_2A-14A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_2A_n260A                                                                                                              |

| EN-DC configuration                                                                                                                                                                                                                                                                                               | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                   |
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| DC_2A-14A_n260G<br>DC_2A-14A_n260H<br>DC_2A-14A_n260I<br>DC_2A-14A_n260J<br>DC_2A-14A_n260K<br>DC_2A-14A_n260L<br>DC_2A-14A_n260M<br>DC_2A-2A-14A_n260A<br>DC_2A-2A-14A_n260G<br>DC_2A-2A-14A_n260H<br>DC_2A-2A-14A_n260I<br>DC_2A-2A-14A_n260J<br>DC_2A-2A-14A_n260K<br>DC_2A-2A-14A_n260L<br>DC_2A-2A-14A_n260M | DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M<br>DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M |
| DC_2A-29A_n260A<br>DC_2A-29A_n260G<br>DC_2A-29A_n260H<br>DC_2A-29A_n260I<br>DC_2A-29A_n260J<br>DC_2A-29A_n260K<br>DC_2A-29A_n260L<br>DC_2A-29A_n260M                                                                                                                                                              | DC_2A_n260A                                                                                                                                                                                                                           |
| DC_2A-30A_n260A<br>DC_2A-30A_n260G<br>DC_2A-30A_n260H<br>DC_2A-30A_n260I<br>DC_2A-30A_n260J<br>DC_2A-30A_n260K<br>DC_2A-30A_n260L<br>DC_2A-30A_n260M                                                                                                                                                              | DC_2A_n260A<br>DC_30A_n260A                                                                                                                                                                                                           |
| DC_2A-2A-30A_n260A<br>DC_2A-2A-30A_n260G<br>DC_2A-2A-30A_n260H<br>DC_2A-2A-30A_n260I<br>DC_2A-2A-30A_n260J<br>DC_2A-2A-30A_n260K<br>DC_2A-2A-30A_n260L<br>DC_2A-2A-30A_n260M                                                                                                                                      | DC_2A_n260A<br>DC_30A_n260A                                                                                                                                                                                                           |
| DC_2A-46A_n258A<br>DC_2A-46C_n258A<br>DC_2A-46D_n258A                                                                                                                                                                                                                                                             | DC_2A_n258A                                                                                                                                                                                                                           |
| DC_2A-46A_n258(2A)<br>DC_2A-46A_n258(3A)<br>DC_2A-46A_n258(4A)<br>DC_2A-46A_n258(5A)<br>DC_2A-46C_n258(2A)<br>DC_2A-46C_n258(3A)<br>DC_2A-46C_n258(4A)<br>DC_2A-46C_n258(5A)<br>DC_2A-46D_n258(2A)<br>DC_2A-46D_n258(3A)<br>DC_2A-46D_n258(4A)<br>DC_2A-46D_n258(5A)                                              | DC_2A_n258A                                                                                                                                                                                                                           |
| DC_2A-46A_n260A<br>DC_2A-46C_n260A<br>DC_2A-46D_n260A<br>DC_2A-46E_n260A<br>DC_2A-46A_n260G<br>DC_2A-46C_n260G<br>DC_2A-46D_n260G<br>DC_2A-46E_n260G<br>DC_2A-46A_n260H<br>DC_2A-46C_n260H<br>DC_2A-46D_n260H                                                                                                     | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M                                                                                                                  |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                  |
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| DC_2A-46E_n260H<br>DC_2A-46A_n260I<br>DC_2A-46C_n260I<br>DC_2A-46D_n260I<br>DC_2A-46E_n260I<br>DC_2A-46A_n260J<br>DC_2A-46C_n260J<br>DC_2A-46D_n260J<br>DC_2A-46E_n260J<br>DC_2A-46A_n260K<br>DC_2A-46C_n260K<br>DC_2A-46D_n260K<br>DC_2A-46E_n260K<br>DC_2A-46A_n260L<br>DC_2A-46C_n260L<br>DC_2A-46D_n260L<br>DC_2A-46E_n260L<br>DC_2A-46A_n260M<br>DC_2A-46C_n260M<br>DC_2A-46D_n260M<br>DC_2A-46E_n260M                                                                                                                                                                                                                                                                                                                  |                                                                                                                      |
| DC_2A-2A-46A_n260A<br>DC_2A-2A-46C_n260A<br>DC_2A-2A-46D_n260A<br>DC_2A-2A-46E_n260A<br>DC_2A-2A-46A_n260G<br>DC_2A-2A-46C_n260G<br>DC_2A-2A-46D_n260G<br>DC_2A-2A-46E_n260G<br>DC_2A-2A-46A_n260H<br>DC_2A-2A-46C_n260H<br>DC_2A-2A-46D_n260H<br>DC_2A-2A-46E_n260H<br>DC_2A-2A-46A_n260I<br>DC_2A-2A-46C_n260I<br>DC_2A-2A-46D_n260I<br>DC_2A-2A-46E_n260I<br>DC_2A-2A-46A_n260J<br>DC_2A-2A-46C_n260J<br>DC_2A-2A-46D_n260J<br>DC_2A-2A-46E_n260J<br>DC_2A-2A-46A_n260K<br>DC_2A-2A-46C_n260K<br>DC_2A-2A-46D_n260K<br>DC_2A-2A-46E_n260K<br>DC_2A-2A-46A_n260L<br>DC_2A-2A-46C_n260L<br>DC_2A-2A-46D_n260L<br>DC_2A-2A-46E_n260L<br>DC_2A-2A-46A_n260M<br>DC_2A-2A-46C_n260M<br>DC_2A-2A-46D_n260M<br>DC_2A-2A-46E_n260M | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M |
| DC_2A-46A_n261A<br>DC_2A-46C_n261A<br>DC_2A-46D_n261A<br>DC_2A-46A_n261(2A)<br>DC_2A-46C_n261(2A)<br>DC_2A-46D_n261(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DC_2A_n261A                                                                                                          |
| DC_2A-66A_n257A <sup>2</sup><br>DC_2A-66A_n257(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC_2A_n257A<br>DC_66A_n257A                                                                                          |
| DC_2A-66A_n260A<br>DC_2A-66A_n260G<br>DC_2A-66A_n260H<br>DC_2A-66A_n260I<br>DC_2A-66A_n260J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_2A_n260A<br>DC_66A_n260A<br>DC_2A_n260G<br>DC_66A_n260G<br>DC_2A_n260H                                            |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                             | Uplink EN-DC configuration (NOTE 1)                                                                                      |
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| DC_2A-66A_n260K<br>DC_2A-66A_n260L<br>DC_2A-66A_n260M                                                                                                                                                                                                                                                                                                                           | DC_66A_n260H<br>DC_2A_n260I<br>DC_66A_n260I                                                                              |
| DC_2A-66A_n260(2A)<br>DC_2A-66A_n260(3A)<br>DC_2A-66A_n260(4A)<br>DC_2A-66A_n260(5A)<br>DC_2A-66A_n260(6A)<br>DC_2A-66A_n260(2G)<br>DC_2A-66A_n260(2H)<br>DC_2A-66A_n260(A-G)<br>DC_2A-66A_n260(A-H)<br>DC_2A-66A_n260(A-2G)<br>DC_2A-66A_n260(2A-G)<br>DC_2A-66A_n260(2A-2G)<br>DC_2A-66A_n260(3A-G)<br>DC_2A-66A_n260(G-H)                                                    | DC_2A_n260A<br>DC_66A_n260A                                                                                              |
| DC_2A-2A-66A_n260A<br>DC_2A-2A-66A_n260G<br>DC_2A-2A-66A_n260H<br>DC_2A-2A-66A_n260I<br>DC_2A-2A-66A_n260J<br>DC_2A-2A-66A_n260K<br>DC_2A-2A-66A_n260L<br>DC_2A-2A-66A_n260M<br>DC_2A-66A-66A_n260A<br>DC_2A-66A-66A_n260G<br>DC_2A-66A-66A_n260H<br>DC_2A-66A-66A_n260I<br>DC_2A-66A-66A_n260J<br>DC_2A-66A-66A_n260K<br>DC_2A-66A-66A_n260L<br>DC_2A-66A-66A_n260M            | DC_2A_n260A<br>DC_66A_n260A<br>DC_2A_n260G<br>DC_66A_n260G<br>DC_2A_n260H<br>DC_66A_n260H<br>DC_2A_n260I<br>DC_66A_n260I |
| DC_2A-66A_n261A<br>DC_2A-66A_n261G<br>DC_2A-66A_n261H<br>DC_2A-66A_n261I<br>DC_2A-66A_n261J<br>DC_2A-66A_n261K<br>DC_2A-66A_n261L<br>DC_2A-66A_n261M                                                                                                                                                                                                                            | DC_2A_n261A<br>DC_66A_n261A<br>DC_2A_n261G<br>DC_66A_n261G<br>DC_2A_n261H<br>DC_66A_n261H<br>DC_2A_n261I<br>DC_66A_n261I |
| DC_2A-66A-66A_n261A<br>DC_2A-66A-66A_n261G<br>DC_2A-66A-66A_n261H<br>DC_2A-66A-66A_n261I<br>DC_2A-66A-66A_n261J<br>DC_2A-66A-66A_n261K<br>DC_2A-66A-66A_n261L<br>DC_2A-66A-66A_n261M                                                                                                                                                                                            | DC_2A_n261A<br>DC_66A_n261A<br>DC_2A_n261G<br>DC_66A_n261G<br>DC_2A_n261H<br>DC_66A_n261H<br>DC_2A_n261I<br>DC_66A_n261I |
| DC_2A-66A_n261(2A)<br>DC_2A-66A_n261(3A)<br>DC_2A-66A_n261(4A)<br>DC_2A-66A_n261(2G)<br>DC_2A-66A_n261(2H)<br>DC_2A-66A_n261(A-G)<br>DC_2A-66A_n261(A-H)<br>DC_2A-66A_n261(A-I)<br>DC_2A-66A_n261(A-J)<br>DC_2A-66A_n261(A-K)<br>DC_2A-66A_n261(A-2G)<br>DC_2A-66A_n261(A-G-H)<br>DC_2A-66A_n261(A-G-I)<br>DC_2A-66A_n261(2A-G)<br>DC_2A-66A_n261(2A-H)<br>DC_2A-66A_n261(2A-I) | DC_2A_n261A<br>DC_66A_n261A<br>DC_2A_n261G<br>DC_66A_n261G<br>DC_2A_n261H<br>DC_66A_n261H<br>DC_2A_n261I<br>DC_66A_n261I |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| DC_2A-66A_n261(3A-G)<br>DC_2A-66A_n261(G-H)<br>DC_2A-66A_n261(G-I)<br>DC_2A-66A_n261(G-J)<br>DC_2A-66A_n261(H-I)<br>DC_2A-66A-66A_n261(A-G)<br>DC_2A-66A-66A_n261(A-H)<br>DC_2A-66A-66A_n261(A-J)<br>DC_2A-66A-66A_n261(A-K)<br>DC_2A-66A-66A_n261(2A-G)<br>DC_2A-66A-66A_n261(2A-H)<br>DC_2A-66A-66A_n261(2A-I)<br>DC_2A-66A-66A_n261(3A-G)<br>DC_2A-66A-66A_n261(2G)<br>DC_2A-66A-66A_n261(G-H)<br>DC_2A-66A-66A_n261(G-I)<br>DC_2A-66A-66A_n261(G-J)<br>DC_2A-66A-66A_n261(2H)<br>DC_2A-66A-66A_n261(H-I) |                                     |
| DC_3A-3A-7A_n257A<br>DC_3A-3A-7A_n257D<br>DC_3A-3A-7A_n257E<br>DC_3A-3A-7A_n257F<br>DC_3A-3A-7A_n257G<br>DC_3A-3A-7A_n257H<br>DC_3A-3A-7A_n257I<br>DC_3A-3A-7A_n257J<br>DC_3A-3A-7A_n257K<br>DC_3A-3A-7A_n257L<br>DC_3A-3A-7A_n257M                                                                                                                                                                                                                                                                          | DC_3A_n257A<br>DC_7A_n257A          |
| DC_3A-3A-7A-7A_n257A<br>DC_3A-3A-7A-7A_n257D<br>DC_3A-3A-7A-7A_n257E<br>DC_3A-3A-7A-7A_n257F<br>DC_3A-3A-7A-7A_n257G<br>DC_3A-3A-7A-7A_n257H<br>DC_3A-3A-7A-7A_n257I<br>DC_3A-3A-7A-7A_n257J<br>DC_3A-3A-7A-7A_n257K<br>DC_3A-3A-7A-7A_n257L<br>DC_3A-3A-7A-7A_n257M                                                                                                                                                                                                                                         | DC_3A_n257A<br>DC_7A_n257A          |
| DC_3A-5A_n257A <sup>2</sup><br>DC_3A-5A_n257D<br>DC_3A-5A_n257E<br>DC_3A-5A_n257F<br>DC_3A-5A_n257G<br>DC_3A-5A_n257H<br>DC_3A-5A_n257I<br>DC_3A-5A_n257J<br>DC_3A-5A_n257K<br>DC_3A-5A_n257L<br>DC_3A-5A_n257M                                                                                                                                                                                                                                                                                              | DC_3A_n257A<br>DC_5A_n257A          |
| DC_3A-7A_n257A <sup>2</sup><br>DC_3A-7A_n257D<br>DC_3A-7A_n257E<br>DC_3A-7A_n257F<br>DC_3A-7A_n257G<br>DC_3A-7A_n257H<br>DC_3A-7A_n257I<br>DC_3A-7A_n257J<br>DC_3A-7A_n257K<br>DC_3A-7A_n257L<br>DC_3A-7A_n257M                                                                                                                                                                                                                                                                                              | DC_3A_n257A<br>DC_7A_n257A          |
| DC_3A-7A-7A_n257A <sup>2</sup><br>DC_3A-7A-7A_n257D                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DC_3A_n257A<br>DC_7A_n257A          |

| EN-DC configuration                                                                                                                                                                                                                                               | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_3A-7A-7A_n257E<br>DC_3A-7A-7A_n257F<br>DC_3A-7A-7A_n257G<br>DC_3A-7A-7A_n257H<br>DC_3A-7A-7A_n257I<br>DC_3A-7A-7A_n257J<br>DC_3A-7A-7A_n257K<br>DC_3A-7A-7A_n257L<br>DC_3A-7A-7A_n257M                                                                         |                                                                                                                                                                                                                     |
| DC_3A-8A_n257A<br>DC_3A-8A_n257D<br>DC_3A-8A_n257E<br>DC_3A-8A_n257F<br>DC_3A-8A_n257G<br>DC_3A-8A_n257H<br>DC_3A-8A_n257I<br>DC_3A-8A_n257J<br>DC_3A-8A_n257K<br>DC_3A-8A_n257L<br>DC_3A-8A_n257M                                                                | DC_3A_n257A<br>DC_8A_n257A                                                                                                                                                                                          |
| DC_3A-18A_n257A<br>DC_3A-18A_n257D<br>DC_3A-18A_n257E<br>DC_3A-18A_n257F<br>DC_3A-18A_n257G<br>DC_3A-18A_n257H<br>DC_3A-18A_n257I<br>DC_3A-18A_n257J<br>DC_3A-18A_n257K<br>DC_3A-18A_n257L<br>DC_3A-18A_n257M                                                     | DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                                            |
| DC_3A-19A_n257A <sup>2</sup><br>DC_3A-19A_n257D <sup>2</sup><br>DC_3A-19A_n257E <sup>2</sup><br>DC_3A-19A_n257F <sup>2</sup><br>DC_3A-19A_n257G<br>DC_3A-19A_n257H<br>DC_3A-19A_n257I<br>DC_3A-19A_n257J<br>DC_3A-19A_n257K<br>DC_3A-19A_n257L<br>DC_3A-19A_n257M | DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_19A_n257A<br>DC_19A_n257D<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I |
| DC_3A-21A_n257A <sup>2</sup><br>DC_3A-21A_n257D <sup>2</sup><br>DC_3A-21A_n257E <sup>2</sup><br>DC_3A-21A_n257F <sup>2</sup><br>DC_3A-21A_n257G<br>DC_3A-21A_n257H<br>DC_3A-21A_n257I<br>DC_3A-21A_n257J<br>DC_3A-21A_n257K<br>DC_3A-21A_n257L<br>DC_3A-21A_n257M | DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_21A_n257A<br>DC_21A_n257D<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I |
| DC_3A-28A_n257A <sup>2</sup><br>DC_3A-28A_n257D <sup>2</sup><br>DC_3A-28A_n257E <sup>2</sup><br>DC_3A-28A_n257F <sup>2</sup><br>DC_3A-28A_n257G<br>DC_3A-28A_n257H                                                                                                | DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J                                                                                                                              |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_3A-28A_n257I<br>DC_3A-28A_n257J<br>DC_3A-28A_n257K<br>DC_3A-28A_n257L<br>DC_3A-28A_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_28A_n257A<br>DC_28A_n257D<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                                                                                           |
| DC_3A-41A_n257A<br>DC_3A-41A_n257D<br>DC_3A-41A_n257E<br>DC_3A-41A_n257F<br>DC_3A-41A_n257G<br>DC_3A-41A_n257H<br>DC_3A-41A_n257I<br>DC_3A-41A_n257J<br>DC_3A-41A_n257K<br>DC_3A-41A_n257L<br>DC_3A-41A_n257M<br>DC_3A-41C_n257A<br>DC_3A-41C_n257D<br>DC_3A-41C_n257E<br>DC_3A-41C_n257F<br>DC_3A-41C_n257G<br>DC_3A-41C_n257H<br>DC_3A-41C_n257I<br>DC_3A-41C_n257J<br>DC_3A-41C_n257K<br>DC_3A-41C_n257L<br>DC_3A-41C_n257M                                                                                                                                                                                                                                                                                                                                                                                                             | DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I                                                                                            |
| DC_3A-42A_n257A <sup>2</sup><br>DC_3A-42A_n257D <sup>2</sup><br>DC_3A-42A_n257E <sup>2</sup><br>DC_3A-42A_n257F <sup>2</sup><br>DC_3A-42A_n257G<br>DC_3A-42A_n257H<br>DC_3A-42A_n257I<br>DC_3A-42A_n257J<br>DC_3A-42A_n257K<br>DC_3A-42A_n257L<br>DC_3A-42A_n257M<br>DC_3A-42C_n257A <sup>2</sup><br>DC_3A-42C_n257D <sup>2</sup><br>DC_3A-42C_n257E <sup>2</sup><br>DC_3A-42C_n257F <sup>2</sup><br>DC_3A-42C_n257G<br>DC_3A-42C_n257H<br>DC_3A-42C_n257I<br>DC_3A-42C_n257J<br>DC_3A-42C_n257K<br>DC_3A-42C_n257L<br>DC_3A-42C_n257M<br>DC_3A-42D_n257A <sup>2</sup><br>DC_3A-42D_n257D<br>DC_3A-42D_n257E<br>DC_3A-42D_n257F<br>DC_3A-42D_n257G<br>DC_3A-42D_n257H<br>DC_3A-42D_n257I<br>DC_3A-42D_n257J<br>DC_3A-42D_n257K<br>DC_3A-42D_n257L<br>DC_3A-42D_n257M<br>DC_3A-42E_n257A <sup>2</sup><br>DC_3A-42E_n257D<br>DC_3A-42E_n257E | DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |

| EN-DC configuration                                                                                                                                                                                                                 | Uplink EN-DC configuration (NOTE 1)                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| DC_3A-42E_n257F<br>DC_3A-42E_n257G<br>DC_3A-42E_n257H<br>DC_3A-42E_n257I<br>DC_3A-42E_n257J<br>DC_3A-42E_n257K<br>DC_3A-42E_n257L<br>DC_3A-42E_n257M                                                                                |                                                                                                                          |
| DC_5A-7A_n257A <sup>2</sup><br>DC_5A-7A_n257D<br>DC_5A-7A_n257E<br>DC_5A-7A_n257F<br>DC_5A-7A_n257G<br>DC_5A-7A_n257H<br>DC_5A-7A_n257I<br>DC_5A-7A_n257J<br>DC_5A-7A_n257K<br>DC_5A-7A_n257L<br>DC_5A-7A_n257M                     | DC_5A_n257A<br>DC_7A_n257A                                                                                               |
| DC_5A-7A-7A_n257A<br>DC_5A-7A-7A_n257D<br>DC_5A-7A-7A_n257E<br>DC_5A-7A-7A_n257F<br>DC_5A-7A-7A_n257G<br>DC_5A-7A-7A_n257H<br>DC_5A-7A-7A_n257I<br>DC_5A-7A-7A_n257J<br>DC_5A-7A-7A_n257K<br>DC_5A-7A-7A_n257L<br>DC_5A-7A-7A_n257M | DC_5A_n257A<br>DC_7A_n257A                                                                                               |
| DC_5A-30A_n260A<br>DC_5A-30A_n260G<br>DC_5A-30A_n260H<br>DC_5A-30A_n260I<br>DC_5A-30A_n260J<br>DC_5A-30A_n260K<br>DC_5A-30A_n260L<br>DC_5A-30A_n260M                                                                                | DC_5A_n260A<br>DC_30A_n260A                                                                                              |
| DC_5A-66A_n260A<br>DC_5A-66A_n260G<br>DC_5A-66A_n260H<br>DC_5A-66A_n260I<br>DC_5A-66A_n260J<br>DC_5A-66A_n260K<br>DC_5A-66A_n260L<br>DC_5A-66A_n260M                                                                                | DC_5A_n260A<br>DC_66A_n260A<br>DC_5A_n260G<br>DC_66A_n260G<br>DC_5A_n260H<br>DC_66A_n260H<br>DC_5A_n260I<br>DC_66A_n260I |
| DC_5A-66A-66A_n260A<br>DC_5A-66A-66A_n260G<br>DC_5A-66A-66A_n260H<br>DC_5A-66A-66A_n260I<br>DC_5A-66A-66A_n260J<br>DC_5A-66A-66A_n260K<br>DC_5A-66A-66A_n260L<br>DC_5A-66A-66A_n260M                                                | DC_5A_n260A<br>DC_66A_n260A<br>DC_5A_n260G<br>DC_66A_n260G<br>DC_5A_n260H<br>DC_66A_n260H<br>DC_5A_n260I<br>DC_66A_n260I |
| DC_5A-66A_n261A<br>DC_5A-66A_n261G<br>DC_5A-66A_n261H<br>DC_5A-66A_n261I<br>DC_5A-66A_n261J<br>DC_5A-66A_n261K<br>DC_5A-66A_n261L<br>DC_5A-66A_n261M                                                                                | DC_5A_n261A<br>DC_66A_n261A<br>DC_5A_n261G<br>DC_66A_n261G<br>DC_5A_n261H<br>DC_66A_n261H<br>DC_5A_n261I<br>DC_66A_n261I |
| DC_5A-66A-66A_n261A<br>DC_5A-66A-66A_n261G<br>DC_5A-66A-66A_n261H                                                                                                                                                                   | DC_5A_n261A<br>DC_66A_n261A<br>DC_5A_n261G                                                                               |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| DC_5A-66A-66A_n261I<br>DC_5A-66A-66A_n261J<br>DC_5A-66A-66A_n261K<br>DC_5A-66A-66A_n261L<br>DC_5A-66A-66A_n261M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_66A_n261G<br>DC_5A_n261H<br>DC_66A_n261H<br>DC_5A_n261I<br>DC_66A_n261I                                                   |
| DC_5A-66A_n261(2G)<br>DC_5A-66A_n261(2H)<br>DC_5A-66A_n261(A-G)<br>DC_5A-66A_n261(A-H)<br>DC_5A-66A_n261(A-J)<br>DC_5A-66A_n261(A-K)<br>DC_5A-66A_n261(2A-G)<br>DC_5A-66A_n261(2A-H)<br>DC_5A-66A_n261(2A-I)<br>DC_5A-66A_n261(3A-G)<br>DC_5A-66A_n261(G-H)<br>DC_5A-66A_n261(G-I)<br>DC_5A-66A_n261(G-J)<br>DC_5A-66A_n261(H-I)<br>DC_5A-66A-66A_n261(A-G)<br>DC_5A-66A-66A_n261(A-H)<br>DC_5A-66A-66A_n261(A-J)<br>DC_5A-66A-66A_n261(A-K)<br>DC_5A-66A-66A_n261(2A-G)<br>DC_5A-66A-66A_n261(2A-H)<br>DC_5A-66A-66A_n261(2A-I)<br>DC_5A-66A-66A_n261(3A-G)<br>DC_5A-66A-66A_n261(2G)<br>DC_5A-66A-66A_n261(G-H)<br>DC_5A-66A-66A_n261(G-I)<br>DC_5A-66A-66A_n261(G-J)<br>DC_5A-66A-66A_n261(2H)<br>DC_5A-66A-66A_n261(H-I) | DC_5A_n261A<br>DC_66A_n261A<br>DC_5A_n261G<br>DC_66A_n261G<br>DC_5A_n261H<br>DC_66A_n261H<br>DC_5A_n261I<br>DC_66A_n261I     |
| DC_8A-11A_n257A<br>DC_8A-11A_n257D<br>DC_8A-11A_n257G<br>DC_8A-11A_n257H<br>DC_8A-11A_n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_8A_n257A<br>DC_11A_n257A                                                                                                  |
| DC_11A-18A_n257A<br>DC_11A-18A_n257G<br>DC_11A-18A_n257H<br>DC_11A-18A_n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_11A_n257A<br>DC_11A_n257G<br>DC_11A_n257H<br>DC_11A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I |
| DC_12A-30A_n260A<br>DC_12A-30A_n260G<br>DC_12A-30A_n260H<br>DC_12A-30A_n260I<br>DC_12A-30A_n260J<br>DC_12A-30A_n260K<br>DC_12A-30A_n260L<br>DC_12A-30A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_12A_n260A<br>DC_30A_n260A                                                                                                 |
| DC_12A-66A_n260A<br>DC_12A-66A_n260G<br>DC_12A-66A_n260H<br>DC_12A-66A_n260I<br>DC_12A-66A_n260J<br>DC_12A-66A_n260K<br>DC_12A-66A_n260L<br>DC_12A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_12A_n260A<br>DC_66A_n260A                                                                                                 |
| DC_12A-66A-66A_n260A<br>DC_12A-66A-66A_n260G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_12A_n260A<br>DC_66A_n260A                                                                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                                                          |
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| DC_12A-66A-66A_n260H<br>DC_12A-66A-66A_n260I<br>DC_12A-66A-66A_n260J<br>DC_12A-66A-66A_n260K<br>DC_12A-66A-66A_n260L<br>DC_12A-66A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                              |
| DC_13A-66A_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_13A_n257A<br>DC_66A_n257A                                                                                                 |
| DC_13A-66A-66A_n260A<br>DC_13A-66A-66A_n260G<br>DC_13A-66A-66A_n260H<br>DC_13A-66A-66A_n260I<br>DC_13A-66A-66A_n260J<br>DC_13A-66A-66A_n260K<br>DC_13A-66A-66A_n260L<br>DC_13A-66A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_13A_n260A<br>DC_66A_n260A<br>DC_13A_n260G<br>DC_66A_n260G<br>DC_13A_n260H<br>DC_66A_n260H<br>DC_13A_n260I<br>DC_66A_n260I |
| DC_13A-66A_n260A<br>DC_13A-66A_n260G<br>DC_13A-66A_n260H<br>DC_13A-66A_n260I<br>DC_13A-66A_n260J<br>DC_13A-66A_n260K<br>DC_13A-66A_n260L<br>DC_13A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_13A_n260A<br>DC_66A_n260A<br>DC_13A_n260G<br>DC_66A_n260G<br>DC_13A_n260H<br>DC_66A_n260H<br>DC_13A_n260I<br>DC_66A_n260I |
| DC_13A-66A_n260(2A)<br>DC_13A-66A_n260(3A)<br>DC_13A-66A_n260(4A)<br>DC_13A-66A_n260(5A)<br>DC_13A-66A_n260(6A)<br>DC_13A-66A_n260(2G)<br>DC_13A-66A_n260(2H)<br>DC_13A-66A_n260(A-G)<br>DC_13A-66A_n260(A-H)<br>DC_13A-66A_n260(A-2G)<br>DC_13A-66A_n260(2A-G)<br>DC_13A-66A_n260(2A-2G)<br>DC_13A-66A_n260(3A-G)<br>DC_13A-66A_n260(G-H)<br>DC_13A-66A-66A_n260(2A)<br>DC_13A-66A-66A_n260(3A)<br>DC_13A-66A-66A_n260(4A)<br>DC_13A-66A-66A_n260(5A)<br>DC_13A-66A-66A_n260(6A)<br>DC_13A-66A-66A_n260(2G)<br>DC_13A-66A-66A_n260(2H)<br>DC_13A-66A-66A_n260(A-G)<br>DC_13A-66A-66A_n260(A-H)<br>DC_13A-66A-66A_n260(A-2G)<br>DC_13A-66A-66A_n260(2A-G)<br>DC_13A-66A-66A_n260(2A-2G)<br>DC_13A-66A-66A_n260(3A-G)<br>DC_13A-66A-66A_n260(G-H) | DC_13A_n260A<br>DC_66A_n260A                                                                                                 |
| DC_13A-66A-66A_n261A<br>DC_13A-66A-66A_n261G<br>DC_13A-66A-66A_n261H<br>DC_13A-66A-66A_n261I<br>DC_13A-66A-66A_n261J<br>DC_13A-66A-66A_n261K<br>DC_13A-66A-66A_n261L<br>DC_13A-66A-66A_n261M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_13A_n261A<br>DC_66A_n261A<br>DC_13A_n261G<br>DC_66A_n261G<br>DC_13A_n261H<br>DC_66A_n261H                                 |
| DC_13A-66A_n261A<br>DC_13A-66A_n261G<br>DC_13A-66A_n261H<br>DC_13A-66A_n261I<br>DC_13A-66A_n261J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_13A_n261A<br>DC_66A_n261A<br>DC_13A_n261G<br>DC_66A_n261G<br>DC_13A_n261H                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                          |
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| DC_13A-66A_n261K<br>DC_13A-66A_n261L<br>DC_13A-66A_n261M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_66A_n261H                                                                                                                                                                                                                                                 |
| DC_13A-66A_n261(2A)<br>DC_13A-66A_n261(3A)<br>DC_13A-66A_n261(4A)<br>DC_13A-66A_n261(2G)<br>DC_13A-66A_n261(2H)<br>DC_13A-66A_n261(A-G)<br>DC_13A-66A_n261(A-H)<br>DC_13A-66A_n261(A-I)<br>DC_13A-66A_n261(A-J)<br>DC_13A-66A_n261(A-K)<br>DC_13A-66A_n261(A-2G)<br>DC_13A-66A_n261(A-G-H)<br>DC_13A-66A_n261(A-G-I)<br>DC_13A-66A_n261(2A-G)<br>DC_13A-66A_n261(2A-H)<br>DC_13A-66A_n261(2A-I)<br>DC_13A-66A_n261(3A-G)<br>DC_13A-66A_n261(G-H)<br>DC_13A-66A_n261(G-I)<br>DC_13A-66A_n261(G-J)<br>DC_13A-66A_n261(H-I)<br>DC_13A-66A-66A_n261(2A)<br>DC_13A-66A-66A_n261(3A)<br>DC_13A-66A-66A_n261(4A)<br>DC_13A-66A-66A_n261(2G)<br>DC_13A-66A-66A_n261(2H)<br>DC_13A-66A-66A_n261(A-G)<br>DC_13A-66A-66A_n261(A-H)<br>DC_13A-66A-66A_n261(A-I)<br>DC_13A-66A-66A_n261(A-J)<br>DC_13A-66A-66A_n261(A-K)<br>DC_13A-66A-66A_n261(A-2G)<br>DC_13A-66A-66A_n261(A-G-H)<br>DC_13A-66A-66A_n261(A-G-I)<br>DC_13A-66A-66A_n261(2A-G)<br>DC_13A-66A-66A_n261(2A-H)<br>DC_13A-66A-66A_n261(2A-I)<br>DC_13A-66A-66A_n261(3A-G)<br>DC_13A-66A-66A_n261(G-H)<br>DC_13A-66A-66A_n261(G-I)<br>DC_13A-66A-66A_n261(G-J)<br>DC_13A-66A-66A_n261(H-I) | DC_13A_n261A<br>DC_66A_n261A<br>DC_13A_n261G<br>DC_66A_n261G<br>DC_13A_n261H<br>DC_66A_n261H                                                                                                                                                                 |
| DC_14A-30A_n260A<br>DC_14A-30A_n260G<br>DC_14A-30A_n260H<br>DC_14A-30A_n260I<br>DC_14A-30A_n260J<br>DC_14A-30A_n260K<br>DC_14A-30A_n260L<br>DC_14A-30A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_30A_n260A<br>DC_30A_n260G<br>DC_30A_n260H<br>DC_30A_n260I<br>DC_30A_n260J<br>DC_30A_n260K<br>DC_30A_n260L<br>DC_30A_n260M |
| DC_14A-66A_n260A<br>DC_14A-66A_n260G<br>DC_14A-66A_n260H<br>DC_14A-66A_n260I<br>DC_14A-66A_n260J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J                                                                                                                                                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                          |
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| DC_14A-66A_n260K<br>DC_14A-66A_n260L<br>DC_14A-66A_n260M<br>DC_14A-66A-66A_n260A<br>DC_14A-66A-66A_n260G<br>DC_14A-66A-66A_n260H<br>DC_14A-66A-66A_n260I<br>DC_14A-66A-66A_n260J<br>DC_14A-66A-66A_n260K<br>DC_14A-66A-66A_n260L<br>DC_14A-66A-66A_n260M                                                                                                                                                                                             | DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M                                                 |
| DC_18A-28A_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                        | DC_18A_n257A<br>DC_28A_n257A                                                                                                                                                                                                 |
| DC_18A-42A_n257A<br>DC_18A-42A_n257D<br>DC_18A-42A_n257E<br>DC_18A-42A_n257F<br>DC_18A-42A_n257G<br>DC_18A-42A_n257H<br>DC_18A-42A_n257I<br>DC_18A-42A_n257J<br>DC_18A-42A_n257K<br>DC_18A-42A_n257L<br>DC_18A-42A_n257M<br>DC_18A-42C_n257A<br>DC_18A-42C_n257D<br>DC_18A-42C_n257E<br>DC_18A-42C_n257F<br>DC_18A-42C_n257G<br>DC_18A-42C_n257H<br>DC_18A-42C_n257I<br>DC_18A-42C_n257J<br>DC_18A-42C_n257K<br>DC_18A-42C_n257L<br>DC_18A-42C_n257M | DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                 |
| DC_18A-41A_n257A<br>DC_18A-41A_n257G<br>DC_18A-41A_n257H<br>DC_18A-41A_n257I<br>DC_18A-41C_n257A<br>DC_18A-41C_n257G<br>DC_18A-41C_n257H<br>DC_18A-41C_n257I                                                                                                                                                                                                                                                                                         | DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I                                 |
| DC_19A-21A_n257A <sup>2</sup><br>DC_19A-21A_n257D <sup>2</sup><br>DC_19A-21A_n257E <sup>2</sup><br>DC_19A-21A_n257F <sup>2</sup><br>DC_19A-21A_n257G<br>DC_19A-21A_n257H<br>DC_19A-21A_n257I<br>DC_19A-21A_n257J<br>DC_19A-21A_n257K<br>DC_19A-21A_n257L<br>DC_19A-21A_n257M                                                                                                                                                                         | DC_19A_n257A<br>DC_19A_n257D<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n257A<br>DC_21A_n257D<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J<br>DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M |
| DC_19A-42A_n257A <sup>2</sup><br>DC_19A-42A_n257D <sup>2</sup><br>DC_19A-42A_n257E <sup>2</sup><br>DC_19A-42A_n257F <sup>2</sup>                                                                                                                                                                                                                                                                                                                     | DC_19A_n257A<br>DC_19A_n257D<br>DC_19A_n257G<br>DC_19A_n257H                                                                                                                                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                          |
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| DC_19A-42A_n257G <sup>2</sup><br>DC_19A-42A_n257H <sup>2</sup><br>DC_19A-42A_n257I <sup>2</sup><br>DC_19A-42C_n257A <sup>2</sup><br>DC_19A-42C_n257G <sup>2</sup><br>DC_19A-42C_n257H <sup>2</sup><br>DC_19A-42C_n257I <sup>2</sup><br>DC_19A-42D_n257D <sup>2</sup><br>DC_19A-42D_n257E <sup>2</sup><br>DC_19A-42D_n257F <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                                                                 |
| DC_21A-28A_n257A <sup>2</sup><br>DC_21A-28A_n257D <sup>2</sup><br>DC_21A-28A_n257E <sup>2</sup><br>DC_21A-28A_n257F <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_21A_n257A<br>DC_21A_n257D<br>DC_28A_n257A<br>DC_28A_n257D                                                                                                                                                                 |
| DC_21A-42A_n257A <sup>2</sup><br>DC_21A-42A_n257D <sup>2</sup><br>DC_21A-42A_n257E <sup>2</sup><br>DC_21A-42A_n257F <sup>2</sup><br>DC_21A-42A_n257G<br>DC_21A-42A_n257H<br>DC_21A-42A_n257I<br>DC_21A-42A_n257J<br>DC_21A-42A_n257K<br>DC_21A-42A_n257L<br>DC_21A-42A_n257M<br>DC_21A-42C_n257A <sup>2</sup><br>DC_21A-42C_n257G<br>DC_21A-42C_n257H<br>DC_21A-42C_n257I<br>DC_21A-42C_n257J<br>DC_21A-42C_n257K<br>DC_21A-42C_n257L<br>DC_21A-42C_n257M<br>DC_21A-42D_n257A<br>DC_21A-42D_n257D<br>DC_21A-42D_n257E<br>DC_21A-42D_n257F<br>DC_21A-42D_n257G<br>DC_21A-42D_n257H<br>DC_21A-42D_n257I<br>DC_21A-42D_n257J<br>DC_21A-42D_n257K<br>DC_21A-42D_n257L<br>DC_21A-42D_n257M<br>DC_21A-42E_n257A<br>DC_21A-42E_n257D<br>DC_21A-42E_n257E<br>DC_21A-42E_n257F<br>DC_21A-42E_n257G<br>DC_21A-42E_n257H<br>DC_21A-42E_n257I<br>DC_21A-42E_n257J<br>DC_21A-42E_n257K<br>DC_21A-42E_n257L<br>DC_21A-42E_n257M | DC_21A_n257A<br>DC_21A_n257D<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J<br>DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_28A-41A_n257A<br>DC_28A-41A_n257G<br>DC_28A-41A_n257H<br>DC_28A-41A_n257I<br>DC_28A-41C_n257A<br>DC_28A-41C_n257G<br>DC_28A-41C_n257H<br>DC_28A-41C_n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                          |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_41C_n257I                                                                                                                                                                                                                                                 |
| DC_28A-42A_n257A <sup>2</sup><br>DC_28A-42A_n257D <sup>2</sup><br>DC_28A-42A_n257G <sup>2</sup><br>DC_28A-42A_n257H <sup>2</sup><br>DC_28A-42A_n257I <sup>2</sup><br>DC_28A-42C_n257A <sup>2</sup><br>DC_28A-42C_n257D <sup>2</sup><br>DC_28A-42C_n257G <sup>2</sup><br>DC_28A-42C_n257H <sup>2</sup><br>DC_28A-42C_n257I <sup>2</sup>                                                                                                                                                                                                                                       | DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                 |
| DC_29A-30A_n260A<br>DC_29A-30A_n260G<br>DC_29A-30A_n260H<br>DC_29A-30A_n260I<br>DC_29A-30A_n260J<br>DC_29A-30A_n260K<br>DC_29A-30A_n260L<br>DC_29A-30A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_30A_n260A                                                                                                                                                                                                                                                 |
| DC_30A-66A_n260A<br>DC_30A-66A_n260G<br>DC_30A-66A_n260H<br>DC_30A-66A_n260I<br>DC_30A-66A_n260J<br>DC_30A-66A_n260K<br>DC_30A-66A_n260L<br>DC_30A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                 |
| DC_30A-66A-66A_n260A<br>DC_30A-66A-66A_n260G<br>DC_30A-66A-66A_n260H<br>DC_30A-66A-66A_n260I<br>DC_30A-66A-66A_n260J<br>DC_30A-66A-66A_n260K<br>DC_30A-66A-66A_n260L<br>DC_30A-66A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                 | DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                 |
| DC_41A-42A_n257A<br>DC_41A-42A_n257D<br>DC_41A-42A_n257E<br>DC_41A-42A_n257F<br>DC_41A-42A_n257G<br>DC_41A-42A_n257H<br>DC_41A-42A_n257I<br>DC_41A-42A_n257J<br>DC_41A-42A_n257K<br>DC_41A-42A_n257L<br>DC_41A-42A_n257M<br>DC_41A-42C_n257A<br>DC_41A-42C_n257D<br>DC_41A-42C_n257E<br>DC_41A-42C_n257F<br>DC_41A-42C_n257G<br>DC_41A-42C_n257H<br>DC_41A-42C_n257I<br>DC_41A-42C_n257J<br>DC_41A-42C_n257K<br>DC_41A-42C_n257L<br>DC_41A-42C_n257M<br>DC_41C-42A_n257A<br>DC_41C-42A_n257D<br>DC_41C-42A_n257E<br>DC_41C-42A_n257F<br>DC_41C-42A_n257G<br>DC_41C-42A_n257H | DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Uplink EN-DC configuration (NOTE 1) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| DC_41C-42A_n257I<br>DC_41C-42A_n257J<br>DC_41C-42A_n257K<br>DC_41C-42A_n257L<br>DC_41C-42A_n257M<br>DC_41C-42C_n257A<br>DC_41C-42C_n257D<br>DC_41C-42C_n257E<br>DC_41C-42C_n257F<br>DC_41C-42C_n257G<br>DC_41C-42C_n257H<br>DC_41C-42C_n257I<br>DC_41C-42C_n257J<br>DC_41C-42C_n257K<br>DC_41C-42C_n257L<br>DC_41C-42C_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                     |
| DC_46A-48A_n260A<br>DC_46C-48A_n260A<br>DC_46D-48A_n260A<br>DC_46A-48C_n260A<br>DC_46A-48D_n260A<br>DC_46C-48C_n260A<br>DC_46C-48D_n260A<br>DC_46D-48C_n260A<br>DC_46D-48D_n260A<br>DC_46A-48A_n260(2A)<br>DC_46C-48A_n260(2A)<br>DC_46D-48A_n260(2A)<br>DC_46A-48C_n260(2A)<br>DC_46A-48D_n260(2A)<br>DC_46C-48C_n260(2A)<br>DC_46C-48D_n260(2A)<br>DC_46D-48C_n260(2A)<br>DC_46D-48D_n260(2A)<br>DC_46A-48A_n260(3A)<br>DC_46C-48A_n260(3A)<br>DC_46D-48A_n260(3A)<br>DC_46A-48C_n260(3A)<br>DC_46A-48D_n260(3A)<br>DC_46C-48C_n260(3A)<br>DC_46C-48D_n260(3A)<br>DC_46D-48C_n260(3A)<br>DC_46D-48D_n260(3A)<br>DC_46A-48A_n260(4A)<br>DC_46C-48A_n260(4A)<br>DC_46D-48A_n260(4A)<br>DC_46A-48C_n260(4A)<br>DC_46A-48D_n260(4A)<br>DC_46C-48C_n260(4A)<br>DC_46C-48D_n260(4A)<br>DC_46D-48C_n260(4A)<br>DC_46D-48D_n260(4A) | DC_48A_n260A<br>DC_48C_n260A        |
| DC_46A-48A_n261A<br>DC_46C-48A_n261A<br>DC_46D-48A_n261A<br>DC_46A-48C_n261A<br>DC_46A-48D_n261A<br>DC_46C-48C_n261A<br>DC_46C-48D_n261A<br>DC_46D-48C_n261A<br>DC_46D-48D_n261A<br>DC_46A-48A_n261(2A)<br>DC_46C-48A_n261(2A)<br>DC_46D-48A_n261(2A)<br>DC_46A-48C_n261(2A)<br>DC_46A-48D_n261(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC_48A_n261A<br>DC_48C_n261A        |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                          |
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| DC_46C-48C_n261(2A)<br>DC_46C-48D_n261(2A)<br>DC_46D-48C_n261(2A)<br>DC_46D-48D_n261(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                              |
| DC_46A-66A_n258A<br>DC_46C-66A_n258A<br>DC_46D-66A_n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_66A_n258A                                                                                                                 |
| DC_46A-66A_n258(2A)<br>DC_46A-66A_n258(3A)<br>DC_46A-66A_n258(4A)<br>DC_46A-66A_n258(5A)<br>DC_46C-66A_n258(2A)<br>DC_46C-66A_n258(3A)<br>DC_46C-66A_n258(4A)<br>DC_46C-66A_n258(5A)<br>DC_46D-66A_n258(2A)<br>DC_46D-66A_n258(3A)<br>DC_46D-66A_n258(4A)<br>DC_46D-66A_n258(5A)                                                                                                                                                                                                                                                                                                                                                                             | DC_66A_n258A                                                                                                                 |
| DC_46A-66A_n260A<br>DC_46C-66A_n260A<br>DC_46D-66A_n260A<br>DC_46E-66A_n260A<br>DC_46A-66A_n260G<br>DC_46C-66A_n260G<br>DC_46D-66A_n260G<br>DC_46E-66A_n260G<br>DC_46A-66A_n260H<br>DC_46C-66A_n260H<br>DC_46D-66A_n260H<br>DC_46E-66A_n260H<br>DC_46A-66A_n260I<br>DC_46C-66A_n260I<br>DC_46D-66A_n260I<br>DC_46E-66A_n260I<br>DC_46A-66A_n260J<br>DC_46C-66A_n260J<br>DC_46D-66A_n260J<br>DC_46E-66A_n260J<br>DC_46A-66A_n260K<br>DC_46C-66A_n260K<br>DC_46D-66A_n260K<br>DC_46E-66A_n260K<br>DC_46A-66A_n260L<br>DC_46C-66A_n260L<br>DC_46D-66A_n260L<br>DC_46E-66A_n260L<br>DC_46A-66A_n260M<br>DC_46C-66A_n260M<br>DC_46D-66A_n260M<br>DC_46E-66A_n260M | DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M |
| DC_46A-66A_n260(2A)<br>DC_46C-66A_n260(2A)<br>DC_46D-66A_n260(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_66A_n260A                                                                                                                 |
| DC_46A-66A_n261A<br>DC_46C-66A_n261A<br>DC_46D-66A_n261A<br>DC_46A-66A_n261(2A)<br>DC_46C-66A_n261(2A)<br>DC_46D-66A_n261(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_66A_n261A                                                                                                                 |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.<br>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability for all of the above combinations.                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                              |

## 5.5B.5.3 Inter-band EN-DC configurations including FR2 (four bands)

Table 5.5B.5.3-1: Inter-band EN-DC configurations including FR2 (four bands)

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-5A_n257A <sup>2</sup><br>DC_1A-3A-5A_n257D<br>DC_1A-3A-5A_n257E<br>DC_1A-3A-5A_n257F<br>DC_1A-3A-5A_n257G<br>DC_1A-3A-5A_n257H<br>DC_1A-3A-5A_n257I<br>DC_1A-3A-5A_n257J<br>DC_1A-3A-5A_n257K<br>DC_1A-3A-5A_n257L<br>DC_1A-3A-5A_n257M                                                                                                                                                                                                                           | DC_1A_n257A<br>DC_3A_n257A<br>DC_5A_n257A                                                                                                                                            |
| DC_1A-3A-7A_n257A <sup>2</sup><br>DC_1A-3A-7A_n257D<br>DC_1A-3A-7A_n257E<br>DC_1A-3A-7A_n257F<br>DC_1A-3A-7A_n257G<br>DC_1A-3A-7A_n257H<br>DC_1A-3A-7A_n257I<br>DC_1A-3A-7A_n257J<br>DC_1A-3A-7A_n257K<br>DC_1A-3A-7A_n257L<br>DC_1A-3A-7A_n257M                                                                                                                                                                                                                           | DC_1A_n257A<br>DC_3A_n257A<br>DC_7A_n257A                                                                                                                                            |
| DC_1A-3A-7A-7A_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DC_1A_n257A<br>DC_3A_n257A<br>DC_7A_n257A                                                                                                                                            |
| DC_1A-3A-8A_n257A<br>DC_1A-3A-8A_n257D<br>DC_1A-3A-8A_n257E<br>DC_1A-3A-8A_n257F<br>DC_1A-3A-8A_n257G<br>DC_1A-3A-8A_n257H<br>DC_1A-3A-8A_n257I<br>DC_1A-3A-8A_n257J<br>DC_1A-3A-8A_n257K<br>DC_1A-3A-8A_n257L<br>DC_1A-3A-8A_n257M<br>DC_1A-3C-8A_n257A<br>DC_1A-3C-8A_n257D<br>DC_1A-3C-8A_n257E<br>DC_1A-3C-8A_n257F<br>DC_1A-3C-8A_n257G<br>DC_1A-3C-8A_n257H<br>DC_1A-3C-8A_n257I<br>DC_1A-3C-8A_n257J<br>DC_1A-3C-8A_n257K<br>DC_1A-3C-8A_n257L<br>DC_1A-3C-8A_n257M | DC_1A_n257A<br>DC_3A_n257A<br>DC_8A_n257A                                                                                                                                            |
| DC_1A-3A-18A_n257A<br>DC_1A-3A-18A_n257D<br>DC_1A-3A-18A_n257E<br>DC_1A-3A-18A_n257F<br>DC_1A-3A-18A_n257G<br>DC_1A-3A-18A_n257H<br>DC_1A-3A-18A_n257I<br>DC_1A-3A-18A_n257J<br>DC_1A-3A-18A_n257K<br>DC_1A-3A-18A_n257L<br>DC_1A-3A-18A_n257M                                                                                                                                                                                                                             | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I |
| DC_1A-3A-19A_n257A <sup>2</sup><br>DC_1A-3A-19A_n257G                                                                                                                                                                                                                                                                                                                                                                                                                      | DC_1A_n257A<br>DC_1A_n257G                                                                                                                                                           |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                            | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                  |
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| DC_1A-3A-19A_n257H<br>DC_1A-3A-19A_n257I<br>DC_1A-3A-19A_n257J<br>DC_1A-3A-19A_n257K<br>DC_1A-3A-19A_n257L<br>DC_1A-3A-19A_n257M                                                                                                                                                                                                                                                                                               | DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I                    |
| DC_1A-3A-21A_n257A <sup>2</sup><br>DC_1A-3A-21A_n257G<br>DC_1A-3A-21A_n257H<br>DC_1A-3A-21A_n257I<br>DC_1A-3A-21A_n257J<br>DC_1A-3A-21A_n257K<br>DC_1A-3A-21A_n257L<br>DC_1A-3A-21A_n257M                                                                                                                                                                                                                                      | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I     |
| DC_1A-3A-28A_n257A <sup>2</sup><br>DC_1A-3A-28A_n257G<br>DC_1A-3A-28A_n257H<br>DC_1A-3A-28A_n257I<br>DC_1A-3A-28A_n257J<br>DC_1A-3A-28A_n257K<br>DC_1A-3A-28A_n257L<br>DC_1A-3A-28A_n257M                                                                                                                                                                                                                                      | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I     |
| DC_1A-3A-41A_n257A<br>DC_1A-3A-41A_n257D<br>DC_1A-3A-41A_n257E<br>DC_1A-3A-41A_n257F<br>DC_1A-3A-41A_n257G<br>DC_1A-3A-41A_n257H<br>DC_1A-3A-41A_n257I<br>DC_1A-3A-41A_n257J<br>DC_1A-3A-41A_n257K<br>DC_1A-3A-41A_n257L<br>DC_1A-3A-41A_n257M<br>DC_1A-3A-41C_n257A<br>DC_1A-3A-41C_n257D<br>DC_1A-3A-41C_n257E<br>DC_1A-3A-41C_n257F<br>DC_1A-3A-41C_n257G<br>DC_1A-3A-41C_n257H<br>DC_1A-3A-41C_n257I<br>DC_1A-3A-41C_n257J | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                          |
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| DC_1A-3A-41C_n257K<br>DC_1A-3A-41C_n257L<br>DC_1A-3A-41C_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                              |
| DC_1A-3A-42A_n257A<br>DC_1A-3A-42A_n257G<br>DC_1A-3A-42A_n257H<br>DC_1A-3A-42A_n257I<br>DC_1A-3A-42A_n257J<br>DC_1A-3A-42A_n257K<br>DC_1A-3A-42A_n257L<br>DC_1A-3A-42A_n257M<br>DC_1A-3A-42C_n257A<br>DC_1A-3A-42C_n257D<br>DC_1A-3A-42C_n257E<br>DC_1A-3A-42C_n257F<br>DC_1A-3A-42C_n257G<br>DC_1A-3A-42C_n257H<br>DC_1A-3A-42C_n257I<br>DC_1A-3A-42C_n257J<br>DC_1A-3A-42C_n257K<br>DC_1A-3A-42C_n257L<br>DC_1A-3A-42C_n257M<br>DC_1A-3A-42D_n257A<br>DC_1A-3A-42D_n257G<br>DC_1A-3A-42D_n257H<br>DC_1A-3A-42D_n257I<br>DC_1A-3A-42D_n257J<br>DC_1A-3A-42D_n257K<br>DC_1A-3A-42D_n257L<br>DC_1A-3A-42D_n257M | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_1A-5A-7A_n257A <sup>2</sup><br>DC_1A-5A-7A_n257D<br>DC_1A-5A-7A_n257E<br>DC_1A-5A-7A_n257F<br>DC_1A-5A-7A_n257G<br>DC_1A-5A-7A_n257H<br>DC_1A-5A-7A_n257I<br>DC_1A-5A-7A_n257J<br>DC_1A-5A-7A_n257K<br>DC_1A-5A-7A_n257L<br>DC_1A-5A-7A_n257M                                                                                                                                                                                                                                                                                                                                                               | DC_1A_n257A<br>DC_5A_n257A<br>DC_7A_n257A                                                                                                                                                                                                                                                                                                                                    |
| DC_1A-5A-7A-7A_n257A<br>DC_1A-5A-7A-7A_n257D<br>DC_1A-5A-7A-7A_n257E<br>DC_1A-5A-7A-7A_n257F<br>DC_1A-5A-7A-7A_n257G<br>DC_1A-5A-7A-7A_n257H<br>DC_1A-5A-7A-7A_n257I<br>DC_1A-5A-7A-7A_n257J<br>DC_1A-5A-7A-7A_n257K<br>DC_1A-5A-7A-7A_n257L<br>DC_1A-5A-7A-7A_n257M                                                                                                                                                                                                                                                                                                                                           | DC_1A_n257A<br>DC_5A_n257A<br>DC_7A_n257A                                                                                                                                                                                                                                                                                                                                    |
| DC_1A-8A-11A_n257A<br>DC_1A-8A-11A_n257D<br>DC_1A-8A-11A_n257G<br>DC_1A-8A-11A_n257H<br>DC_1A-8A-11A_n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_1A_n257A<br>DC_8A_n257A<br>DC_11A_n257A                                                                                                                                                                                                                                                                                                                                   |
| DC_1A-11A-18A_n257A<br>DC_1A-11A-18A_n257G<br>DC_1A-11A-18A_n257H<br>DC_1A-11A-18A_n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_11A_n257A<br>DC_11A_n257G<br>DC_11A_n257H<br>DC_11A_n257I                                                                                                                                                                                                                                                     |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                                                                                                                                                                                                         |
| DC_1A-18A-28A_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DC_1A_n257A<br>DC_18A_n257A<br>DC_28A_n257A                                                                                                                                                                                                                                                                          |
| DC_1A-18A-41A_n257A<br>DC_1A-18A-41A_n257G<br>DC_1A-18A-41A_n257H<br>DC_1A-18A-41A_n257I<br>DC_1A-18A-41C_n257A<br>DC_1A-18A-41C_n257G<br>DC_1A-18A-41C_n257H<br>DC_1A-18A-41C_n257I                                                                                                                                                                                                                                                                                                                                   | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I                                                             |
| DC_1A-18A-42A_n257A<br>DC_1A-18A-42A_n257D<br>DC_1A-18A-42A_n257E<br>DC_1A-18A-42A_n257F<br>DC_1A-18A-42A_n257G<br>DC_1A-18A-42A_n257H<br>DC_1A-18A-42A_n257I<br>DC_1A-18A-42A_n257J<br>DC_1A-18A-42A_n257K<br>DC_1A-18A-42A_n257L<br>DC_1A-18A-42A_n257M<br>DC_1A-18A-42C_n257A<br>DC_1A-18A-42C_n257D<br>DC_1A-18A-42C_n257E<br>DC_1A-18A-42C_n257F<br>DC_1A-18A-42C_n257G<br>DC_1A-18A-42C_n257H<br>DC_1A-18A-42C_n257I<br>DC_1A-18A-42C_n257J<br>DC_1A-18A-42C_n257K<br>DC_1A-18A-42C_n257L<br>DC_1A-18A-42C_n257M | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                             |
| DC_1A-19A-21A_n257A<br>DC_1A-19A-21A_n257D<br>DC_1A-19A-21A_n257E<br>DC_1A-19A-21A_n257F<br>DC_1A-19A-21A_n257G<br>DC_1A-19A-21A_n257H<br>DC_1A-19A-21A_n257I<br>DC_1A-19A-21A_n257J<br>DC_1A-19A-21A_n257K<br>DC_1A-19A-21A_n257L<br>DC_1A-19A-21A_n257M                                                                                                                                                                                                                                                              | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J<br>DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                  |
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| DC_1A-19A-42A_n257A<br>DC_1A-19A-42C_n257A<br>DC_1A-19A-42C_n257D<br>DC_1A-19A-42C_n257E<br>DC_1A-19A-42C_n257F<br>DC_1A-19A-42A_n257G<br>DC_1A-19A-42A_n257H<br>DC_1A-19A-42A_n257I<br>DC_1A-19A-42A_n257J<br>DC_1A-19A-42A_n257K<br>DC_1A-19A-42A_n257L<br>DC_1A-19A-42A_n257M<br>DC_1A-19A-42C_n257G<br>DC_1A-19A-42C_n257H<br>DC_1A-19A-42C_n257I<br>DC_1A-19A-42C_n257J<br>DC_1A-19A-42C_n257K<br>DC_1A-19A-42C_n257L<br>DC_1A-19A-42C_n257M                                                                                             | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M<br>DC_19A_n257A<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                                                                 |
| DC_1A-21A-28A_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_1A_n257A<br>DC_21A_n257A<br>DC_28A_n257A                                                                                                                                                                                                                                                                                          |
| DC_1A-21A-42A_n257A<br>DC_1A-21A-42A_n257G<br>DC_1A-21A-42A_n257H<br>DC_1A-21A-42A_n257I<br>DC_1A-21A-42A_n257J<br>DC_1A-21A-42A_n257K<br>DC_1A-21A-42A_n257L<br>DC_1A-21A-42A_n257M<br>DC_1A-21A-42C_n257A<br>DC_1A-21A-42C_n257D<br>DC_1A-21A-42C_n257E<br>DC_1A-21A-42C_n257F<br>DC_1A-21A-42C_n257G<br>DC_1A-21A-42C_n257H<br>DC_1A-21A-42C_n257I<br>DC_1A-21A-42C_n257J<br>DC_1A-21A-42C_n257K<br>DC_1A-21A-42C_n257L<br>DC_1A-21A-42C_n257M<br>DC_1A-21A-42D_n257A<br>DC_1A-21A-42D_n257D<br>DC_1A-21A-42D_n257E<br>DC_1A-21A-42D_n257F | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J<br>DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_1A-28A-42A_n257A<br>DC_1A-28A-42A_n257D<br>DC_1A-28A-42A_n257G<br>DC_1A-28A-42A_n257H<br>DC_1A-28A-42A_n257I<br>DC_1A-28A-42C_n257A<br>DC_1A-28A-42C_n257D<br>DC_1A-28A-42C_n257G<br>DC_1A-28A-42C_n257H<br>DC_1A-28A-42C_n257I                                                                                                                                                                                                                                                                                                            | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                             |
| DC_1A-41A-42A_n257A<br>DC_1A-41A-42A_n257D<br>DC_1A-41A-42A_n257E<br>DC_1A-41A-42A_n257F<br>DC_1A-41A-42A_n257G                                                                                                                                                                                                                                                                                                                                                                                                                               | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_41A_n257A                                                                                                                                                                                                                                                             |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                          |
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| DC_1A-41A-42A_n257H<br>DC_1A-41A-42A_n257I<br>DC_1A-41A-42A_n257J<br>DC_1A-41A-42A_n257K<br>DC_1A-41A-42A_n257L<br>DC_1A-41A-42A_n257M<br>DC_1A-41A-42C_n257A<br>DC_1A-41A-42C_n257D<br>DC_1A-41A-42C_n257E<br>DC_1A-41A-42C_n257F<br>DC_1A-41A-42C_n257G<br>DC_1A-41A-42C_n257H<br>DC_1A-41A-42C_n257I<br>DC_1A-41A-42C_n257J<br>DC_1A-41A-42C_n257K<br>DC_1A-41A-42C_n257L<br>DC_1A-41A-42C_n257M<br>DC_1A-41C-42A_n257A<br>DC_1A-41C-42A_n257D<br>DC_1A-41C-42A_n257E<br>DC_1A-41C-42A_n257F<br>DC_1A-41C-42A_n257G<br>DC_1A-41C-42A_n257H<br>DC_1A-41C-42A_n257I<br>DC_1A-41C-42A_n257J<br>DC_1A-41C-42A_n257K<br>DC_1A-41C-42A_n257L<br>DC_1A-41C-42A_n257M<br>DC_1A-41C-42C_n257A<br>DC_1A-41C-42C_n257D<br>DC_1A-41C-42C_n257E<br>DC_1A-41C-42C_n257F<br>DC_1A-41C-42C_n257G<br>DC_1A-41C-42C_n257H<br>DC_1A-41C-42C_n257I<br>DC_1A-41C-42C_n257J<br>DC_1A-41C-42C_n257K<br>DC_1A-41C-42C_n257L<br>DC_1A-41C-42C_n257M | DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_2A-5A-30A_n260A<br>DC_2A-5A-30A_n260G<br>DC_2A-5A-30A_n260H<br>DC_2A-5A-30A_n260I<br>DC_2A-5A-30A_n260J<br>DC_2A-5A-30A_n260K<br>DC_2A-5A-30A_n260L<br>DC_2A-5A-30A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_2A_n260A<br>DC_5A_n260A<br>DC_30A_n260A                                                                                                                                                                                                   |
| DC_2A-2A-5A-30A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DC_2A_n260A<br>DC_5A_n260A<br>DC_30A_n260A                                                                                                                                                                                                   |
| DC_2A-5A-66A_n260A<br>DC_2A-5A-66A_n260G<br>DC_2A-5A-66A_n260H<br>DC_2A-5A-66A_n260I<br>DC_2A-5A-66A_n260J<br>DC_2A-5A-66A_n260K<br>DC_2A-5A-66A_n260L<br>DC_2A-5A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_2A_n260A<br>DC_5A_n260A<br>DC_66A_n260A                                                                                                                                                                                                   |
| DC_2A-2A-5A-66A_n260A<br>DC_2A-5A-66A-66A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DC_2A_n260A<br>DC_5A_n260A<br>DC_66A_n260A                                                                                                                                                                                                   |
| DC_2A-12A-30A_n260A<br>DC_2A-12A-30A_n260G<br>DC_2A-12A-30A_n260H<br>DC_2A-12A-30A_n260I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DC_2A_n260A<br>DC_12A_n260A<br>DC_30A_n260A                                                                                                                                                                                                  |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                                  |
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| DC_2A-12A-30A_n260J<br>DC_2A-12A-30A_n260K<br>DC_2A-12A-30A_n260L<br>DC_2A-12A-30A_n260M                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                      |
| DC_2A-2A-12A-30A_n260A                                                                                                                                                                                                                                                                                                                                                               | DC_2A_n260A<br>DC_12A_n260A<br>DC_30A_n260A                                                                                                                                                                                                                                                                                                                                          |
| DC_2A-12A-66A_n260A<br>DC_2A-12A-66A_n260G<br>DC_2A-12A-66A_n260H<br>DC_2A-12A-66A_n260I<br>DC_2A-12A-66A_n260J<br>DC_2A-12A-66A_n260K<br>DC_2A-12A-66A_n260L<br>DC_2A-12A-66A_n260M                                                                                                                                                                                                 | DC_2A_n260A<br>DC_12A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                                                                                          |
| DC_2A-2A-12A-66A_n260A<br>DC_2A-12A-66A-66A_n260A                                                                                                                                                                                                                                                                                                                                    | DC_2A_n260A<br>DC_12A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                                                                                          |
| DC_2A-13A-66A_n260A<br>DC_2A-13A-66A_n260G<br>DC_2A-13A-66A_n260H<br>DC_2A-13A-66A_n260I<br>DC_2A-13A-66A_n260J<br>DC_2A-13A-66A_n260K<br>DC_2A-13A-66A_n260L<br>DC_2A-13A-66A_n260M                                                                                                                                                                                                 | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M<br>DC_13A_n260A<br>DC_13A_n260G<br>DC_13A_n260H<br>DC_13A_n260I<br>DC_13A_n260J<br>DC_13A_n260K<br>DC_13A_n260L<br>DC_13A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M |
| DC_2A-13A-66A_n260(A-G)<br>DC_2A-13A-66A_n260(A-H)<br>DC_2A-13A-66A_n260(A-2G)<br>DC_2A-13A-66A_n260(2A)<br>DC_2A-13A-66A_n260(2A-G)<br>DC_2A-13A-66A_n260(2A-2G)<br>DC_2A-13A-66A_n260(3A)<br>DC_2A-13A-66A_n260(3A-G)<br>DC_2A-13A-66A_n260(4A)<br>DC_2A-13A-66A_n260(5A)<br>DC_2A-13A-66A_n260(6A)<br>DC_2A-13A-66A_n260(G-H)<br>DC_2A-13A-66A_n260(2G)<br>DC_2A-13A-66A_n260(2H) | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_13A_n260A<br>DC_13A_n260G<br>DC_13A_n260H<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H                                                                                                                                                                                                                                            |
| DC_2A-13A-66A_n261A<br>DC_2A-13A-66A_n261G<br>DC_2A-13A-66A_n261H<br>DC_2A-13A-66A_n261I<br>DC_2A-13A-66A_n261J<br>DC_2A-13A-66A_n261K<br>DC_2A-13A-66A_n261L<br>DC_2A-13A-66A_n261M                                                                                                                                                                                                 | DC_2A_n261A<br>DC_2A_n261G<br>DC_2A_n261H<br>DC_2A_n261I<br>DC_2A_n261J<br>DC_2A_n261K<br>DC_2A_n261L<br>DC_2A_n261M<br>DC_13A_n261A                                                                                                                                                                                                                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                                  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DC_13A_n261G<br>DC_13A_n261H<br>DC_13A_n261I<br>DC_13A_n261J<br>DC_13A_n261K<br>DC_13A_n261L<br>DC_13A_n261M<br>DC_66A_n261A<br>DC_66A_n261G<br>DC_66A_n261H<br>DC_66A_n261I<br>DC_66A_n261J<br>DC_66A_n261K<br>DC_66A_n261L<br>DC_66A_n261M                                                                                                                                         |
| DC_2A-13A-66A_n261(A-G)<br>DC_2A-13A-66A_n261(A-G-H)<br>DC_2A-13A-66A_n261(A-G-I)<br>DC_2A-13A-66A_n261(A-2G)<br>DC_2A-13A-66A_n261(A-H)<br>DC_2A-13A-66A_n261(A-I)<br>DC_2A-13A-66A_n261(A-J)<br>DC_2A-13A-66A_n261(A-K)<br>DC_2A-13A-66A_n261(2A)<br>DC_2A-13A-66A_n261(2A-G)<br>DC_2A-13A-66A_n261(2A-H)<br>DC_2A-13A-66A_n261(2A-I)<br>DC_2A-13A-66A_n261(3A)<br>DC_2A-13A-66A_n261(3A-G)<br>DC_2A-13A-66A_n261(4A)<br>DC_2A-13A-66A_n261(G-H)<br>DC_2A-13A-66A_n261(G-I)<br>DC_2A-13A-66A_n261(G-J)<br>DC_2A-13A-66A_n261(2G)<br>DC_2A-13A-66A_n261(H-I)<br>DC_2A-13A-66A_n261(2H) | DC_2A_n261A<br>DC_2A_n261G<br>DC_2A_n261H<br>DC_2A_n261I<br>DC_2A_n261J<br>DC_2A_n261K<br>DC_13A_n261A<br>DC_13A_n261G<br>DC_13A_n261H<br>DC_13A_n261I<br>DC_13A_n261J<br>DC_13A_n261K<br>DC_66A_n261A<br>DC_66A_n261G<br>DC_66A_n261H<br>DC_66A_n261I<br>DC_66A_n261J<br>DC_66A_n261K                                                                                               |
| DC_2A-14A-30A_n260A<br>DC_2A-14A-30A_n260G<br>DC_2A-14A-30A_n260H<br>DC_2A-14A-30A_n260I<br>DC_2A-14A-30A_n260J<br>DC_2A-14A-30A_n260K<br>DC_2A-14A-30A_n260L<br>DC_2A-14A-30A_n260M                                                                                                                                                                                                                                                                                                                                                                                                    | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M<br>DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_30A_n260A<br>DC_30A_n260G<br>DC_30A_n260H<br>DC_30A_n260I<br>DC_30A_n260J<br>DC_30A_n260K<br>DC_30A_n260L<br>DC_30A_n260M |
| DC_2A-14A-66A_n260A<br>DC_2A-14A-66A_n260G<br>DC_2A-14A-66A_n260H<br>DC_2A-14A-66A_n260I<br>DC_2A-14A-66A_n260J<br>DC_2A-14A-66A_n260K                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K                                                                                                                                                                                                                                                                                               |

| EN-DC configuration                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                                  |
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| DC_2A-14A-66A_n260L<br>DC_2A-14A-66A_n260M                                                                                                                                                                           | DC_2A_n260L<br>DC_2A_n260M<br>DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M                                                                                           |
| DC_2A-2A-14A-66A_n260A<br>DC_2A-2A-14A-66A_n260G<br>DC_2A-2A-14A-66A_n260H<br>DC_2A-2A-14A-66A_n260I<br>DC_2A-2A-14A-66A_n260J<br>DC_2A-2A-14A-66A_n260K<br>DC_2A-2A-14A-66A_n260L<br>DC_2A-2A-14A-66A_n260M         | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M<br>DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M |
| DC_2A-14A-66A-66A_n260A<br>DC_2A-14A-66A-66A_n260G<br>DC_2A-14A-66A-66A_n260H<br>DC_2A-14A-66A-66A_n260I<br>DC_2A-14A-66A-66A_n260J<br>DC_2A-14A-66A-66A_n260K<br>DC_2A-14A-66A-66A_n260L<br>DC_2A-14A-66A-66A_n260M | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M<br>DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                   | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                      |
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| DC_2A-29A-30A_n260A<br>DC_2A-29A-30A_n260G<br>DC_2A-29A-30A_n260H<br>DC_2A-29A-30A_n260I<br>DC_2A-29A-30A_n260J<br>DC_2A-29A-30A_n260K<br>DC_2A-29A-30A_n260L<br>DC_2A-29A-30A_n260M                                                                                                                                                                  | DC_2A_n260A<br>DC_30A_n260A                                                                                                                                                                                                              |
| DC_2A-2A-29A-30A_n260A                                                                                                                                                                                                                                                                                                                                | DC_2A_n260A<br>DC_30A_n260A                                                                                                                                                                                                              |
| DC_2A-30A-66A_n260A<br>DC_2A-30A-66A_n260G<br>DC_2A-30A-66A_n260H<br>DC_2A-30A-66A_n260I<br>DC_2A-30A-66A_n260J<br>DC_2A-30A-66A_n260K<br>DC_2A-30A-66A_n260L<br>DC_2A-30A-66A_n260M                                                                                                                                                                  | DC_2A_n260A<br>DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                              |
| DC_2A-30A-66A-66A_n260A                                                                                                                                                                                                                                                                                                                               | DC_2A_n260A<br>DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                              |
| DC_2A-46A-66A_n261A<br>DC_2A-46C-66A_n261A<br>DC_2A-46D-66A_n261A                                                                                                                                                                                                                                                                                     | DC_2A_n261A<br>DC_66A_n261A                                                                                                                                                                                                              |
| DC_2A-46A-66A_n261(2A)<br>DC_2A-46C-66A_n261(2A)<br>DC_2A-46D-66A_n261(2A)                                                                                                                                                                                                                                                                            | DC_2A_n261A<br>DC_66A_n261A                                                                                                                                                                                                              |
| DC_3A-5A-7A_n257A <sup>2</sup><br>DC_3A-5A-7A_n257D<br>DC_3A-5A-7A_n257E<br>DC_3A-5A-7A_n257F<br>DC_3A-5A-7A_n257G<br>DC_3A-5A-7A_n257H<br>DC_3A-5A-7A_n257I<br>DC_3A-5A-7A_n257J<br>DC_3A-5A-7A_n257K<br>DC_3A-5A-7A_n257L<br>DC_3A-5A-7A_n257M                                                                                                      | DC_3A_n257A<br>DC_5A_n257A<br>DC_7A_n257A                                                                                                                                                                                                |
| DC_3A-5A-7A-7A_n257A <sup>2</sup><br>DC_3A-5A-7A-7A_n257D<br>DC_3A-5A-7A-7A_n257E<br>DC_3A-5A-7A-7A_n257F<br>DC_3A-5A-7A-7A_n257G<br>DC_3A-5A-7A-7A_n257H<br>DC_3A-5A-7A-7A_n257I<br>DC_3A-5A-7A-7A_n257J<br>DC_3A-5A-7A-7A_n257K<br>DC_3A-5A-7A-7A_n257L<br>DC_3A-5A-7A-7A_n257M                                                                     | DC_3A_n257A<br>DC_5A_n257A<br>DC_7A_n257A                                                                                                                                                                                                |
| DC_3A-18A-42A_n257A<br>DC_3A-18A-42A_n257D<br>DC_3A-18A-42A_n257E<br>DC_3A-18A-42A_n257F<br>DC_3A-18A-42A_n257G<br>DC_3A-18A-42A_n257H<br>DC_3A-18A-42A_n257I<br>DC_3A-18A-42A_n257J<br>DC_3A-18A-42A_n257K<br>DC_3A-18A-42A_n257L<br>DC_3A-18A-42A_n257M<br>DC_3A-18A-42C_n257A<br>DC_3A-18A-42C_n257D<br>DC_3A-18A-42C_n257E<br>DC_3A-18A-42C_n257F | DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                      |
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| DC_3A-18A-42C_n257G<br>DC_3A-18A-42C_n257H<br>DC_3A-18A-42C_n257I<br>DC_3A-18A-42C_n257J<br>DC_3A-18A-42C_n257K<br>DC_3A-18A-42C_n257L<br>DC_3A-18A-42C_n257M                                                                                                                                                                                                                                                              | DC_42C_n257I                                                                                                                                                                                                                                             |
| DC_3A-19A-21A_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                           | DC_3A_n257A<br>DC_19A_n257A<br>DC_21A_n257A                                                                                                                                                                                                              |
| DC_3A-19A-42A_n257A<br>DC_3A-19A-42A_n257D<br>DC_3A-19A-42A_n257E<br>DC_3A-19A-42A_n257F<br>DC_3A-19A-42A_n257G<br>DC_3A-19A-42A_n257H<br>DC_3A-19A-42A_n257I<br>DC_3A-19A-42C_n257A<br>DC_3A-19A-42C_n257D<br>DC_3A-19A-42C_n257E<br>DC_3A-19A-42C_n257F<br>DC_3A-19A-42C_n257G<br>DC_3A-19A-42C_n257H<br>DC_3A-19A-42C_n257I<br>DC_3A-19A-42D_n257A<br>DC_3A-19A-42D_n257D<br>DC_3A-19A-42D_n257E<br>DC_3A-19A-42D_n257F | DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_19A_n257A<br>DC_19A_n257D<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                  |
| DC_3A-21A-42A_n257A<br>DC_3A-21A-42A_n257D<br>DC_3A-21A-42A_n257E<br>DC_3A-21A-42A_n257F<br>DC_3A-21A-42A_n257G<br>DC_3A-21A-42A_n257H<br>DC_3A-21A-42A_n257I<br>DC_3A-21A-42C_n257A<br>DC_3A-21A-42C_n257D<br>DC_3A-21A-42C_n257E<br>DC_3A-21A-42C_n257F<br>DC_3A-21A-42C_n257G<br>DC_3A-21A-42C_n257H<br>DC_3A-21A-42C_n257I<br>DC_3A-21A-42D_n257A<br>DC_3A-21A-42D_n257D<br>DC_3A-21A-42D_n257E<br>DC_3A-21A-42D_n257F | DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_21A_n257A<br>DC_21A_n257D<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                  |
| DC_3A-28A-41A_n257A<br>DC_3A-28A-41A_n257G<br>DC_3A-28A-41A_n257H<br>DC_3A-28A-41A_n257I<br>DC_3A-28A-41C_n257A<br>DC_3A-28A-41C_n257G<br>DC_3A-28A-41C_n257H<br>DC_3A-28A-41C_n257I                                                                                                                                                                                                                                       | DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_3A-28A-42A_n257A<br>DC_3A-28A-42A_n257D<br>DC_3A-28A-42A_n257G                                                                                                                                                                                                                                                                                                                                                          | DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H                                                                                                                                                                                                                |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                      |
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| DC_3A-28A-42A_n257H<br>DC_3A-28A-42A_n257I<br>DC_3A-28A-42C_n257A<br>DC_3A-28A-42C_n257D<br>DC_3A-28A-42C_n257G<br>DC_3A-28A-42C_n257H<br>DC_3A-28A-42C_n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_3A_n257I<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                                                              |
| DC_3A-41A-42A_n257A<br>DC_3A-41A-42A_n257D<br>DC_3A-41A-42A_n257E<br>DC_3A-41A-42A_n257F<br>DC_3A-41A-42A_n257G<br>DC_3A-41A-42A_n257H<br>DC_3A-41A-42A_n257I<br>DC_3A-41A-42A_n257J<br>DC_3A-41A-42A_n257K<br>DC_3A-41A-42A_n257L<br>DC_3A-41A-42A_n257M<br>DC_3A-41A-42C_n257A<br>DC_3A-41A-42C_n257D<br>DC_3A-41A-42C_n257E<br>DC_3A-41A-42C_n257F<br>DC_3A-41A-42C_n257G<br>DC_3A-41A-42C_n257H<br>DC_3A-41A-42C_n257I<br>DC_3A-41A-42C_n257J<br>DC_3A-41A-42C_n257K<br>DC_3A-41A-42C_n257L<br>DC_3A-41A-42C_n257M<br>DC_3A-41C-42A_n257A<br>DC_3A-41C-42A_n257D<br>DC_3A-41C-42A_n257E<br>DC_3A-41C-42A_n257F<br>DC_3A-41C-42A_n257G<br>DC_3A-41C-42A_n257H<br>DC_3A-41C-42A_n257I<br>DC_3A-41C-42A_n257J<br>DC_3A-41C-42A_n257K<br>DC_3A-41C-42A_n257L<br>DC_3A-41C-42A_n257M<br>DC_3A-41C-42C_n257A<br>DC_3A-41C-42C_n257D<br>DC_3A-41C-42C_n257E<br>DC_3A-41C-42C_n257F<br>DC_3A-41C-42C_n257G<br>DC_3A-41C-42C_n257H<br>DC_3A-41C-42C_n257I<br>DC_3A-41C-42C_n257J<br>DC_3A-41C-42C_n257K<br>DC_3A-41C-42C_n257L<br>DC_3A-41C-42C_n257M | DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_5A-30A-66A_n260A<br>DC_5A-30A-66A_n260G<br>DC_5A-30A-66A_n260H<br>DC_5A-30A-66A_n260I<br>DC_5A-30A-66A_n260J<br>DC_5A-30A-66A_n260K<br>DC_5A-30A-66A_n260L<br>DC_5A-30A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_5A_n260A<br>DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                              |
| DC_5A-30A-66A-66A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DC_5A_n260A                                                                                                                                                                                                                                                                                                              |

| EN-DC configuration                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                                          |
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|                                                                                                                                                                                                                              | DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                                                                                                                 |
| DC_12A-30A-66A_n260A<br>DC_12A-30A-66A_n260G<br>DC_12A-30A-66A_n260H<br>DC_12A-30A-66A_n260I<br>DC_12A-30A-66A_n260J<br>DC_12A-30A-66A_n260K<br>DC_12A-30A-66A_n260L<br>DC_12A-30A-66A_n260M                                 | DC_12A_n260A<br>DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                                                                                                 |
| DC_12A-30A-66A-66A_n260A                                                                                                                                                                                                     | DC_12A_n260A<br>DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                                                                                                 |
| DC_14A-30A-66A_n260A<br>DC_14A-30A-66A_n260G<br>DC_14A-30A-66A_n260H<br>DC_14A-30A-66A_n260I<br>DC_14A-30A-66A_n260J<br>DC_14A-30A-66A_n260K<br>DC_14A-30A-66A_n260L<br>DC_14A-30A-66A_n260M                                 | DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_30A_n260A<br>DC_30A_n260G<br>DC_30A_n260H<br>DC_30A_n260I<br>DC_30A_n260J<br>DC_30A_n260K<br>DC_30A_n260L<br>DC_30A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M |
| DC_14A-30A-66A-66A_n260A<br>DC_14A-30A-66A-66A_n260G<br>DC_14A-30A-66A-66A_n260H<br>DC_14A-30A-66A-66A_n260I<br>DC_14A-30A-66A-66A_n260J<br>DC_14A-30A-66A-66A_n260K<br>DC_14A-30A-66A-66A_n260L<br>DC_14A-30A-66A-66A_n260M | DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_30A_n260A<br>DC_30A_n260G<br>DC_30A_n260H<br>DC_30A_n260I<br>DC_30A_n260J<br>DC_30A_n260K<br>DC_30A_n260L<br>DC_30A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M |
| DC_19A-21A-42A_n257A <sup>2</sup><br>DC_19A-21A-42A_n257D <sup>2</sup><br>DC_19A-21A-42A_n257E <sup>2</sup><br>DC_19A-21A-42A_n257F <sup>2</sup>                                                                             | DC_19A_n257A<br>DC_19A_n257D<br>DC_19A_n257G<br>DC_19A_n257H                                                                                                                                                                                                                                                                                                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                          |
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| DC_19A-21A-42A_n257G <sup>2</sup><br>DC_19A-21A-42A_n257H <sup>2</sup><br>DC_19A-21A-42A_n257I <sup>2</sup><br>DC_19A-21A-42C_n257A <sup>2</sup><br>DC_19A-21A-42C_n257D <sup>2</sup><br>DC_19A-21A-42C_n257E <sup>2</sup><br>DC_19A-21A-42C_n257F <sup>2</sup><br>DC_19A-21A-42C_n257G <sup>2</sup><br>DC_19A-21A-42C_n257H <sup>2</sup><br>DC_19A-21A-42C_n257I <sup>2</sup>               | DC_19A_n257I<br>DC_21A_n257A<br>DC_21A_n257D<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257D<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                                                                                 |
| DC_21A-28A-42A_n257A <sup>2</sup><br>DC_21A-28A-42C_n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                       | DC_21A_n257A<br>DC_28A_n257A<br>DC_42A_n257A                                                                                                                                                                                                                                                                                 |
| DC_28A-41A-42A_n257A<br>DC_28A-41A-42A_n257G<br>DC_28A-41A-42A_n257H<br>DC_28A-41A-42A_n257I<br>DC_28A-41C-42A_n257A<br>DC_28A-41C-42A_n257G<br>DC_28A-41C-42A_n257H<br>DC_28A-41C-42A_n257I<br>DC_28A-41A-42C_n257A<br>DC_28A-41A-42C_n257G<br>DC_28A-41A-42C_n257H<br>DC_28A-41A-42C_n257I<br>DC_28A-41C-42C_n257A<br>DC_28A-41C-42C_n257G<br>DC_28A-41C-42C_n257H<br>DC_28A-41C-42C_n257I | DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.<br>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability for all of the above combinations.                                                                                                                                      |                                                                                                                                                                                                                                                                                                                              |

#### 5.5B.5.4 Inter-band EN-DC configurations including FR2 (five bands)

**Table 5.5B.5.4-1: Inter-band EN-DC configurations including FR2 (five bands)**

| EN-DC configuration                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| DC_1A-3A-5A-7A_n257A<br>DC_1A-3A-5A-7A_n257D<br>DC_1A-3A-5A-7A_n257E<br>DC_1A-3A-5A-7A_n257F<br>DC_1A-3A-5A-7A_n257G<br>DC_1A-3A-5A-7A_n257H<br>DC_1A-3A-5A-7A_n257I<br>DC_1A-3A-5A-7A_n257J<br>DC_1A-3A-5A-7A_n257K<br>DC_1A-3A-5A-7A_n257L<br>DC_1A-3A-5A-7A_n257M | DC_1A_n257A<br>DC_3A_n257A<br>DC_5A_n257A<br>DC_7A_n257A |
| DC_1A-3A-5A-7A-7A_n257A <sup>2</sup><br>DC_1A-3A-5A-7A-7A_n257D<br>DC_1A-3A-5A-7A-7A_n257E<br>DC_1A-3A-5A-7A-7A_n257F<br>DC_1A-3A-5A-7A-7A_n257G<br>DC_1A-3A-5A-7A-7A_n257H<br>DC_1A-3A-5A-7A-7A_n257I<br>DC_1A-3A-5A-7A-7A_n257J<br>DC_1A-3A-5A-7A-7A_n257K         | DC_1A_n257A<br>DC_3A_n257A<br>DC_5A_n257A<br>DC_7A_n257A |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-5A-7A-7A_n257L<br>DC_1A-3A-5A-7A-7A_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                      |
| DC_1A-3A-18A-42A_n257A<br>DC_1A-3A-18A-42A_n257D<br>DC_1A-3A-18A-42A_n257E<br>DC_1A-3A-18A-42A_n257F<br>DC_1A-3A-18A-42A_n257G<br>DC_1A-3A-18A-42A_n257H<br>DC_1A-3A-18A-42A_n257I<br>DC_1A-3A-18A-42A_n257J<br>DC_1A-3A-18A-42A_n257K<br>DC_1A-3A-18A-42A_n257L<br>DC_1A-3A-18A-42A_n257M<br>DC_1A-3A-18A-42C_n257A<br>DC_1A-3A-18A-42C_n257D<br>DC_1A-3A-18A-42C_n257E<br>DC_1A-3A-18A-42C_n257F<br>DC_1A-3A-18A-42C_n257G<br>DC_1A-3A-18A-42C_n257H<br>DC_1A-3A-18A-42C_n257I<br>DC_1A-3A-18A-42C_n257J<br>DC_1A-3A-18A-42C_n257K<br>DC_1A-3A-18A-42C_n257L<br>DC_1A-3A-18A-42C_n257M | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_1A-3A-19A-21A_n257A <sup>2</sup><br>DC_1A-3A-19A-21A_n257D <sup>2</sup><br>DC_1A-3A-19A-21A_n257E <sup>2</sup><br>DC_1A-3A-19A-21A_n257F <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_1A_n257A<br>DC_3A_n257A<br>DC_19A_n257A<br>DC_21A_n257A                                                                                                                                                                                                                                                           |
| DC_1A-3A-19A-42A_n257A<br>DC_1A-3A-19A-42A_n257D<br>DC_1A-3A-19A-42A_n257E<br>DC_1A-3A-19A-42A_n257F<br>DC_1A-3A-19A-42A_n257G<br>DC_1A-3A-19A-42A_n257H<br>DC_1A-3A-19A-42A_n257I<br>DC_1A-3A-19A-42A_n257J<br>DC_1A-3A-19A-42A_n257K<br>DC_1A-3A-19A-42A_n257L<br>DC_1A-3A-19A-42A_n257M<br>DC_1A-3A-19A-42C_n257A<br>DC_1A-3A-19A-42C_n257D<br>DC_1A-3A-19A-42C_n257E<br>DC_1A-3A-19A-42C_n257F<br>DC_1A-3A-19A-42C_n257G<br>DC_1A-3A-19A-42C_n257H<br>DC_1A-3A-19A-42C_n257I<br>DC_1A-3A-19A-42C_n257J<br>DC_1A-3A-19A-42C_n257K<br>DC_1A-3A-19A-42C_n257L<br>DC_1A-3A-19A-42C_n257M | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I     |
| DC_1A-3A-21A-42A_n257A<br>DC_1A-3A-21A-42A_n257G<br>DC_1A-3A-21A-42A_n257H<br>DC_1A-3A-21A-42A_n257I<br>DC_1A-3A-21A-42A_n257J<br>DC_1A-3A-21A-42A_n257K<br>DC_1A-3A-21A-42A_n257L<br>DC_1A-3A-21A-42A_n257M<br>DC_1A-3A-21A-42C_n257A<br>DC_1A-3A-21A-42C_n257D<br>DC_1A-3A-21A-42C_n257E<br>DC_1A-3A-21A-42C_n257F<br>DC_1A-3A-21A-42C_n257G<br>DC_1A-3A-21A-42C_n257H<br>DC_1A-3A-21A-42C_n257I<br>DC_1A-3A-21A-42C_n257J                                                                                                                                                             | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                                                                     |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-21A-42C_n257K<br>DC_1A-3A-21A-42C_n257L<br>DC_1A-3A-21A-42C_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                                                                                                                                                                                                                                                         |
| DC_1A-3A-28A-42A_n257A<br>DC_1A-3A-28A-42A_n257G<br>DC_1A-3A-28A-42A_n257H<br>DC_1A-3A-28A-42A_n257I<br>DC_1A-3A-28A-42A_n257J<br>DC_1A-3A-28A-42A_n257K<br>DC_1A-3A-28A-42A_n257L<br>DC_1A-3A-28A-42A_n257M<br>DC_1A-3A-28A-42C_n257A<br>DC_1A-3A-28A-42C_n257G<br>DC_1A-3A-28A-42C_n257H<br>DC_1A-3A-28A-42C_n257I<br>DC_1A-3A-28A-42C_n257J<br>DC_1A-3A-28A-42C_n257K<br>DC_1A-3A-28A-42C_n257L<br>DC_1A-3A-28A-42C_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n257J<br>DC_3A_n257K<br>DC_3A_n257L<br>DC_3A_n257M<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I     |
| DC_1A-3A-41A-42A_n257A<br>DC_1A-3A-41A-42A_n257D<br>DC_1A-3A-41A-42A_n257E<br>DC_1A-3A-41A-42A_n257F<br>DC_1A-3A-41A-42A_n257G<br>DC_1A-3A-41A-42A_n257H<br>DC_1A-3A-41A-42A_n257I<br>DC_1A-3A-41A-42A_n257J<br>DC_1A-3A-41A-42A_n257K<br>DC_1A-3A-41A-42A_n257L<br>DC_1A-3A-41A-42A_n257M<br>DC_1A-3A-41A-42C_n257A<br>DC_1A-3A-41A-42C_n257D<br>DC_1A-3A-41A-42C_n257E<br>DC_1A-3A-41A-42C_n257F<br>DC_1A-3A-41A-42C_n257G<br>DC_1A-3A-41A-42C_n257H<br>DC_1A-3A-41A-42C_n257I<br>DC_1A-3A-41A-42C_n257J<br>DC_1A-3A-41A-42C_n257K<br>DC_1A-3A-41A-42C_n257L<br>DC_1A-3A-41A-42C_n257M<br>DC_1A-3A-41C-42A_n257A<br>DC_1A-3A-41C-42A_n257D<br>DC_1A-3A-41C-42A_n257E<br>DC_1A-3A-41C-42A_n257F<br>DC_1A-3A-41C-42A_n257G<br>DC_1A-3A-41C-42A_n257H<br>DC_1A-3A-41C-42A_n257I<br>DC_1A-3A-41C-42A_n257J<br>DC_1A-3A-41C-42A_n257K<br>DC_1A-3A-41C-42A_n257L<br>DC_1A-3A-41C-42A_n257M<br>DC_1A-3A-41C-42C_n257A<br>DC_1A-3A-41C-42C_n257D<br>DC_1A-3A-41C-42C_n257E<br>DC_1A-3A-41C-42C_n257F<br>DC_1A-3A-41C-42C_n257G | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-41C-42C_n257H<br>DC_1A-3A-41C-42C_n257I<br>DC_1A-3A-41C-42C_n257J<br>DC_1A-3A-41C-42C_n257K<br>DC_1A-3A-41C-42C_n257L<br>DC_1A-3A-41C-42C_n257M                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                      |
| DC_1A-19A-21A-42A_n257A<br>DC_1A-19A-21A-42A_n257D<br>DC_1A-19A-21A-42A_n257E<br>DC_1A-19A-21A-42A_n257F<br>DC_1A-19A-21A-42A_n257G<br>DC_1A-19A-21A-42A_n257H<br>DC_1A-19A-21A-42A_n257I<br>DC_1A-19A-21A-42A_n257J<br>DC_1A-19A-21A-42A_n257K<br>DC_1A-19A-21A-42A_n257L<br>DC_1A-19A-21A-42A_n257M<br>DC_1A-19A-21A-42C_n257A<br>DC_1A-19A-21A-42C_n257D<br>DC_1A-19A-21A-42C_n257E<br>DC_1A-19A-21A-42C_n257F<br>DC_1A-19A-21A-42C_n257G<br>DC_1A-19A-21A-42C_n257H<br>DC_1A-19A-21A-42C_n257I<br>DC_1A-19A-21A-42C_n257J<br>DC_1A-19A-21A-42C_n257K<br>DC_1A-19A-21A-42C_n257L<br>DC_1A-19A-21A-42C_n257M | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n257J<br>DC_1A_n257K<br>DC_1A_n257L<br>DC_1A_n257M<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n257J<br>DC_21A_n257K<br>DC_21A_n257L<br>DC_21A_n257M<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_1A-19A-28A-42C_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC_1A_n257A<br>DC_19A_n257A<br>DC_28A_n257A<br>DC_42A_n257A                                                                                                                                                                                                                                                                                                                          |
| DC_1A-21A-28A-42A_n257A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC_1A_n257A<br>DC_21A_n257A<br>DC_28A_n257A<br>DC_42A_n257A                                                                                                                                                                                                                                                                                                                          |
| DC_2A-5A-30A-66A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DC_2A_n260A<br>DC_5A_n260A<br>DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                                                                           |
| DC_2A-12A-30A-66A_n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DC_2A_n260A<br>DC_12A_n260A<br>DC_30A_n260A<br>DC_66A_n260A                                                                                                                                                                                                                                                                                                                          |
| DC_2A-14A-30A-66A_n260A<br>DC_2A-14A-30A-66A_n260G<br>DC_2A-14A-30A-66A_n260H<br>DC_2A-14A-30A-66A_n260I<br>DC_2A-14A-30A-66A_n260J<br>DC_2A-14A-30A-66A_n260K<br>DC_2A-14A-30A-66A_n260L<br>DC_2A-14A-30A-66A_n260M                                                                                                                                                                                                                                                                                                                                                                                           | DC_2A_n260A<br>DC_2A_n260G<br>DC_2A_n260H<br>DC_2A_n260I<br>DC_2A_n260J<br>DC_2A_n260K<br>DC_2A_n260L<br>DC_2A_n260M<br>DC_14A_n260A<br>DC_14A_n260G<br>DC_14A_n260H<br>DC_14A_n260I<br>DC_14A_n260J<br>DC_14A_n260K<br>DC_14A_n260L<br>DC_14A_n260M<br>DC_30A_n260A<br>DC_30A_n260G<br>DC_30A_n260H                                                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_30A_n260I<br>DC_30A_n260J<br>DC_30A_n260K<br>DC_30A_n260L<br>DC_30A_n260M<br>DC_66A_n260A<br>DC_66A_n260G<br>DC_66A_n260H<br>DC_66A_n260I<br>DC_66A_n260J<br>DC_66A_n260K<br>DC_66A_n260L<br>DC_66A_n260M                                                                                                                                                                             |
| DC_3A-19A-21A-42A_n257A<br>DC_3A-19A-21A-42A_n257D<br>DC_3A-19A-21A-42A_n257E<br>DC_3A-19A-21A-42A_n257F<br>DC_3A-19A-21A-42C_n257A<br>DC_3A-19A-21A-42C_n257D<br>DC_3A-19A-21A-42C_n257E<br>DC_3A-19A-21A-42C_n257F                                                                                                                                                                                                                         | DC_3A_n257A<br>DC_19A_n257A<br>DC_21A_n257A<br>DC_3A_n257D<br>DC_19A_n257D<br>DC_21A_n257D                                                                                                                                                                                                                                                                                               |
| DC_3A-28A-41A-42A_n257A<br>DC_3A-28A-41A-42A_n257G<br>DC_3A-28A-41A-42A_n257H<br>DC_3A-28A-41A-42A_n257I<br>DC_3A-28A-41A-42C_n257A<br>DC_3A-28A-41A-42C_n257G<br>DC_3A-28A-41A-42C_n257H<br>DC_3A-28A-41A-42C_n257I<br>DC_3A-28A-41C-42A_n257A<br>DC_3A-28A-41C-42A_n257G<br>DC_3A-28A-41C-42A_n257H<br>DC_3A-28A-41C-42A_n257I<br>DC_3A-28A-41C-42C_n257A<br>DC_3A-28A-41C-42C_n257G<br>DC_3A-28A-41C-42C_n257H<br>DC_3A-28A-41C-42C_n257I | DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.<br>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability for all of the above combinations.                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                          |

5.5B.5.5 Void

## 5.5B.6 Inter-band EN-DC including FR1 and FR2

5.5B.6.1 Void

5.5B.6.2 Inter-band EN-DC configurations including FR1 and FR2 (three bands)

**Table 5.5B.6.2-1: Inter-band EN-DC configurations including FR1 and FR2 (three bands)**

| EN-DC configuration          | Uplink EN-DC configuration (NOTE 1) |
|------------------------------|-------------------------------------|
| DC_1A_n3A-n257A <sup>2</sup> | DC_1A_n3A                           |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A_n3A-n257G <sup>2</sup><br>DC_1A_n3A-n257H <sup>2</sup><br>DC_1A_n3A-n257I <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                               | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I                                                                                                              |
| DC_1A_n28A-n257A <sup>2</sup><br>DC_1A_n28A-n257G <sup>2</sup><br>DC_1A_n28A-n257H <sup>2</sup><br>DC_1A_n28A-n257I <sup>2</sup>                                                                                                                                                                                                                                                                                                                                           | DC_1A_n28A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I                                                                                                |
| DC_1A_n77A-n257A <sup>2</sup><br>DC_1A_n77A-n257D <sup>2</sup><br>DC_1A_n77A-n257E <sup>2</sup><br>DC_1A_n77A-n257F <sup>2</sup><br>DC_1A_n77A-n257G <sup>2</sup><br>DC_1A_n77A-n257H <sup>2</sup><br>DC_1A_n77A-n257I <sup>2</sup><br>DC_1A_n77C-n257A <sup>2</sup><br>DC_1A_n77C-n257D <sup>2</sup><br>DC_1A_n77C-n257E <sup>2</sup><br>DC_1A_n77C-n257F <sup>2</sup>                                                                                                    | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_1A_n77A-n257H<br>DC_1A_n77A-n257I |
| DC_1A_n77(2A)-n257A <sup>2</sup><br>DC_1A_n77(2A)-n257D <sup>2</sup><br>DC_1A_n77(2A)-n257G <sup>2</sup><br>DC_1A_n77(2A)-n257H <sup>2</sup><br>DC_1A_n77(2A)-n257I <sup>2</sup>                                                                                                                                                                                                                                                                                           | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I                                                                                 |
| DC_1A_n77A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC_1A_n77A<br>DC_1A_n258A                                                                                                                                             |
| DC_1A_n78A-n257A <sup>2</sup><br>DC_1A_n78A-n257D <sup>2</sup><br>DC_1A_n78A-n257E <sup>2</sup><br>DC_1A_n78A-n257F <sup>2</sup><br>DC_1A_n78C-n257A <sup>2</sup><br>DC_1A_n78C-n257D <sup>2</sup><br>DC_1A_n78C-n257E <sup>2</sup><br>DC_1A_n78C-n257F <sup>2</sup>                                                                                                                                                                                                       | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257H<br>DC_1A_n78A-n257A                                                                                           |
| DC_1A_n78A-n257G <sup>2</sup><br>DC_1A_n78A-n257H <sup>2</sup><br>DC_1A_n78A-n257I <sup>2</sup><br>DC_1A_n78A-n257J <sup>2</sup><br>DC_1A_n78A-n257K <sup>2</sup><br>DC_1A_n78A-n257L <sup>2</sup><br>DC_1A_n78A-n257M <sup>2</sup>                                                                                                                                                                                                                                        | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n78A-n257A<br>DC_1A_n78A-n257G<br>DC_1A_n78A-n257H<br>DC_1A_n78A-n257I                |
| DC_1A_n78A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC_1A_n78A<br>DC_1A_n258A                                                                                                                                             |
| DC_1A_n79A-n257A <sup>2</sup><br>DC_1A_n79A-n257D <sup>2</sup><br>DC_1A_n79A-n257E <sup>2</sup><br>DC_1A_n79A-n257F <sup>2</sup><br>DC_1A_n79A-n257G <sup>2</sup><br>DC_1A_n79A-n257H <sup>2</sup><br>DC_1A_n79A-n257I <sup>2</sup><br>DC_1A_n79C-n257A <sup>2</sup><br>DC_1A_n79C-n257D <sup>2</sup><br>DC_1A_n79C-n257E <sup>2</sup><br>DC_1A_n79C-n257F <sup>2</sup><br>DC_1A_n79A-n257G <sup>2</sup><br>DC_1A_n79A-n257H <sup>2</sup><br>DC_1A_n79A-n257I <sup>2</sup> | DC_1A_n79A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I                |
| DC_1A_n79A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC_1A_n79A<br>DC_1A_n258A                                                                                                                                             |
| DC_2A_n12A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                           | DC_2A_n258A                                                                                                                                                           |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Uplink EN-DC configuration (NOTE 1)                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_2A_n12A                                                                                                                                                            |
| DC_2A_n12A-n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_2A_n260A<br>DC_2A_n12A                                                                                                                                             |
| DC_2A_n12A-n261A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_2A_n261A<br>DC_2A_n12A                                                                                                                                             |
| DC_2A_n41A-n260A<br>DC_2A_n41A-n260(2A)<br>DC_2A_n41A-n260(3A)<br>DC_2A_n41A-n260(4A)                                                                                                                                                                                                                                                                                                                                                                                                                       | DC_2A_n41A                                                                                                                                                            |
| DC_2A_n41A-n261A<br>DC_2A_n41A-n261(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_2A_n41A                                                                                                                                                            |
| DC_2A_n71A-n261A<br>DC_2A_n71A-n261(2A)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | DC_2A_n261A<br>DC_2A_n71A                                                                                                                                             |
| DC_3A_n1A-n257A <sup>2</sup><br>DC_3A-3A_n1A-n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                             | DC_3A_n1A<br>DC_3A_n257A                                                                                                                                              |
| DC_3A_n40A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_3A_n40A<br>DC_3A_n258A                                                                                                                                             |
| DC_3A_n28A-n257A <sup>2</sup><br>DC_3A_n28A-n257G <sup>2</sup><br>DC_3A_n28A-n257H <sup>2</sup><br>DC_3A_n28A-n257I <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                            | DC_3A_n28A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I                                                                                                |
| DC_3A_n40A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_3A_n40A<br>DC_3A_n258A                                                                                                                                             |
| DC_3A_n77A-n257A <sup>2</sup><br>DC_3A_n77A-n257D <sup>2</sup><br>DC_3A_n77A-n257E <sup>2</sup><br>DC_3A_n77A-n257F <sup>2</sup><br>DC_3A_n77A-n257G <sup>2</sup><br>DC_3A_n77A-n257H <sup>2</sup><br>DC_3A_n77A-n257I <sup>2</sup><br>DC_3A_n77C-n257A <sup>2</sup><br>DC_3A_n77C-n257D <sup>2</sup><br>DC_3A_n77C-n257E <sup>2</sup><br>DC_3A_n77C-n257F <sup>2</sup>                                                                                                                                     | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n77A-n257A<br>DC_3A_n77A-n257G<br>DC_3A_n77A-n257H<br>DC_3A_n77A-n257I |
| DC_3A_n77(2A)-n257A <sup>2</sup><br>DC_3A_n77(2A)-n257D <sup>2</sup><br>DC_3A_n77(2A)-n257G <sup>2</sup><br>DC_3A_n77(2A)-n257H <sup>2</sup><br>DC_3A_n77(2A)-n257I <sup>2</sup>                                                                                                                                                                                                                                                                                                                            | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I                                                                                 |
| DC_3A_n77A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_3A_n77A<br>DC_3A_n258A<br>DC_3A_n77A-n258A                                                                                                                         |
| DC_3A_n78A-n257A <sup>2</sup><br>DC_3A_n78A-n257D <sup>2</sup><br>DC_3A_n78A-n257E <sup>2</sup><br>DC_3A_n78A-n257F <sup>2</sup><br>DC_3A_n78A-n257G <sup>2</sup><br>DC_3A_n78A-n257H <sup>2</sup><br>DC_3A_n78A-n257I <sup>2</sup><br>DC_3A_n78A-n257J <sup>2</sup><br>DC_3A_n78A-n257K <sup>2</sup><br>DC_3A_n78A-n257L <sup>2</sup><br>DC_3A_n78A-n257M <sup>2</sup><br>DC_3A_n78C-n257A <sup>2</sup><br>DC_3A_n78C-n257D <sup>2</sup><br>DC_3A_n78C-n257E <sup>2</sup><br>DC_3A_n78C-n257F <sup>2</sup> | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n78A-n257A<br>DC_3A_n78A-n257G<br>DC_3A_n78A-n257H<br>DC_3A_n78A-n257I |
| DC_3C_n78A-n257A <sup>2</sup><br>DC_3C_n78A-n257D <sup>2</sup><br>DC_3C_n78A-n257E <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                             | DC_3A_n78A<br>DC_3A_n257A                                                                                                                                             |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_3C_n78A-n257F <sup>2</sup><br>DC_3C_n78A-n257G <sup>2</sup><br>DC_3C_n78A-n257H <sup>2</sup><br>DC_3C_n78A-n257I <sup>2</sup><br>DC_3C_n78A-n257J <sup>2</sup><br>DC_3C_n78A-n257K <sup>2</sup><br>DC_3C_n78A-n257L <sup>2</sup><br>DC_3C_n78A-n257M <sup>2</sup>                                                                                                                                     |                                                                                                                                                        |
| DC_3A_n78A-n258A                                                                                                                                                                                                                                                                                                                                                                                         | DC_3A_n78A<br>DC_3A_n258A                                                                                                                              |
| DC_3A-3A_n78A-n257A <sup>2</sup><br>DC_3A-3A_n78A-n257D <sup>2</sup><br>DC_3A-3A_n78A-n257E <sup>2</sup><br>DC_3A-3A_n78A-n257F <sup>2</sup><br>DC_3A-3A_n78A-n257G <sup>2</sup><br>DC_3A-3A_n78A-n257H <sup>2</sup><br>DC_3A-3A_n78A-n257I <sup>2</sup><br>DC_3A-3A_n78A-n257J <sup>2</sup><br>DC_3A-3A_n78A-n257K <sup>2</sup><br>DC_3A-3A_n78A-n257L <sup>2</sup><br>DC_3A-3A_n78A-n257M <sup>2</sup> | DC_3A_n78A<br>DC_3A_n257A                                                                                                                              |
| DC_3A_n79A-n257A <sup>2</sup><br>DC_3A_n79A-n257D <sup>2</sup><br>DC_3A_n79A-n257E <sup>2</sup><br>DC_3A_n79A-n257F <sup>2</sup><br>DC_3A_n79A-n257G <sup>2</sup><br>DC_3A_n79A-n257H <sup>2</sup><br>DC_3A_n79A-n257I <sup>2</sup><br>DC_3A_n79C-n257A <sup>2</sup><br>DC_3A_n79C-n257D <sup>2</sup><br>DC_3A_n79C-n257E <sup>2</sup><br>DC_3A_n79C-n257F <sup>2</sup>                                  | DC_3A_n79A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_3A_n79A-n257A<br>DC_3A_n79A-n257G<br>DC_3A_n79A-n257H<br>DC_3A_n79A-n257I |
| DC_3A_n79A-n258A<br>DC_3A_n79A-n258D<br>DC_3A_n79A-n258E<br>DC_3A_n79A-n258F<br>DC_3A_n79A-n258G<br>DC_3A_n79A-n258H<br>DC_3A_n79A-n258I<br>DC_3A_n79A-n258J<br>DC_3A_n79A-n258K<br>DC_3A_n79A-n258L                                                                                                                                                                                                     | DC_3A_n79A<br>DC_3A_n258A<br>DC_3A_n79A-n258A                                                                                                          |
| DC_5A_n78A-n257A <sup>2</sup><br>DC_5A_n78A-n257D<br>DC_5A_n78A-n257E<br>DC_5A_n78A-n257F<br>DC_5A_n78A-n257G<br>DC_5A_n78A-n257H<br>DC_5A_n78A-n257I<br>DC_5A_n78A-n257J<br>DC_5A_n78A-n257K<br>DC_5A_n78A-n257L<br>DC_5A_n78A-n257M                                                                                                                                                                    | DC_5A_n78A<br>DC_5A_n257A                                                                                                                              |
| DC_7A_n1A-n257A <sup>2</sup><br>DC_7A-7A_n1A-n257A <sup>2</sup>                                                                                                                                                                                                                                                                                                                                          | DC_7A_n1A<br>DC_7A_n257A                                                                                                                               |
| DC_7A_n78A-n257A <sup>2</sup><br>DC_7A_n78A-n257D <sup>2</sup><br>DC_7A_n78A-n257E <sup>2</sup><br>DC_7A_n78A-n257F <sup>2</sup><br>DC_7A_n78A-n257G <sup>2</sup><br>DC_7A_n78A-n257H <sup>2</sup><br>DC_7A_n78A-n257I <sup>2</sup><br>DC_7A_n78A-n257J <sup>2</sup><br>DC_7A_n78A-n257K <sup>2</sup><br>DC_7A_n78A-n257L <sup>2</sup>                                                                   | DC_7A_n78A<br>DC_7A_n257A                                                                                                                              |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_7A_n78A-n257M <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                 |
| DC_7A-7A_n78A-n257A <sup>2</sup><br>DC_7A-7A_n78A-n257D <sup>2</sup><br>DC_7A-7A_n78A-n257E <sup>2</sup><br>DC_7A-7A_n78A-n257F <sup>2</sup><br>DC_7A-7A_n78A-n257G <sup>2</sup><br>DC_7A-7A_n78A-n257H <sup>2</sup><br>DC_7A-7A_n78A-n257I <sup>2</sup><br>DC_7A-7A_n78A-n257J <sup>2</sup><br>DC_7A-7A_n78A-n257K <sup>2</sup><br>DC_7A-7A_n78A-n257L <sup>2</sup><br>DC_7A-7A_n78A-n257M <sup>2</sup> | DC_7A_n78A<br>DC_7A_n257A<br>DC_7A_n78A-n257A                                                                                                                   |
| DC_8A_n77A-n257A <sup>2</sup><br>DC_8A_n77A-n257D <sup>2</sup><br>DC_8A_n77A-n257G <sup>2</sup><br>DC_8A_n77A-n257H <sup>2</sup><br>DC_8A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                                                        | DC_8A_n77A<br>DC_8A_n257A                                                                                                                                       |
| DC_8A_n77(2A)-n257A <sup>2</sup><br>DC_8A_n77(2A)-n257D <sup>2</sup><br>DC_8A_n77(2A)-n257G <sup>2</sup><br>DC_8A_n77(2A)-n257H <sup>2</sup><br>DC_8A_n77(2A)-n257I <sup>2</sup>                                                                                                                                                                                                                         | DC_8A_n77A<br>DC_8A_n257A                                                                                                                                       |
| DC_11A_n77A-n257A <sup>2</sup><br>DC_11A_n77A-n257D <sup>2</sup><br>DC_11A_n77A-n257G <sup>2</sup><br>DC_11A_n77A-n257H <sup>2</sup><br>DC_11A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                                                   | DC_11A_n77A<br>DC_11A_n257A                                                                                                                                     |
| DC_11A_n77(2A)-n257A <sup>2</sup><br>DC_11A_n77(2A)-n257D <sup>2</sup><br>DC_11A_n77(2A)-n257G <sup>2</sup><br>DC_11A_n77(2A)-n257H <sup>2</sup><br>DC_11A_n77(2A)-n257I <sup>2</sup>                                                                                                                                                                                                                    | DC_11A_n77A<br>DC_11A_n257A                                                                                                                                     |
| DC_19A_n77A-n257A <sup>2</sup><br>DC_19A_n77A-n257D <sup>2</sup><br>DC_19A_n77A-n257E <sup>2</sup><br>DC_19A_n77A-n257F <sup>2</sup><br>DC_19A_n77A-n257G <sup>2</sup><br>DC_19A_n77A-n257H <sup>2</sup><br>DC_19A_n77A-n257I <sup>2</sup><br>DC_19A_n77C-n257A <sup>2</sup><br>DC_19A_n77C-n257D <sup>2</sup><br>DC_19A_n77C-n257E <sup>2</sup><br>DC_19A_n77C-n257F <sup>2</sup>                       | DC_19A_n77A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_19A_n77A-n257A<br>DC_19A_n77A-n257G<br>DC_19A_n77A-n257H<br>DC_19A_n77A-n257I |
| DC_19A_n78A-n257A <sup>2</sup><br>DC_19A_n78A-n257D <sup>2</sup><br>DC_19A_n78A-n257E <sup>2</sup><br>DC_19A_n78A-n257F <sup>2</sup><br>DC_19A_n78A-n257G <sup>2</sup><br>DC_19A_n78A-n257H <sup>2</sup><br>DC_19A_n78A-n257I <sup>2</sup><br>DC_19A_n78C-n257A <sup>2</sup><br>DC_19A_n78C-n257D <sup>2</sup><br>DC_19A_n78C-n257E <sup>2</sup><br>DC_19A_n78C-n257F <sup>2</sup>                       | DC_19A_n78A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_19A_n78A-n257A<br>DC_19A_n78A-n257G<br>DC_19A_n78A-n257H<br>DC_19A_n78A-n257I |
| DC_19A_n79A-n257A <sup>2</sup><br>DC_19A_n79A-n257D <sup>2</sup><br>DC_19A_n79A-n257E <sup>2</sup><br>DC_19A_n79A-n257F <sup>2</sup><br>DC_19A_n79A-n257G <sup>2</sup><br>DC_19A_n79A-n257H <sup>2</sup><br>DC_19A_n79A-n257I <sup>2</sup><br>DC_19A_n79C-n257A <sup>2</sup><br>DC_19A_n79C-n257D <sup>2</sup><br>DC_19A_n79C-n257E <sup>2</sup>                                                         | DC_19A_n79A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_19A_n79A-n257A<br>DC_19A_n79A-n257G<br>DC_19A_n79A-n257H<br>DC_19A_n79A-n257I |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                     | Uplink EN-DC configuration (NOTE 1)                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_19A_n79C-n257F <sup>2</sup>                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                 |
| DC_21A_n77A-n257A <sup>2</sup><br>DC_21A_n77A-n257G <sup>2</sup><br>DC_21A_n77A-n257H <sup>2</sup><br>DC_21A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                                                    | DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I |
| DC_8A_n78A-n257A <sup>2</sup><br>DC_8A_n78A-n257D <sup>2</sup><br>DC_8A_n78A-n257E <sup>2</sup><br>DC_8A_n78A-n257F <sup>2</sup><br>DC_8A_n78A-n257G <sup>2</sup><br>DC_8A_n78A-n257H <sup>2</sup><br>DC_8A_n78A-n257I <sup>2</sup><br>DC_8A_n78A-n257J <sup>2</sup><br>DC_8A_n78A-n257K <sup>2</sup><br>DC_8A_n78A-n257L <sup>2</sup><br>DC_8A_n78A-n257M <sup>2</sup> | DC_8A_n78A<br>DC_8A_n257A                                                                                                                                       |
| DC_18A_n3A-n257A<br>DC_18A_n3A-n257G<br>DC_18A_n3A-n257H<br>DC_18A_n3A-n257I                                                                                                                                                                                                                                                                                            | DC_18A_n3A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                                      |
| DC_18A_n78A-n257A<br>DC_18A_n78A-n257G<br>DC_18A_n78A-n257H<br>DC_18A_n78A-n257I                                                                                                                                                                                                                                                                                        | DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                                     |
| DC_21A_n78A-n257A <sup>2</sup><br>DC_21A_n78A-n257G <sup>2</sup><br>DC_21A_n78A-n257H <sup>2</sup><br>DC_21A_n78A-n257I <sup>2</sup>                                                                                                                                                                                                                                    | DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I |
| DC_21A_n79A-n257A <sup>2</sup><br>DC_21A_n79A-n257G <sup>2</sup><br>DC_21A_n79A-n257H <sup>2</sup><br>DC_21A_n79A-n257I <sup>2</sup>                                                                                                                                                                                                                                    | DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I |
| DC_28A_n3A-n257A <sup>2</sup><br>DC_28A_n3A-n257G <sup>2</sup><br>DC_28A_n3A-n257H <sup>2</sup><br>DC_28A_n3A-n257I <sup>2</sup>                                                                                                                                                                                                                                        | DC_28A_n3A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                      |
| DC_28A_n77A-n257A <sup>2</sup><br>DC_28A_n77A-n257D <sup>2</sup><br>DC_28A_n77A-n257G <sup>2</sup><br>DC_28A_n77A-n257H <sup>2</sup><br>DC_28A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                  | DC_28A_n77A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                     |
| DC_28A_n77(2A)-n257A <sup>2</sup><br>DC_28A_n77(2A)-n257D <sup>2</sup><br>DC_28A_n77(2A)-n257G <sup>2</sup><br>DC_28A_n77(2A)-n257H <sup>2</sup><br>DC_28A_n77(2A)-n257I <sup>2</sup>                                                                                                                                                                                   | DC_28A_n77A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                     |

| EN-DC configuration                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_28A_n78A-n257A <sup>2</sup><br>DC_28A_n78A-n257G <sup>2</sup><br>DC_28A_n78A-n257H <sup>2</sup><br>DC_28A_n78A-n257I <sup>2</sup>                                                                                                                                         | DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                |
| DC_28A_n8A-n258A                                                                                                                                                                                                                                                             | DC_28A_n8A<br>DC_28A_n258A                                                                                                                                 |
| DC_41A_n3A-n257A <sup>2</sup><br>DC_41A_n3A-n257G <sup>2</sup><br>DC_41A_n3A-n257H <sup>2</sup><br>DC_41A_n3A-n257I <sup>2</sup><br>DC_41C_n3A-n257A <sup>2</sup><br>DC_41C_n3A-n257G <sup>2</sup><br>DC_41C_n3A-n257H <sup>2</sup><br>DC_41C_n3A-n257I <sup>2</sup>         | DC_41A_n3A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n3A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I   |
| DC_41A_n28A-n257A <sup>2</sup><br>DC_41A_n28A-n257G <sup>2</sup><br>DC_41A_n28A-n257H <sup>2</sup><br>DC_41A_n28A-n257I <sup>2</sup><br>DC_41C_n28A-n257A <sup>2</sup><br>DC_41C_n28A-n257G <sup>2</sup><br>DC_41C_n28A-n257H <sup>2</sup><br>DC_41C_n28A-n257I <sup>2</sup> | DC_41A_n28A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n28A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_41A_n77A-n257A<br>DC_41A_n77A-n257G<br>DC_41A_n77A-n257H<br>DC_41A_n77A-n257I<br>DC_41C_n77A-n257A<br>DC_41C_n77A-n257G<br>DC_41C_n77A-n257H<br>DC_41C_n77A-n257I                                                                                                         | DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_41A_n78A-n257A<br>DC_41A_n78A-n257G<br>DC_41A_n78A-n257H<br>DC_41A_n78A-n257I<br>DC_41C_n78A-n257A<br>DC_41C_n78A-n257G<br>DC_41C_n78A-n257H<br>DC_41C_n78A-n257I                                                                                                         | DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_42A_n77A-n257A<br>DC_42A_n77A-n257G<br>DC_42A_n77A-n257H<br>DC_42A_n77A-n257I<br>DC_42C_n77A-n257A<br>DC_42C_n77A-n257G<br>DC_42C_n77A-n257H<br>DC_42C_n77A-n257I                                                                                                         | DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                               |
| DC_42A_n78A-n257A<br>DC_42A_n78A-n257G<br>DC_42A_n78A-n257H<br>DC_42A_n78A-n257I<br>DC_42C_n78A-n257A<br>DC_42C_n78A-n257G<br>DC_42C_n78A-n257H<br>DC_42C_n78A-n257I                                                                                                         | DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                               |
| DC_42A_n79A-n257A                                                                                                                                                                                                                                                            | DC_42A_n257A                                                                                                                                               |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Uplink EN-DC configuration (NOTE 1)            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| DC_42A_n79A-n257G<br>DC_42A_n79A-n257H<br>DC_42A_n79A-n257I<br>DC_42C_n79A-n257A<br>DC_42C_n79A-n257G<br>DC_42C_n79A-n257H<br>DC_42C_n79A-n257I                                                                                                                                                                                                                                                                                                                                                   | DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I   |
| DC_66A_n5A-n260A<br>DC_66A_n5A-n260G<br>DC_66A_n5A-n260H<br>DC_66A_n5A-n260I<br>DC_66A_n5A-n260J<br>DC_66A_n5A-n260K<br>DC_66A_n5A-n260L<br>DC_66A_n5A-n260M                                                                                                                                                                                                                                                                                                                                      | DC_66A_n5A<br>DC_66A_n260A<br>DC_66A_n5A-n260A |
| DC_66A_n5A-n260(2A)<br>DC_66A_n5A-n260(3A)<br>DC_66A_n5A-n260(4A)<br>DC_66A_n5A-n260(5A)<br>DC_66A_n5A-n260(6A)<br>DC_66A_n5A-n260(2H)<br>DC_66A_n5A-n260(2G)<br>DC_66A_n5A-n260(A-2G)<br>DC_66A_n5A-n260(A-H)<br>DC_66A_n5A-n260(A-G)<br>DC_66A_n5A-n260(G-H)<br>DC_66A_n5A-n260(2A-G)<br>DC_66A_n5A-n260(2A-2G)<br>DC_66A_n5A-n260(3A-G)                                                                                                                                                        | DC_66A_n5A-n260A                               |
| DC_66A_n5A-n261A<br>DC_66A_n5A-n261G<br>DC_66A_n5A-n261H<br>DC_66A_n5A-n261I<br>DC_66A_n5A-n261J<br>DC_66A_n5A-n261K<br>DC_66A_n5A-n261L<br>DC_66A_n5A-n261M                                                                                                                                                                                                                                                                                                                                      | DC_66A_n5A-n261A                               |
| DC_66A_n5A-n261(2A)<br>DC_66A_n5A-n261(3A)<br>DC_66A_n5A-n261(2G)<br>DC_66A_n5A-n261(2H)<br>DC_66A_n5A-n261(A-G)<br>DC_66A_n5A-n261(A-H)<br>DC_66A_n5A-n261(A-I)<br>DC_66A_n5A-n261(A-J)<br>DC_66A_n5A-n261(A-K)<br>DC_66A_n5A-n261(G-H)<br>DC_66A_n5A-n261(G-I)<br>DC_66A_n5A-n261(G-J)<br>DC_66A_n5A-n261(H-I)<br>DC_66A_n5A-n261(A-2G)<br>DC_66A_n5A-n261(A-G-H)<br>DC_66A_n5A-n261(A-G-I)<br>DC_66A_n5A-n261(2A-G)<br>DC_66A_n5A-n261(2A-H)<br>DC_66A_n5A-n261(2A-I)<br>DC_66A_n5A-n261(3A-G) | DC_66A_n5A-n261A                               |
| DC_66A_n12A-n258A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_66A_n12A<br>DC_66A_n258A                    |
| DC_66A_n12A-n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_66A_n12A<br>DC_66A_n260A                    |
| DC_66A_n12A-n261A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_66A_n12A<br>DC_66A_n261A                    |
| DC_66A_n41A-n260A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DC_66A_n41A                                    |

| EN-DC configuration                                                                                            | Uplink EN-DC configuration (NOTE 1) |
|----------------------------------------------------------------------------------------------------------------|-------------------------------------|
| DC_66A_n41A-n260(2A)<br>DC_66A_n41A-n260(3A)<br>DC_66A_n41A-n260(4A)                                           |                                     |
| DC_66A_n41A-n261A<br>DC_66A_n41A-n261(2A)                                                                      | DC_66A_n41A                         |
| DC_66A_n71A-n260A<br>DC_66A_n71A-n260(2A)                                                                      | DC_66A_n71A<br>DC_66A_n260A         |
| DC_66A_n71A-n261A<br>DC_66A_n71A-n261(2A)                                                                      | DC_66A_n71A<br>DC_66A_n261A         |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications. |                                     |
| NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability.            |                                     |

### 5.5B.6.3 Inter-band EN-DC configurations including FR1 and FR2 (four bands)

**Table 5.5B.6.3-1: Inter-band EN-DC configurations including FR1 and FR2 (four bands)**

| EN-DC configuration                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A_n28A-n257A <sup>2</sup><br>DC_1A-3A_n28A-n257G <sup>2</sup><br>DC_1A-3A_n28A-n257H <sup>2</sup><br>DC_1A-3A_n28A-n257I <sup>2</sup> | DC_1A_n28A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n28A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I                               |
| DC_1A-3A_n77A-n257A <sup>2</sup>                                                                                                             | DC_1A_n77A<br>DC_3A_n77A<br>DC_1A_n257A<br>DC_3A_n257A                                                                                                                         |
| DC_1A-3A_n77A-n257D <sup>2</sup>                                                                                                             | DC_1A_n77A<br>DC_3A_n77A<br>DC_1A_n257A<br>DC_1A_n257D<br>DC_3A_n257A<br>DC_3A_n257D                                                                                           |
| DC_1A-3A_n77A-n257G <sup>2</sup>                                                                                                             | DC_1A_n77A<br>DC_3A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_3A_n77A-n257A<br>DC_3A_n77A-n257G           |
| DC_1A-3A_n77A-n257H <sup>2</sup>                                                                                                             | DC_1A_n77A<br>DC_3A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_1A_n77A-n257H |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                          | DC_3A_n77A-n257A<br>DC_3A_n77A-n257G<br>DC_3A_n77A-n257H                                                                                                                                                                                                                                                                                       |
| DC_1A-3A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                         | DC_1A_n77A<br>DC_3A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_1A_n77A-n257H<br>DC_1A_n77A-n257I<br>DC_3A_n77A-n257A<br>DC_3A_n77A-n257G<br>DC_3A_n77A-n257H<br>DC_3A_n77A-n257I                               |
| DC_1A-3A_n78A-n257A <sup>2</sup><br>DC_1A-3A_n78A-n257D <sup>2</sup><br>DC_1A-3A_n78A-n257E <sup>2</sup><br>DC_1A-3A_n78A-n257F <sup>2</sup><br>DC_1A-3A_n78A-n257G <sup>2</sup><br>DC_1A-3A_n78A-n257H <sup>2</sup><br>DC_1A-3A_n78A-n257I <sup>2</sup><br>DC_1A-3A_n78A-n257J <sup>2</sup><br>DC_1A-3A_n78A-n257K <sup>2</sup><br>DC_1A-3A_n78A-n257L <sup>2</sup><br>DC_1A-3A_n78A-n257M <sup>2</sup> | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257D<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_1A_n78A-n257A<br>DC_1A_n78A-n257G<br>DC_1A_n78A-n257H<br>DC_1A_n78A-n257I<br>DC_3A_n78A-n257A<br>DC_3A_n78A-n257G<br>DC_3A_n78A-n257H<br>DC_3A_n78A-n257I |
| DC_1A-3A_n79A-n257A <sup>2</sup><br>DC_1A-3A_n79A-n257G <sup>2</sup><br>DC_1A-3A_n79A-n257H <sup>2</sup><br>DC_1A-3A_n79A-n257I <sup>2</sup>                                                                                                                                                                                                                                                             | DC_1A_n79A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n79A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I                                                                                                                                                                                               |
| DC_1A-3A_n79A-n257A <sup>2</sup><br>DC_1A-3A_n79A-n257G <sup>2</sup><br>DC_1A-3A_n79A-n257H <sup>2</sup><br>DC_1A-3A_n79A-n257I <sup>2</sup>                                                                                                                                                                                                                                                             | DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I<br>DC_3A_n79A-n257A<br>DC_3A_n79A-n257G<br>DC_3A_n79A-n257H<br>DC_3A_n79A-n257I                                                                                                                                                                                   |
| DC_1A-5A_n78A-n257A<br>DC_1A-5A_n78A-n257D<br>DC_1A-5A_n78A-n257E<br>DC_1A-5A_n78A-n257F<br>DC_1A-5A_n78A-n257G<br>DC_1A-5A_n78A-n257H                                                                                                                                                                                                                                                                   | DC_1A_n78A<br>DC_1A_n257A<br>DC_5A_n78A<br>DC_5A_n257A                                                                                                                                                                                                                                                                                         |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                      | Uplink EN-DC configuration (NOTE 1)                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| DC_1A-5A_n78A-n257I<br>DC_1A-5A_n78A-n257J<br>DC_1A-5A_n78A-n257K<br>DC_1A-5A_n78A-n257L<br>DC_1A-5A_n78A-n257M                                                                                                                                                                                                                                                                                          |                                                                                     |
| DC_1A-7A_n78A-n257A<br>DC_1A-7A_n78A-n257D<br>DC_1A-7A_n78A-n257E<br>DC_1A-7A_n78A-n257F<br>DC_1A-7A_n78A-n257G<br>DC_1A-7A_n78A-n257H<br>DC_1A-7A_n78A-n257I<br>DC_1A-7A_n78A-n257J<br>DC_1A-7A_n78A-n257K<br>DC_1A-7A_n78A-n257L<br>DC_1A-7A_n78A-n257M                                                                                                                                                | DC_1A_n78A<br>DC_1A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                              |
| DC_1A-7A-7A_n78A-n257A<br>DC_1A-7A-7A_n78A-n257D<br>DC_1A-7A-7A_n78A-n257E<br>DC_1A-7A-7A_n78A-n257F<br>DC_1A-7A-7A_n78A-n257G<br>DC_1A-7A-7A_n78A-n257H<br>DC_1A-7A-7A_n78A-n257I<br>DC_1A-7A-7A_n78A-n257J<br>DC_1A-7A-7A_n78A-n257K<br>DC_1A-7A-7A_n78A-n257L<br>DC_1A-7A-7A_n78A-n257M                                                                                                               | DC_1A_n78A<br>DC_1A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                              |
| DC_1A-8A_n77A-n257A <sup>2</sup><br>DC_1A-8A_n77A-n257D <sup>2</sup><br>DC_1A-8A_n77A-n257G <sup>2</sup><br>DC_1A-8A_n77A-n257H <sup>2</sup><br>DC_1A-8A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                                         | DC_1A_n77A<br>DC_1A_n257A<br>DC_8A_n77A<br>DC_8A_n257A                              |
| DC_1A-8A_n77(2A)-n257A <sup>2</sup><br>DC_1A-8A_n77(2A)-n257D <sup>2</sup><br>DC_1A-8A_n77(2A)-n257G <sup>2</sup><br>DC_1A-8A_n77(2A)-n257H <sup>2</sup><br>DC_1A-8A_n77(2A)-n257I <sup>2</sup>                                                                                                                                                                                                          | DC_1A_n77A<br>DC_1A_n257A<br>DC_8A_n77A<br>DC_8A_n257A                              |
| DC_1A-8A_n78A-n257A <sup>2</sup><br>DC_1A-8A_n78A-n257D <sup>2</sup><br>DC_1A-8A_n78A-n257E <sup>2</sup><br>DC_1A-8A_n78A-n257F <sup>2</sup><br>DC_1A-8A_n78A-n257G <sup>2</sup><br>DC_1A-8A_n78A-n257H <sup>2</sup><br>DC_1A-8A_n78A-n257I <sup>2</sup><br>DC_1A-8A_n78A-n257J <sup>2</sup><br>DC_1A-8A_n78A-n257K <sup>2</sup><br>DC_1A-8A_n78A-n257L <sup>2</sup><br>DC_1A-8A_n78A-n257M <sup>2</sup> | DC_1A_n78A<br>DC_8A_n78A<br>DC_1A_n257A<br>DC_8A_n257A                              |
| DC_1A-11A_n77A-n257A <sup>2</sup><br>DC_1A-11A_n77A-n257D <sup>2</sup><br>DC_1A-11A_n77A-n257G <sup>2</sup><br>DC_1A-11A_n77A-n257H <sup>2</sup><br>DC_1A-11A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                                    | DC_1A_n77A<br>DC_1A_n257A<br>DC_11A_n77A<br>DC_11A_n257A                            |
| DC_1A-11A_n77(2A)-n257A <sup>2</sup><br>DC_1A-11A_n77(2A)-n257D <sup>2</sup><br>DC_1A-11A_n77(2A)-n257G <sup>2</sup><br>DC_1A-11A_n77(2A)-n257H <sup>2</sup><br>DC_1A-11A_n77(2A)-n257I <sup>2</sup>                                                                                                                                                                                                     | DC_1A_n77A<br>DC_1A_n257A<br>DC_11A_n77A<br>DC_11A_n257A                            |
| DC_1A-18A_n3A-n257A<br>DC_1A-18A_n3A-n257G<br>DC_1A-18A_n3A-n257H<br>DC_1A-18A_n3A-n257I                                                                                                                                                                                                                                                                                                                 | DC_1A_n3A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_18A_n3A |

| EN-DC configuration                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                                                                                   |
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|                                                                                                                                                  | DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                                          |
| DC_1A-18A_n78A-n257A<br>DC_1A-18A_n78A-n257G<br>DC_1A-18A_n78A-n257H<br>DC_1A-18A_n78A-n257I                                                     | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I |
| DC_1A-19A_n77A-n257A <sup>2</sup><br>DC_1A-19A_n77A-n257G <sup>2</sup><br>DC_1A-19A_n77A-n257H <sup>2</sup><br>DC_1A-19A_n77A-n257I <sup>2</sup> | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_19A_n77A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I |
| DC_1A-19A_n78A-n257A <sup>2</sup><br>DC_1A-19A_n78A-n257G <sup>2</sup><br>DC_1A-19A_n78A-n257H <sup>2</sup><br>DC_1A-19A_n78A-n257I <sup>2</sup> | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_19A_n78A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I |
| DC_1A-19A_n79A-n257A <sup>2</sup><br>DC_1A-19A_n79A-n257G <sup>2</sup><br>DC_1A-19A_n79A-n257H <sup>2</sup><br>DC_1A-19A_n79A-n257I <sup>2</sup> | DC_1A_n79A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_19A_n79A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I |
| DC_1A-21A_n77A-n257A <sup>2</sup><br>DC_1A-21A_n77A-n257G <sup>2</sup><br>DC_1A-21A_n77A-n257H <sup>2</sup><br>DC_1A-21A_n77A-n257I <sup>2</sup> | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I |
| DC_1A-21A_n78A-n257A <sup>2</sup><br>DC_1A-21A_n78A-n257G <sup>2</sup><br>DC_1A-21A_n78A-n257H <sup>2</sup><br>DC_1A-21A_n78A-n257I <sup>2</sup> | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I |
| DC_1A-21A_n79A-n257A <sup>2</sup>                                                                                                                | DC_1A_n79A                                                                                                                                            |

| EN-DC configuration                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                                                                                              |
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| DC_1A-21A_n79A-n257G <sup>2</sup><br>DC_1A-21A_n79A-n257H <sup>2</sup><br>DC_1A-21A_n79A-n257I <sup>2</sup>                                      | DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                          |
| DC_1A-19A_n79A-n257A <sup>2</sup><br>DC_1A-19A_n79A-n257G <sup>2</sup><br>DC_1A-19A_n79A-n257H <sup>2</sup><br>DC_1A-19A_n79A-n257I <sup>2</sup> | DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I<br>DC_19A_n79A-n257A<br>DC_19A_n79A-n257G<br>DC_19A_n79A-n257H<br>DC_19A_n79A-n257I |
| DC_1A-21A_n77A-n257A <sup>2</sup><br>DC_1A-21A_n77A-n257G <sup>2</sup><br>DC_1A-21A_n77A-n257H <sup>2</sup><br>DC_1A-21A_n77A-n257I <sup>2</sup> | DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_1A_n77A-n257H<br>DC_1A_n77A-n257I<br>DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I |
| DC_1A-21A_n78A-n257A <sup>2</sup><br>DC_1A-21A_n78A-n257G <sup>2</sup><br>DC_1A-21A_n78A-n257H <sup>2</sup><br>DC_1A-21A_n78A-n257I <sup>2</sup> | DC_1A_n78A-n257A<br>DC_1A_n78A-n257G<br>DC_1A_n78A-n257H<br>DC_1A_n78A-n257I<br>DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I |
| DC_1A-21A_n79A-n257A <sup>2</sup><br>DC_1A-21A_n79A-n257G <sup>2</sup><br>DC_1A-21A_n79A-n257H <sup>2</sup><br>DC_1A-21A_n79A-n257I <sup>2</sup> | DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I<br>DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I |
| DC_1A-28A_n3A-n257A <sup>2</sup><br>DC_1A-28A_n3A-n257G <sup>2</sup><br>DC_1A-28A_n3A-n257H <sup>2</sup><br>DC_1A-28A_n3A-n257I <sup>2</sup>     | DC_1A_n3A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_28A_n3A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I              |
| DC_1A-28A_n78A-n257A <sup>2</sup><br>DC_1A-28A_n78A-n257G <sup>2</sup><br>DC_1A-28A_n78A-n257H <sup>2</sup><br>DC_1A-28A_n78A-n257I <sup>2</sup> | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I            |
| DC_1A-41A_n3A-n257A <sup>2</sup><br>DC_1A-41A_n3A-n257I                                                                                          | DC_41A_n3A<br>DC_41A_n257A<br>DC_41A_n257I                                                                                                                       |

| EN-DC configuration                                                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                  |
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| DC_1A-41C_n3A-n257A <sup>2</sup><br>DC_1A-41C_n3A-n257I                                                                                                                                                                                                                                              | DC_41A_n3A<br>DC_41A_n257A<br>DC_41A_n257I<br>DC_41C_n3A<br>DC_41C_n257A<br>DC_41C_n257I                                                                                                                                             |
| DC_1A-41A_n28A-n257A <sup>2</sup><br>DC_1A-41A_n28A-n257G <sup>2</sup><br>DC_1A-41A_n28A-n257H <sup>2</sup><br>DC_1A-41A_n28A-n257I <sup>2</sup><br>DC_1A-41C_n28A-n257A <sup>2</sup><br>DC_1A-41C_n28A-n257G <sup>2</sup><br>DC_1A-41C_n28A-n257H <sup>2</sup><br>DC_1A-41C_n28A-n257I <sup>2</sup> | DC_1A_n28A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_41A_n28A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n28A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_1A-41A_n77A-n257A<br>DC_1A-41A_n77A-n257G<br>DC_1A-41A_n77A-n257H<br>DC_1A-41A_n77A-n257I<br>DC_1A-41C_n77A-n257A<br>DC_1A-41C_n77A-n257G<br>DC_1A-41C_n77A-n257H<br>DC_1A-41C_n77A-n257I                                                                                                         | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_1A-41A_n78A-n257A<br>DC_1A-41A_n78A-n257G<br>DC_1A-41A_n78A-n257H<br>DC_1A-41A_n78A-n257I<br>DC_1A-41C_n78A-n257A<br>DC_1A-41C_n78A-n257G<br>DC_1A-41C_n78A-n257H<br>DC_1A-41C_n78A-n257I                                                                                                         | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_1A-42A_n77A-n257A<br>DC_1A-42A_n77A-n257G<br>DC_1A-42A_n77A-n257H<br>DC_1A-42A_n77A-n257I<br>DC_1A-42C_n77A-n257A<br>DC_1A-42C_n77A-n257G<br>DC_1A-42C_n77A-n257H<br>DC_1A-42C_n77A-n257I                                                                                                         | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                               |
| DC_1A-42A_n77A-n257A<br>DC_1A-42A_n77A-n257G<br>DC_1A-42A_n77A-n257H<br>DC_1A-42A_n77A-n257I<br>DC_1A-42C_n77A-n257A                                                                                                                                                                                 | DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_1A_n77A-n257H<br>DC_1A_n77A-n257I                                                                                                                                                         |

| EN-DC configuration                                                                                                                                                                                                                                       | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-42C_n77A-n257G<br>DC_1A-42C_n77A-n257H<br>DC_1A-42C_n77A-n257I                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                        |
| DC_1A-42A_n78A-n257A<br>DC_1A-42A_n78A-n257G<br>DC_1A-42A_n78A-n257H<br>DC_1A-42A_n78A-n257I<br>DC_1A-42C_n78A-n257A<br>DC_1A-42C_n78A-n257G<br>DC_1A-42C_n78A-n257H<br>DC_1A-42C_n78A-n257I                                                              | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I<br>DC_1A_n78A-n257A<br>DC_1A_n78A-n257G<br>DC_1A_n78A-n257H<br>DC_1A_n78A-n257I |
| DC_1A-42A_n79A-n257A<br>DC_1A-42A_n79A-n257G<br>DC_1A-42A_n79A-n257H<br>DC_1A-42A_n79A-n257I<br>DC_1A-42C_n79A-n257A<br>DC_1A-42C_n79A-n257G<br>DC_1A-42C_n79A-n257H<br>DC_1A-42C_n79A-n257I                                                              | DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I                                                                                                                                                                                                           |
| DC_1A-42A_n79A-n257A<br>DC_1A-42A_n79A-n257G<br>DC_1A-42A_n79A-n257H<br>DC_1A-42A_n79A-n257I<br>DC_1A-42C_n79A-n257A<br>DC_1A-42C_n79A-n257G<br>DC_1A-42C_n79A-n257H<br>DC_1A-42C_n79A-n257I                                                              | DC_1A_n79A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                                                                                 |
| DC_2A-66A_n41A-n260A<br>DC_2A-66A_n41A-n260(2A)<br>DC_2A-66A_n41A-n260(3A)<br>DC_2A-66A_n41A-n260(4A)                                                                                                                                                     | DC_2A_n41A<br>DC_66A_n41A                                                                                                                                                                                                                                                              |
| DC_2A-66A_n41A-n261A<br>DC_2A-66A_n41A-n261(2A)                                                                                                                                                                                                           | DC_2A_n41A<br>DC_66A_n41A                                                                                                                                                                                                                                                              |
| DC_2A-66A_n71A-n261A<br>DC_2A-66A_n71A-n261(2A)                                                                                                                                                                                                           | DC_2A_n71A<br>DC_66A_n71A                                                                                                                                                                                                                                                              |
| DC_3A-5A_n78A-n257A<br>DC_3A-5A_n78A-n257D<br>DC_3A-5A_n78A-n257E<br>DC_3A-5A_n78A-n257F<br>DC_3A-5A_n78A-n257G<br>DC_3A-5A_n78A-n257H<br>DC_3A-5A_n78A-n257I<br>DC_3A-5A_n78A-n257J<br>DC_3A-5A_n78A-n257K<br>DC_3A-5A_n78A-n257L<br>DC_3A-5A_n78A-n257M | DC_3A_n78A<br>DC_3A_n257A<br>DC_5A_n78A<br>DC_5A_n257A                                                                                                                                                                                                                                 |
| DC_3A-7A_n1A-n257A <sup>2</sup><br>DC_3A-3A-7A_n1A-n257A <sup>2</sup><br>DC_3A-7A-7A_n1A-n257A <sup>2</sup><br>DC_3A-3A-7A-7A_n1A-n257A <sup>2</sup>                                                                                                      | DC_3A_n1A<br>DC_3A_n257A<br>DC_7A_n1A<br>DC_7A_n257A                                                                                                                                                                                                                                   |
| DC_3A-3A-7A_n78A-n257A <sup>2</sup><br>DC_3A-3A-7A_n78A-n257D <sup>2</sup><br>DC_3A-3A-7A_n78A-n257E <sup>2</sup><br>DC_3A-3A-7A_n78A-n257F <sup>2</sup>                                                                                                  | DC_3A_n78A<br>DC_3A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                                                                                                                                                 |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Uplink EN-DC configuration (NOTE 1)                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_3A-3A-7A_n78A-n257G <sup>2</sup><br>DC_3A-3A-7A_n78A-n257H <sup>2</sup><br>DC_3A-3A-7A_n78A-n257I <sup>2</sup><br>DC_3A-3A-7A_n78A-n257J <sup>2</sup><br>DC_3A-3A-7A_n78A-n257K <sup>2</sup><br>DC_3A-3A-7A_n78A-n257L <sup>2</sup><br>DC_3A-3A-7A_n78A-n257M <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257A <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257D <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257E <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257F <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257G <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257H <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257I <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257J <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257K <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257L <sup>2</sup><br>DC_3A-3A-7A-7A_n78A-n257M <sup>2</sup> |                                                                                                                                                       |
| DC_3A-7A_n78A-n257A <sup>2</sup><br>DC_3A-7A_n78A-n257D <sup>2</sup><br>DC_3A-7A_n78A-n257E <sup>2</sup><br>DC_3A-7A_n78A-n257F <sup>2</sup><br>DC_3A-7A_n78A-n257G <sup>2</sup><br>DC_3A-7A_n78A-n257H <sup>2</sup><br>DC_3A-7A_n78A-n257I <sup>2</sup><br>DC_3A-7A_n78A-n257J <sup>2</sup><br>DC_3A-7A_n78A-n257K <sup>2</sup><br>DC_3A-7A_n78A-n257L <sup>2</sup><br>DC_3A-7A_n78A-n257M <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                    | DC_3A_n78A<br>DC_3A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                |
| DC_3A-7A-7A_n78A-n257A <sup>2</sup><br>DC_3A-7A-7A_n78A-n257D <sup>2</sup><br>DC_3A-7A-7A_n78A-n257E <sup>2</sup><br>DC_3A-7A-7A_n78A-n257F <sup>2</sup><br>DC_3A-7A-7A_n78A-n257G <sup>2</sup><br>DC_3A-7A-7A_n78A-n257H <sup>2</sup><br>DC_3A-7A-7A_n78A-n257I <sup>2</sup><br>DC_3A-7A-7A_n78A-n257J <sup>2</sup><br>DC_3A-7A-7A_n78A-n257K <sup>2</sup><br>DC_3A-7A-7A_n78A-n257L <sup>2</sup><br>DC_3A-7A-7A_n78A-n257M <sup>2</sup>                                                                                                                                                                                                                                                                                                                   | DC_3A_n78A<br>DC_3A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                |
| DC_3A-8A_n78A-n257A <sup>2</sup><br>DC_3A-8A_n78A-n257D <sup>2</sup><br>DC_3A-8A_n78A-n257E <sup>2</sup><br>DC_3A-8A_n78A-n257F <sup>2</sup><br>DC_3A-8A_n78A-n257G <sup>2</sup><br>DC_3A-8A_n78A-n257H <sup>2</sup><br>DC_3A-8A_n78A-n257I <sup>2</sup><br>DC_3A-8A_n78A-n257J <sup>2</sup><br>DC_3A-8A_n78A-n257K <sup>2</sup><br>DC_3A-8A_n78A-n257L <sup>2</sup><br>DC_3A-8A_n78A-n257M <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                    | DC_3A_n78A<br>DC_8A_n78A<br>DC_3A_n257A<br>DC_8A_n257A                                                                                                |
| DC_3A-18A_n78A-n257A<br>DC_3A-18A_n78A-n257G<br>DC_3A-18A_n78A-n257H<br>DC_3A-18A_n78A-n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I |
| DC_3A-19A_n77A-n257A <sup>2</sup><br>DC_3A-19A_n77A-n257G <sup>2</sup><br>DC_3A-19A_n77A-n257H <sup>2</sup><br>DC_3A-19A_n77A-n257I <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H                                                                                               |

| EN-DC configuration                                                                                                                              | Uplink EN-DC configuration (NOTE 1)                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                  | DC_3A_n257I<br>DC_19A_n77A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I                                                                       |
| DC_3A-19A_n78A-n257A <sup>2</sup><br>DC_3A-19A_n78A-n257G <sup>2</sup><br>DC_3A-19A_n78A-n257H <sup>2</sup><br>DC_3A-19A_n78A-n257I <sup>2</sup> | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_19A_n78A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I            |
| DC_3A-19A_n79A-n257A <sup>2</sup><br>DC_3A-19A_n79A-n257G <sup>2</sup><br>DC_3A-19A_n79A-n257H <sup>2</sup><br>DC_3A-19A_n79A-n257I <sup>2</sup> | DC_3A_n79A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_19A_n79A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I            |
| DC_3A-21A_n77A-n257A <sup>2</sup><br>DC_3A-21A_n77A-n257G <sup>2</sup><br>DC_3A-21A_n77A-n257H <sup>2</sup><br>DC_3A-21A_n77A-n257I <sup>2</sup> | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I            |
| DC_3A-21A_n78A-n257A <sup>2</sup><br>DC_3A-21A_n78A-n257G <sup>2</sup><br>DC_3A-21A_n78A-n257H <sup>2</sup><br>DC_3A-21A_n78A-n257I <sup>2</sup> | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I            |
| DC_3A-21A_n79A-n257A <sup>2</sup><br>DC_3A-21A_n79A-n257G <sup>2</sup><br>DC_3A-21A_n79A-n257H <sup>2</sup><br>DC_3A-21A_n79A-n257I <sup>2</sup> | DC_3A_n79A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I            |
| DC_3A-19A_n77A-n257A <sup>2</sup><br>DC_3A-19A_n77A-n257G <sup>2</sup><br>DC_3A-19A_n77A-n257H <sup>2</sup><br>DC_3A-19A_n77A-n257I <sup>2</sup> | DC_3A_n77A-n257A<br>DC_3A_n77A-n257G<br>DC_3A_n77A-n257H<br>DC_3A_n77A-n257I<br>DC_19A_n77A-n257A<br>DC_19A_n77A-n257G<br>DC_19A_n77A-n257H<br>DC_19A_n77A-n257I |
| DC_3A-19A_n78A-n257A <sup>2</sup>                                                                                                                | DC_3A_n78A-n257A                                                                                                                                                 |

| EN-DC configuration                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                  |
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| DC_3A-19A_n78A-n257G <sup>2</sup><br>DC_3A-19A_n78A-n257H <sup>2</sup><br>DC_3A-19A_n78A-n257I <sup>2</sup>                                                                                          | DC_3A_n78A-n257G<br>DC_3A_n78A-n257H<br>DC_3A_n78A-n257I<br>DC_19A_n78A-n257A<br>DC_19A_n78A-n257G<br>DC_19A_n78A-n257H<br>DC_19A_n78A-n257I                                         |
| DC_3A-19A_n79A-n257A <sup>2</sup><br>DC_3A-19A_n79A-n257G <sup>2</sup><br>DC_3A-19A_n79A-n257H <sup>2</sup><br>DC_3A-19A_n79A-n257I <sup>2</sup>                                                     | DC_3A_n79A-n257A<br>DC_3A_n79A-n257G<br>DC_3A_n79A-n257H<br>DC_3A_n79A-n257I<br>DC_19A_n79A-n257A<br>DC_19A_n79A-n257G<br>DC_19A_n79A-n257H<br>DC_19A_n79A-n257I                     |
| DC_3A-21A_n77A-n257A <sup>2</sup><br>DC_3A-21A_n77A-n257G <sup>2</sup><br>DC_3A-21A_n77A-n257H <sup>2</sup><br>DC_3A-21A_n77A-n257I <sup>2</sup>                                                     | DC_3A_n77A-n257A<br>DC_3A_n77A-n257G<br>DC_3A_n77A-n257H<br>DC_3A_n77A-n257I<br>DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I                     |
| DC_3A-21A_n78A-n257A <sup>2</sup><br>DC_3A-21A_n78A-n257G <sup>2</sup><br>DC_3A-21A_n78A-n257H <sup>2</sup><br>DC_3A-21A_n78A-n257I <sup>2</sup>                                                     | DC_3A_n78A-n257A<br>DC_3A_n78A-n257G<br>DC_3A_n78A-n257H<br>DC_3A_n78A-n257I<br>DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I                     |
| DC_3A-21A_n79A-n257A <sup>2</sup><br>DC_3A-21A_n79A-n257G <sup>2</sup><br>DC_3A-21A_n79A-n257H <sup>2</sup><br>DC_3A-21A_n79A-n257I <sup>2</sup>                                                     | DC_3A_n79A-n257A<br>DC_3A_n79A-n257G<br>DC_3A_n79A-n257H<br>DC_3A_n79A-n257I<br>DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I                     |
| DC_3A-28A_n77A-n257A <sup>2</sup><br>DC_3A-28A_n77A-n257D <sup>2</sup><br>DC_3A-28A_n77A-n257G <sup>2</sup><br>DC_3A-28A_n77A-n257H <sup>2</sup><br>DC_3A-28A_n77A-n257I <sup>2</sup>                | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n77A<br>DC_28A_n257A<br>DC_28A_n257D<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I |
| DC_3A-28A_n77(2A)-n257A <sup>2</sup><br>DC_3A-28A_n77(2A)-n257D <sup>2</sup><br>DC_3A-28A_n77(2A)-n257G <sup>2</sup><br>DC_3A-28A_n77(2A)-n257H <sup>2</sup><br>DC_3A-28A_n77(2A)-n257I <sup>2</sup> | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257D<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n77A<br>DC_28A_n257A<br>DC_28A_n257D<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I |
| DC_3A-28A_n78A-n257A <sup>2</sup><br>DC_3A-28A_n78A-n257G <sup>2</sup>                                                                                                                               | DC_3A_n78A<br>DC_3A_n257A                                                                                                                                                            |

| EN-DC configuration                                                                                                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                  |
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| DC_3A-28A_n78A-n257H <sup>2</sup><br>DC_3A-28A_n78A-n257I <sup>2</sup>                                                                                                                                                                                                                               | DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                                             |
| DC_3A-41A_n28A-n257A <sup>2</sup><br>DC_3A-41A_n28A-n257G <sup>2</sup><br>DC_3A-41A_n28A-n257H <sup>2</sup><br>DC_3A-41A_n28A-n257I <sup>2</sup><br>DC_3A-41C_n28A-n257A <sup>2</sup><br>DC_3A-41C_n28A-n257G <sup>2</sup><br>DC_3A-41C_n28A-n257H <sup>2</sup><br>DC_3A-41C_n28A-n257I <sup>2</sup> | DC_3A_n28A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n28A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n28A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_3A-41A_n77A-n257A<br>DC_3A-41A_n77A-n257G<br>DC_3A-41A_n77A-n257H<br>DC_3A-41A_n77A-n257I<br>DC_3A-41C_n77A-n257A<br>DC_3A-41C_n77A-n257G<br>DC_3A-41C_n77A-n257H<br>DC_3A-41C_n77A-n257I                                                                                                         | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_3A-41A_n78A-n257A<br>DC_3A-41A_n78A-n257G<br>DC_3A-41A_n78A-n257H<br>DC_3A-41A_n78A-n257I<br>DC_3A-41C_n78A-n257A<br>DC_3A-41C_n78A-n257G<br>DC_3A-41C_n78A-n257H<br>DC_3A-41C_n78A-n257I                                                                                                         | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_3A-42A_n77A-n257A<br>DC_3A-42A_n77A-n257G<br>DC_3A-42A_n77A-n257H<br>DC_3A-42A_n77A-n257I<br>DC_3A-42C_n77A-n257A<br>DC_3A-42C_n77A-n257G<br>DC_3A-42C_n77A-n257H<br>DC_3A-42C_n77A-n257I                                                                                                         | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                               |
| DC_3A-42A_n77A-n257A<br>DC_3A-42A_n77A-n257G<br>DC_3A-42A_n77A-n257H                                                                                                                                                                                                                                 | DC_3A_n77A-n257A<br>DC_3A_n77A-n257G<br>DC_3A_n77A-n257H                                                                                                                                                                             |

| EN-DC configuration                                                                                                                                                                                                                                                                        | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_3A-42A_n77A-n257I<br>DC_3A-42C_n77A-n257A<br>DC_3A-42C_n77A-n257G<br>DC_3A-42C_n77A-n257H<br>DC_3A-42C_n77A-n257I                                                                                                                                                                       | DC_3A_n77A-n257I                                                                                                                                                                                                                                                                       |
| DC_3A-42A_n78A-n257A<br>DC_3A-42A_n78A-n257G<br>DC_3A-42A_n78A-n257H<br>DC_3A-42A_n78A-n257I<br>DC_3A-42C_n78A-n257A<br>DC_3A-42C_n78A-n257G<br>DC_3A-42C_n78A-n257H<br>DC_3A-42C_n78A-n257I                                                                                               | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I<br>DC_3A_n78A-n257A<br>DC_3A_n78A-n257G<br>DC_3A_n78A-n257H<br>DC_3A_n78A-n257I |
| DC_3A-42A_n79A-n257A<br>DC_3A-42A_n79A-n257G<br>DC_3A-42A_n79A-n257H<br>DC_3A-42A_n79A-n257I<br>DC_3A-42C_n79A-n257A<br>DC_3A-42C_n79A-n257G<br>DC_3A-42C_n79A-n257H<br>DC_3A-42C_n79A-n257I                                                                                               | DC_3A_n79A-n257A<br>DC_3A_n79A-n257G<br>DC_3A_n79A-n257H<br>DC_3A_n79A-n257I                                                                                                                                                                                                           |
| DC_3A-42A_n79A-n257A<br>DC_3A-42A_n79A-n257G<br>DC_3A-42A_n79A-n257H<br>DC_3A-42A_n79A-n257I<br>DC_3A-42C_n79A-n257A<br>DC_3A-42C_n79A-n257G<br>DC_3A-42C_n79A-n257H<br>DC_3A-42C_n79A-n257I                                                                                               | DC_3A_n79A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                                                                                 |
| DC_5A-7A_n78A-n257A<br>DC_5A-7A_n78A-n257D<br>DC_5A-7A_n78A-n257E<br>DC_5A-7A_n78A-n257F<br>DC_5A-7A_n78A-n257G<br>DC_5A-7A_n78A-n257H<br>DC_5A-7A_n78A-n257I<br>DC_5A-7A_n78A-n257J<br>DC_5A-7A_n78A-n257K<br>DC_5A-7A_n78A-n257L<br>DC_5A-7A_n78A-n257M                                  | DC_5A_n78A<br>DC_5A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                                                                                                                                                 |
| DC_5A-7A-7A_n78A-n257A<br>DC_5A-7A-7A_n78A-n257D<br>DC_5A-7A-7A_n78A-n257E<br>DC_5A-7A-7A_n78A-n257F<br>DC_5A-7A-7A_n78A-n257G<br>DC_5A-7A-7A_n78A-n257H<br>DC_5A-7A-7A_n78A-n257I<br>DC_5A-7A-7A_n78A-n257J<br>DC_5A-7A-7A_n78A-n257K<br>DC_5A-7A-7A_n78A-n257L<br>DC_5A-7A-7A_n78A-n257M | DC_5A_n78A<br>DC_5A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                                                                                                                                                 |
| DC_8A-11A_n77A-n257A <sup>2</sup><br>DC_8A-11A_n77A-n257D <sup>2</sup><br>DC_8A-11A_n77A-n257G <sup>2</sup><br>DC_8A-11A_n77A-n257H <sup>2</sup>                                                                                                                                           | DC_8A_n77A<br>DC_8A_n257A<br>DC_11A_n77A<br>DC_11A_n257A                                                                                                                                                                                                                               |

| EN-DC configuration                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_8A-11A_n77A-n257I <sup>2</sup>                                                                                                                                                                    |                                                                                                                                                                                                                                        |
| DC_8A-11A_n77(2A)-n257A <sup>2</sup><br>DC_8A-11A_n77(2A)-n257D <sup>2</sup><br>DC_8A-11A_n77(2A)-n257G <sup>2</sup><br>DC_8A-11A_n77(2A)-n257H <sup>2</sup><br>DC_8A-11A_n77(2A)-n257I <sup>2</sup> | DC_8A_n77A<br>DC_8A_n257A<br>DC_11A_n77A<br>DC_11A_n257A                                                                                                                                                                               |
| DC_18A-41A_n3A-n257A<br>DC_18A-41A_n3A-n257G<br>DC_18A-41A_n3A-n257H<br>DC_18A-41A_n3A-n257I<br>DC_18A-41C_n3A-n257A<br>DC_18A-41C_n3A-n257G<br>DC_18A-41C_n3A-n257H<br>DC_18A-41C_n3A-n257I         | DC_18A_n3A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_41A_n3A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n3A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_18A-42A_n78A-n257A<br>DC_18A-42A_n78A-n257G<br>DC_18A-42A_n78A-n257H<br>DC_18A-42A_n78A-n257I<br>DC_18A-42C_n78A-n257A<br>DC_18A-42C_n78A-n257G<br>DC_18A-42C_n78A-n257H<br>DC_18A-42C_n78A-n257I | DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                            |
| DC_19A-21A_n77A-n257A <sup>2</sup><br>DC_19A-21A_n77A-n257G <sup>2</sup><br>DC_19A-21A_n77A-n257H <sup>2</sup><br>DC_19A-21A_n77A-n257I <sup>2</sup>                                                 | DC_19A_n77A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                                                                             |
| DC_19A-21A_n78A-n257A <sup>2</sup><br>DC_19A-21A_n78A-n257G <sup>2</sup><br>DC_19A-21A_n78A-n257H <sup>2</sup><br>DC_19A-21A_n78A-n257I <sup>2</sup>                                                 | DC_19A_n78A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                                                                             |
| DC_19A-21A_n79A-n257A <sup>2</sup><br>DC_19A-21A_n79A-n257G <sup>2</sup><br>DC_19A-21A_n79A-n257H <sup>2</sup><br>DC_19A-21A_n79A-n257I <sup>2</sup>                                                 | DC_19A_n79A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                                                                             |
| DC_19A-42A_n77A-n257A                                                                                                                                                                                | DC_19A_n77A                                                                                                                                                                                                                            |

| EN-DC configuration                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_19A-42A_n77A-n257G<br>DC_19A-42A_n77A-n257H<br>DC_19A-42A_n77A-n257I<br>DC_19A-42C_n77A-n257A<br>DC_19A-42C_n77A-n257G<br>DC_19A-42C_n77A-n257H<br>DC_19A-42C_n77A-n257I                          | DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                         |
| DC_19A-42A_n78A-n257A<br>DC_19A-42A_n78A-n257G<br>DC_19A-42A_n78A-n257H<br>DC_19A-42A_n78A-n257I<br>DC_19A-42C_n78A-n257A<br>DC_19A-42C_n78A-n257G<br>DC_19A-42C_n78A-n257H<br>DC_19A-42C_n78A-n257I | DC_19A_n78A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                          |
| DC_19A-42A_n79A-n257A<br>DC_19A-42A_n79A-n257G<br>DC_19A-42A_n79A-n257H<br>DC_19A-42A_n79A-n257I<br>DC_19A-42C_n79A-n257A<br>DC_19A-42C_n79A-n257G<br>DC_19A-42C_n79A-n257H<br>DC_19A-42C_n79A-n257I | DC_19A_n79A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                          |
| DC_21A-42A_n77A-n257A<br>DC_21A-42A_n77A-n257G<br>DC_21A-42A_n77A-n257H<br>DC_21A-42A_n77A-n257I<br>DC_21A-42C_n77A-n257A<br>DC_21A-42C_n77A-n257G<br>DC_21A-42C_n77A-n257H<br>DC_21A-42C_n77A-n257I | DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                          |
| DC_21A-42A_n78A-n257A<br>DC_21A-42A_n78A-n257G<br>DC_21A-42A_n78A-n257H<br>DC_21A-42A_n78A-n257I<br>DC_21A-42C_n78A-n257A<br>DC_21A-42C_n78A-n257G<br>DC_21A-42C_n78A-n257H<br>DC_21A-42C_n78A-n257I | DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                          |
| DC_21A-42A_n79A-n257A<br>DC_21A-42A_n79A-n257G<br>DC_21A-42A_n79A-n257H<br>DC_21A-42A_n79A-n257I<br>DC_21A-42C_n79A-n257A<br>DC_21A-42C_n79A-n257G<br>DC_21A-42C_n79A-n257H<br>DC_21A-42C_n79A-n257I | DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                          |
| DC_19A-21A_n77A-n257A <sup>2</sup><br>DC_19A-21A_n77A-n257G <sup>2</sup><br>DC_19A-21A_n77A-n257H <sup>2</sup><br>DC_19A-21A_n77A-n257I <sup>2</sup>                                                 | DC_19A_n77A-n257A<br>DC_19A_n77A-n257G<br>DC_19A_n77A-n257H<br>DC_19A_n77A-n257I<br>DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I |
| DC_19A-21A_n78A-n257A <sup>2</sup><br>DC_19A-21A_n78A-n257G <sup>2</sup><br>DC_19A-21A_n78A-n257H <sup>2</sup><br>DC_19A-21A_n78A-n257I <sup>2</sup>                                                 | DC_19A_n78A-n257A<br>DC_19A_n78A-n257G<br>DC_19A_n78A-n257H<br>DC_19A_n78A-n257I                                                                                     |

| EN-DC configuration                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                      | DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I                                                                                     |
| DC_19A-21A_n79A-n257A <sup>2</sup><br>DC_19A-21A_n79A-n257G <sup>2</sup><br>DC_19A-21A_n79A-n257H <sup>2</sup><br>DC_19A-21A_n79A-n257I <sup>2</sup>                                                 | DC_19A_n79A-n257A<br>DC_19A_n79A-n257G<br>DC_19A_n79A-n257H<br>DC_19A_n79A-n257I<br>DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I |
| DC_19A-42A_n77A-n257A<br>DC_19A-42A_n77A-n257G<br>DC_19A-42A_n77A-n257H<br>DC_19A-42A_n77A-n257I<br>DC_19A-42C_n77A-n257A<br>DC_19A-42C_n77A-n257G<br>DC_19A-42C_n77A-n257H<br>DC_19A-42C_n77A-n257I | DC_19A_n77A-n257A<br>DC_19A_n77A-n257G<br>DC_19A_n77A-n257H<br>DC_19A_n77A-n257I                                                                                     |
| DC_19A-42A_n78A-n257A<br>DC_19A-42A_n78A-n257G<br>DC_19A-42A_n78A-n257H<br>DC_19A-42A_n78A-n257I<br>DC_19A-42C_n78A-n257A<br>DC_19A-42C_n78A-n257G<br>DC_19A-42C_n78A-n257H<br>DC_19A-42C_n78A-n257I | DC_19A_n78A-n257A<br>DC_19A_n78A-n257G<br>DC_19A_n78A-n257H<br>DC_19A_n78A-n257I                                                                                     |
| DC_19A-42A_n79A-n257A<br>DC_19A-42A_n79A-n257G<br>DC_19A-42A_n79A-n257H<br>DC_19A-42A_n79A-n257I<br>DC_19A-42C_n79A-n257A<br>DC_19A-42C_n79A-n257G<br>DC_19A-42C_n79A-n257H<br>DC_19A-42C_n79A-n257I | DC_19A_n79A-n257A<br>DC_19A_n79A-n257G<br>DC_19A_n79A-n257H<br>DC_19A_n79A-n257I                                                                                     |
| DC_21A-42A_n77A-n257A<br>DC_21A-42A_n77A-n257G<br>DC_21A-42A_n77A-n257H<br>DC_21A-42A_n77A-n257I<br>DC_21A-42C_n77A-n257A<br>DC_21A-42C_n77A-n257G<br>DC_21A-42C_n77A-n257H<br>DC_21A-42C_n77A-n257I | DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I                                                                                     |
| DC_21A-42A_n78A-n257A<br>DC_21A-42A_n78A-n257G<br>DC_21A-42A_n78A-n257H<br>DC_21A-42A_n78A-n257I<br>DC_21A-42C_n78A-n257A<br>DC_21A-42C_n78A-n257G<br>DC_21A-42C_n78A-n257H<br>DC_21A-42C_n78A-n257I | DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I                                                                                     |
| DC_21A-42A_n79A-n257A<br>DC_21A-42A_n79A-n257G<br>DC_21A-42A_n79A-n257H<br>DC_21A-42A_n79A-n257I<br>DC_21A-42C_n79A-n257A<br>DC_21A-42C_n79A-n257G<br>DC_21A-42C_n79A-n257H<br>DC_21A-42C_n79A-n257I | DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I                                                                                     |
| DC_28A-41A_n78A-n257A<br>DC_28A-41A_n78A-n257G<br>DC_28A-41A_n78A-n257H<br>DC_28A-41A_n78A-n257I                                                                                                     | DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H                                                                                                          |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_28A-41C_n78A-n257A<br>DC_28A-41C_n78A-n257G<br>DC_28A-41C_n78A-n257H<br>DC_28A-41C_n78A-n257I                                                                                                                                                                                                                                                                                                             | DC_28A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I                                                                                                                 |
| DC_28A-42A_n78A-n257A<br>DC_28A-42A_n78A-n257G<br>DC_28A-42A_n78A-n257H<br>DC_28A-42A_n78A-n257I<br>DC_28A-42C_n78A-n257A<br>DC_28A-42C_n78A-n257G<br>DC_28A-42C_n78A-n257H<br>DC_28A-42C_n78A-n257I                                                                                                                                                                                                         | DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                                |
| DC_41A-42A_n77A-n257A<br>DC_41A-42A_n77A-n257G<br>DC_41A-42A_n77A-n257H<br>DC_41A-42A_n77A-n257I<br>DC_41A-42C_n77A-n257A<br>DC_41A-42C_n77A-n257G<br>DC_41A-42C_n77A-n257H<br>DC_41A-42C_n77A-n257I<br>DC_41C-42A_n77A-n257A<br>DC_41C-42A_n77A-n257G<br>DC_41C-42A_n77A-n257H<br>DC_41C-42A_n77A-n257I<br>DC_41C-42C_n77A-n257A<br>DC_41C-42C_n77A-n257G<br>DC_41C-42C_n77A-n257H<br>DC_41C-42C_n77A-n257I | DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_41A-42A_n78A-n257A<br>DC_41A-42A_n78A-n257G<br>DC_41A-42A_n78A-n257H<br>DC_41A-42A_n78A-n257I<br>DC_41A-42C_n78A-n257A<br>DC_41A-42C_n78A-n257G<br>DC_41A-42C_n78A-n257H<br>DC_41A-42C_n78A-n257I<br>DC_41C-42A_n78A-n257A<br>DC_41C-42A_n78A-n257G<br>DC_41C-42A_n78A-n257H<br>DC_41C-42A_n78A-n257I<br>DC_41C-42C_n78A-n257A<br>DC_41C-42C_n78A-n257G<br>DC_41C-42C_n78A-n257H<br>DC_41C-42C_n78A-n257I | DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.<br>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability.                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                            |

## 5.5B.6.4 Inter-band EN-DC configurations including FR1 and FR2 (five bands)

Table 5.5B.6.4-1: Inter-band EN-DC configurations including FR1 and FR2 (five bands)

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Uplink EN-DC configuration (NOTE 1)                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| DC_1A-3A-5A_n78A-n257A<br>DC_1A-3A-5A_n78A-n257D<br>DC_1A-3A-5A_n78A-n257E<br>DC_1A-3A-5A_n78A-n257F<br>DC_1A-3A-5A_n78A-n257G<br>DC_1A-3A-5A_n78A-n257H<br>DC_1A-3A-5A_n78A-n257I<br>DC_1A-3A-5A_n78A-n257J<br>DC_1A-3A-5A_n78A-n257K<br>DC_1A-3A-5A_n78A-n257L<br>DC_1A-3A-5A_n78A-n257M                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_1A_n78A<br>DC_1A_n257A<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_5A_n78A<br>DC_5A_n257A  |
| DC_1A-3A-7A_n78A-n257A<br>DC_1A-3A-7A_n78A-n257D<br>DC_1A-3A-7A_n78A-n257E<br>DC_1A-3A-7A_n78A-n257F<br>DC_1A-3A-7A_n78A-n257G<br>DC_1A-3A-7A_n78A-n257H<br>DC_1A-3A-7A_n78A-n257I<br>DC_1A-3A-7A_n78A-n257J<br>DC_1A-3A-7A_n78A-n257K<br>DC_1A-3A-7A_n78A-n257L<br>DC_1A-3A-7A_n78A-n257M                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_1A_n78A<br>DC_1A_n257A<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_7A_n78A<br>DC_7A_n257A  |
| DC_1A-3A-7A-7A_n78A-n257A<br>DC_1A-3A-7A-7A_n78A-n257D<br>DC_1A-3A-7A-7A_n78A-n257E<br>DC_1A-3A-7A-7A_n78A-n257F<br>DC_1A-3A-7A-7A_n78A-n257G<br>DC_1A-3A-7A-7A_n78A-n257H<br>DC_1A-3A-7A-7A_n78A-n257I<br>DC_1A-3A-7A-7A_n78A-n257J<br>DC_1A-3A-7A-7A_n78A-n257K<br>DC_1A-3A-7A-7A_n78A-n257L<br>DC_1A-3A-7A-7A_n78A-n257M                                                                                                                                                                                                                                                                                                                                                                                                             | DC_1A_n78A<br>DC_1A_n257A<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_7A_n78A<br>DC_7A_n257A  |
| DC_1A-3A-8A_n78A-n257A <sup>2</sup><br>DC_1A-3A-8A_n78A-n257D <sup>2</sup><br>DC_1A-3A-8A_n78A-n257E <sup>2</sup><br>DC_1A-3A-8A_n78A-n257F <sup>2</sup><br>DC_1A-3A-8A_n78A-n257G <sup>2</sup><br>DC_1A-3A-8A_n78A-n257H <sup>2</sup><br>DC_1A-3A-8A_n78A-n257I <sup>2</sup><br>DC_1A-3A-8A_n78A-n257J <sup>2</sup><br>DC_1A-3A-8A_n78A-n257K <sup>2</sup><br>DC_1A-3A-8A_n78A-n257L <sup>2</sup><br>DC_1A-3A-8A_n78A-n257M <sup>2</sup><br>DC_1A-3C-8A_n78A-n257A<br>DC_1A-3C-8A_n78A-n257D<br>DC_1A-3C-8A_n78A-n257E<br>DC_1A-3C-8A_n78A-n257F<br>DC_1A-3C-8A_n78A-n257G<br>DC_1A-3C-8A_n78A-n257H<br>DC_1A-3C-8A_n78A-n257I<br>DC_1A-3C-8A_n78A-n257J<br>DC_1A-3C-8A_n78A-n257K<br>DC_1A-3C-8A_n78A-n257L<br>DC_1A-3C-8A_n78A-n257M | DC_1A_n78A<br>DC_1A_n257A<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_8A_n78A<br>DC_8A_n257A  |
| DC_1A-3A-18A_n78A-n257A<br>DC_1A-3A-18A_n78A-n257G<br>DC_1A-3A-18A_n78A-n257H<br>DC_1A-3A-18A_n78A-n257I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A |

| EN-DC configuration                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                              | DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I                                                                                                          |
| DC_1A-3A-21A_n77A-n257A <sup>2</sup><br>DC_1A-3A-21A_n77A-n257G <sup>2</sup><br>DC_1A-3A-21A_n77A-n257H <sup>2</sup><br>DC_1A-3A-21A_n77A-n257I <sup>2</sup> | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                  |
| DC_1A-3A-21A_n78A-n257A <sup>2</sup><br>DC_1A-3A-21A_n78A-n257G <sup>2</sup><br>DC_1A-3A-21A_n78A-n257H <sup>2</sup><br>DC_1A-3A-21A_n78A-n257I <sup>2</sup> | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                  |
| DC_1A-3A-21A_n79A-n257A <sup>2</sup><br>DC_1A-3A-21A_n79A-n257G <sup>2</sup><br>DC_1A-3A-21A_n79A-n257H <sup>2</sup><br>DC_1A-3A-21A_n79A-n257I <sup>2</sup> | DC_1A_n79A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n79A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I                  |
| DC_1A-3A-21A_n77A-n257A <sup>2</sup><br>DC_1A-3A-21A_n77A-n257G <sup>2</sup><br>DC_1A-3A-21A_n77A-n257H <sup>2</sup><br>DC_1A-3A-21A_n77A-n257I <sup>2</sup> | DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_1A_n77A-n257H<br>DC_1A_n77A-n257I<br>DC_3A_n77A-n257A<br>DC_3A_n77A-n257G<br>DC_3A_n77A-n257H<br>DC_3A_n77A-n257I<br>DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I |

| EN-DC configuration                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-21A_n78A-n257A <sup>2</sup><br>DC_1A-3A-21A_n78A-n257G <sup>2</sup><br>DC_1A-3A-21A_n78A-n257H <sup>2</sup><br>DC_1A-3A-21A_n78A-n257I <sup>2</sup>                                                         | DC_1A_n78A-n257A<br>DC_1A_n78A-n257G<br>DC_1A_n78A-n257H<br>DC_1A_n78A-n257I<br>DC_3A_n78A-n257A<br>DC_3A_n78A-n257G<br>DC_3A_n78A-n257H<br>DC_3A_n78A-n257I<br>DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I |
| DC_1A-3A-21A_n79A-n257A <sup>2</sup><br>DC_1A-3A-21A_n79A-n257G <sup>2</sup><br>DC_1A-3A-21A_n79A-n257H <sup>2</sup><br>DC_1A-3A-21A_n79A-n257I <sup>2</sup>                                                         | DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I<br>DC_3A_n79A-n257A<br>DC_3A_n79A-n257G<br>DC_3A_n79A-n257H<br>DC_3A_n79A-n257I<br>DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I |
| DC_1A-3A-28A_n78A-n257A <sup>2</sup><br>DC_1A-3A-28A_n78A-n257G <sup>2</sup><br>DC_1A-3A-28A_n78A-n257H <sup>2</sup><br>DC_1A-3A-28A_n78A-n257I <sup>2</sup>                                                         | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                  |
| DC_1A-3A-41A_n28A-n257A <sup>2</sup><br>DC_1A-3A-41A_n28A-n257I                                                                                                                                                      | DC_1A_n28A<br>DC_1A_n257A<br>DC_3A_n28A<br>DC_3A_n257A<br>DC_41A_n28A<br>DC_41A_n257A<br>DC_41A_n257I                                                                                                                                            |
| DC_1A-3A-41C_n28A-n257A <sup>2</sup><br>DC_1A-3A-41C_n28A-n257I                                                                                                                                                      | DC_1A_n28A<br>DC_1A_n257A<br>DC_3A_n28A<br>DC_3A_n257A<br>DC_41A_n28A<br>DC_41A_n257A<br>DC_41A_n257I<br>DC_41C_n28A<br>DC_41C_n257A<br>DC_41C_n257I                                                                                             |
| DC_1A-3A-41A_n77A-n257A<br>DC_1A-3A-41A_n77A-n257G<br>DC_1A-3A-41A_n77A-n257H<br>DC_1A-3A-41A_n77A-n257I<br>DC_1A-3A-41C_n77A-n257A<br>DC_1A-3A-41C_n77A-n257G<br>DC_1A-3A-41C_n77A-n257H<br>DC_1A-3A-41C_n77A-n257I | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H                                                                                                                |

| EN-DC configuration                                                                                                                                                                                                  | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                      | DC_3A_n257I<br>DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I                                                                                                                                      |
| DC_1A-3A-41A_n78A-n257A<br>DC_1A-3A-41A_n78A-n257G<br>DC_1A-3A-41A_n78A-n257H<br>DC_1A-3A-41A_n78A-n257I<br>DC_1A-3A-41C_n78A-n257A<br>DC_1A-3A-41C_n78A-n257G<br>DC_1A-3A-41C_n78A-n257H<br>DC_1A-3A-41C_n78A-n257I | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I |
| DC_1A-3A-42A_n77A-n257A<br>DC_1A-3A-42A_n77A-n257G<br>DC_1A-3A-42A_n77A-n257H<br>DC_1A-3A-42A_n77A-n257I<br>DC_1A-3A-42C_n77A-n257A<br>DC_1A-3A-42C_n77A-n257G<br>DC_1A-3A-42C_n77A-n257H<br>DC_1A-3A-42C_n77A-n257I | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                               |
| DC_1A-3A-42A_n78A-n257A<br>DC_1A-3A-42A_n78A-n257G<br>DC_1A-3A-42A_n78A-n257H<br>DC_1A-3A-42A_n78A-n257I<br>DC_1A-3A-42C_n78A-n257A<br>DC_1A-3A-42C_n78A-n257G<br>DC_1A-3A-42C_n78A-n257H<br>DC_1A-3A-42C_n78A-n257I | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H                                               |

| EN-DC configuration                                                                                                                                                                                                                                                                                                         | Uplink EN-DC configuration (NOTE 1)                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                             | DC_42C_n257I                                                                                                                           |
| DC_1A-5A-7A_n78A-n257A<br>DC_1A-5A-7A_n78A-n257D<br>DC_1A-5A-7A_n78A-n257E<br>DC_1A-5A-7A_n78A-n257F<br>DC_1A-5A-7A_n78A-n257G<br>DC_1A-5A-7A_n78A-n257H<br>DC_1A-5A-7A_n78A-n257I<br>DC_1A-5A-7A_n78A-n257J<br>DC_1A-5A-7A_n78A-n257K<br>DC_1A-5A-7A_n78A-n257L<br>DC_1A-5A-7A_n78A-n257M                                  | DC_1A_n78A<br>DC_1A_n257A<br>DC_5A_n78A<br>DC_5A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                    |
| DC_1A-5A-7A-7A_n78A-n257A<br>DC_1A-5A-7A-7A_n78A-n257D<br>DC_1A-5A-7A-7A_n78A-n257E<br>DC_1A-5A-7A-7A_n78A-n257F<br>DC_1A-5A-7A-7A_n78A-n257G<br>DC_1A-5A-7A-7A_n78A-n257H<br>DC_1A-5A-7A-7A_n78A-n257I<br>DC_1A-5A-7A-7A_n78A-n257J<br>DC_1A-5A-7A-7A_n78A-n257K<br>DC_1A-5A-7A-7A_n78A-n257L<br>DC_1A-5A-7A-7A_n78A-n257M | DC_1A_n78A<br>DC_1A_n257A<br>DC_5A_n78A<br>DC_5A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                    |
| DC_1A-8A-11A_n77A-n257A <sup>2</sup><br>DC_1A-8A-11A_n77A-n257D <sup>2</sup><br>DC_1A-8A-11A_n77A-n257G <sup>2</sup><br>DC_1A-8A-11A_n77A-n257H <sup>2</sup><br>DC_1A-8A-11A_n77A-n257I <sup>2</sup>                                                                                                                        | DC_1A_n77A<br>DC_1A_n257A<br>DC_8A_n77A<br>DC_8A_n257A<br>DC_11A_n77A<br>DC_11A_n257A                                                  |
| DC_1A-8A-11A_n77(2A)-n257A <sup>2</sup><br>DC_1A-8A-11A_n77(2A)-n257D <sup>2</sup><br>DC_1A-8A-11A_n77(2A)-n257G <sup>2</sup><br>DC_1A-8A-11A_n77(2A)-n257H <sup>2</sup><br>DC_1A-8A-11A_n77(2A)-n257I <sup>2</sup>                                                                                                         | DC_1A_n77A<br>DC_1A_n257A<br>DC_8A_n77A<br>DC_8A_n257A<br>DC_11A_n77A<br>DC_11A_n257A                                                  |
| DC_1A-18A-41A_n3A-n77A<br>DC_1A-18A-41C_n3A-n77A                                                                                                                                                                                                                                                                            | DC_18A_n3A<br>DC_18A_n77A<br>DC_41A_n3A<br>DC_41C_n3A<br>DC_41A_n77A<br>DC_41C_n77A                                                    |
| DC_1A-18A-41A_n3A-n78A<br>DC_1A-18A-41C_n3A-n78A                                                                                                                                                                                                                                                                            | DC_18A_n3A<br>DC_18A_n78A<br>DC_41A_n3A<br>DC_41C_n3A<br>DC_41A_n78A<br>DC_41C_n78A                                                    |
| DC_1A-18A-41A_n3A-n257A<br>DC_1A-18A-41A_n3A-n257I<br>DC_1A-18A-41C_n3A-n257A<br>DC_1A-18A-41C_n3A-n257I                                                                                                                                                                                                                    | DC_18A_n3A<br>DC_18A_n257A<br>DC_41A_n3A<br>DC_41C_n3A<br>DC_41A_n257A<br>DC_41C_n257A<br>DC_18A_n257I<br>DC_41A_n257I<br>DC_41C_n257I |
| DC_1A-18A-42A_n78A-n257A<br>DC_1A-18A-42A_n78A-n257G<br>DC_1A-18A-42A_n78A-n257H<br>DC_1A-18A-42A_n78A-n257I<br>DC_1A-18A-42C_n78A-n257A<br>DC_1A-18A-42C_n78A-n257G<br>DC_1A-18A-42C_n78A-n257H<br>DC_1A-18A-42C_n78A-n257I                                                                                                | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G                  |

| EN-DC configuration                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                              | DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                          |
| DC_1A-19A-42A_n77A-n257A<br>DC_1A-19A-42A_n77A-n257G<br>DC_1A-19A-42A_n77A-n257H<br>DC_1A-19A-42A_n77A-n257I<br>DC_1A-19A-42C_n77A-n257A<br>DC_1A-19A-42C_n77A-n257G<br>DC_1A-19A-42C_n77A-n257H<br>DC_1A-19A-42C_n77A-n257I | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_19A_n77A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_1A-19A-42A_n78A-n257A<br>DC_1A-19A-42A_n78A-n257G<br>DC_1A-19A-42A_n78A-n257H<br>DC_1A-19A-42A_n78A-n257I<br>DC_1A-19A-42C_n78A-n257A<br>DC_1A-19A-42C_n78A-n257G<br>DC_1A-19A-42C_n78A-n257H<br>DC_1A-19A-42C_n78A-n257I | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_19A_n78A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_1A-19A-42A_n79A-n257A<br>DC_1A-19A-42A_n79A-n257G<br>DC_1A-19A-42A_n79A-n257H<br>DC_1A-19A-42A_n79A-n257I<br>DC_1A-19A-42C_n79A-n257A<br>DC_1A-19A-42C_n79A-n257G<br>DC_1A-19A-42C_n79A-n257H<br>DC_1A-19A-42C_n79A-n257I | DC_1A_n79A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_19A_n79A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_1A-21A-42A_n77A-n257A<br>DC_1A-21A-42A_n77A-n257G<br>DC_1A-21A-42A_n77A-n257H<br>DC_1A-21A-42A_n77A-n257I<br>DC_1A-21A-42C_n77A-n257A<br>DC_1A-21A-42C_n77A-n257G<br>DC_1A-21A-42C_n77A-n257H<br>DC_1A-21A-42C_n77A-n257I | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |

| EN-DC configuration                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                   |
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| DC_1A-21A-42A_n78A-n257A<br>DC_1A-21A-42A_n78A-n257G<br>DC_1A-21A-42A_n78A-n257H<br>DC_1A-21A-42A_n78A-n257I<br>DC_1A-21A-42C_n78A-n257A<br>DC_1A-21A-42C_n78A-n257G<br>DC_1A-21A-42C_n78A-n257H<br>DC_1A-21A-42C_n78A-n257I | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_1A-21A-42A_n79A-n257A<br>DC_1A-21A-42A_n79A-n257G<br>DC_1A-21A-42A_n79A-n257H<br>DC_1A-21A-42A_n79A-n257I<br>DC_1A-21A-42C_n79A-n257A<br>DC_1A-21A-42C_n79A-n257G<br>DC_1A-21A-42C_n79A-n257H<br>DC_1A-21A-42C_n79A-n257I | DC_1A_n79A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_1A-19A-42A_n79A-n257A<br>DC_1A-19A-42A_n79A-n257G<br>DC_1A-19A-42A_n79A-n257H<br>DC_1A-19A-42A_n79A-n257I<br>DC_1A-19A-42C_n79A-n257A<br>DC_1A-19A-42C_n79A-n257G<br>DC_1A-19A-42C_n79A-n257H<br>DC_1A-19A-42C_n79A-n257I | DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I<br>DC_19A_n79A-n257A<br>DC_19A_n79A-n257G<br>DC_19A_n79A-n257H<br>DC_19A_n79A-n257I                                                      |
| DC_1A-21A-42A_n77A-n257A<br>DC_1A-21A-42A_n77A-n257G<br>DC_1A-21A-42A_n77A-n257H<br>DC_1A-21A-42A_n77A-n257I<br>DC_1A-21A-42C_n77A-n257A<br>DC_1A-21A-42C_n77A-n257G<br>DC_1A-21A-42C_n77A-n257H<br>DC_1A-21A-42C_n77A-n257I | DC_1A_n77A-n257A<br>DC_1A_n77A-n257G<br>DC_1A_n77A-n257H<br>DC_1A_n77A-n257I<br>DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I                                                      |
| DC_1A-21A-42A_n78A-n257A<br>DC_1A-21A-42A_n78A-n257G<br>DC_1A-21A-42A_n78A-n257H<br>DC_1A-21A-42A_n78A-n257I<br>DC_1A-21A-42C_n78A-n257A<br>DC_1A-21A-42C_n78A-n257G<br>DC_1A-21A-42C_n78A-n257H<br>DC_1A-21A-42C_n78A-n257I | DC_1A_n78A-n257A<br>DC_1A_n78A-n257G<br>DC_1A_n78A-n257H<br>DC_1A_n78A-n257I<br>DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I                                                      |
| DC_1A-21A-42A_n79A-n257A<br>DC_1A-21A-42A_n79A-n257G<br>DC_1A-21A-42A_n79A-n257H<br>DC_1A-21A-42A_n79A-n257I<br>DC_1A-21A-42C_n79A-n257A<br>DC_1A-21A-42C_n79A-n257G<br>DC_1A-21A-42C_n79A-n257H<br>DC_1A-21A-42C_n79A-n257I | DC_1A_n79A-n257A<br>DC_1A_n79A-n257G<br>DC_1A_n79A-n257H<br>DC_1A_n79A-n257I<br>DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I                                                      |
| DC_1A-28A-42A_n78A-n257A<br>DC_1A-28A-42A_n78A-n257G<br>DC_1A-28A-42A_n78A-n257H<br>DC_1A-28A-42A_n78A-n257I<br>DC_1A-28A-42C_n78A-n257A                                                                                     | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I                                                                                                                                                |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                  |
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| DC_1A-28A-42C_n78A-n257G<br>DC_1A-28A-42C_n78A-n257H<br>DC_1A-28A-42C_n78A-n257I                                                                                                                                                                                                                                                                                                                                                                             | DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                                                                                                          |
| DC_1A-41A-42A_n77A-n257A<br>DC_1A-41A-42A_n77A-n257G<br>DC_1A-41A-42A_n77A-n257H<br>DC_1A-41A-42A_n77A-n257I<br>DC_1A-41A-42C_n77A-n257A<br>DC_1A-41A-42C_n77A-n257G<br>DC_1A-41A-42C_n77A-n257H<br>DC_1A-41A-42C_n77A-n257I<br>DC_1A-41C-42A_n77A-n257A<br>DC_1A-41C-42A_n77A-n257G<br>DC_1A-41C-42A_n77A-n257H<br>DC_1A-41C-42A_n77A-n257I<br>DC_1A-41C-42C_n77A-n257A<br>DC_1A-41C-42C_n77A-n257G<br>DC_1A-41C-42C_n77A-n257H<br>DC_1A-41C-42C_n77A-n257I | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_1A-41A-42A_n78A-n257A<br>DC_1A-41A-42A_n78A-n257G<br>DC_1A-41A-42A_n78A-n257H<br>DC_1A-41A-42A_n78A-n257I<br>DC_1A-41A-42C_n78A-n257A<br>DC_1A-41A-42C_n78A-n257G<br>DC_1A-41A-42C_n78A-n257H<br>DC_1A-41A-42C_n78A-n257I<br>DC_1A-41C-42A_n78A-n257A<br>DC_1A-41C-42A_n78A-n257G<br>DC_1A-41C-42A_n78A-n257H<br>DC_1A-41C-42A_n78A-n257I<br>DC_1A-41C-42C_n78A-n257A<br>DC_1A-41C-42C_n78A-n257G<br>DC_1A-41C-42C_n78A-n257H<br>DC_1A-41C-42C_n78A-n257I | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_3A-5A-7A_n78A-n257A<br>DC_3A-5A-7A_n78A-n257D<br>DC_3A-5A-7A_n78A-n257E<br>DC_3A-5A-7A_n78A-n257F<br>DC_3A-5A-7A_n78A-n257G<br>DC_3A-5A-7A_n78A-n257H<br>DC_3A-5A-7A_n78A-n257I                                                                                                                                                                                                                                                                           | DC_3A_n78A<br>DC_3A_n257A<br>DC_5A_n78A<br>DC_5A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                                                                                                                                                                                                  |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                  |
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| DC_3A-5A-7A_n78A-n257J<br>DC_3A-5A-7A_n78A-n257K<br>DC_3A-5A-7A_n78A-n257L<br>DC_3A-5A-7A_n78A-n257M                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                      |
| DC_3A-5A-7A-7A_n78A-n257A<br>DC_3A-5A-7A-7A_n78A-n257D<br>DC_3A-5A-7A-7A_n78A-n257E<br>DC_3A-5A-7A-7A_n78A-n257F<br>DC_3A-5A-7A-7A_n78A-n257G<br>DC_3A-5A-7A-7A_n78A-n257H<br>DC_3A-5A-7A-7A_n78A-n257I<br>DC_3A-5A-7A-7A_n78A-n257J<br>DC_3A-5A-7A-7A_n78A-n257K<br>DC_3A-5A-7A-7A_n78A-n257L<br>DC_3A-5A-7A-7A_n78A-n257M                                                                                                                                  | DC_3A_n78A<br>DC_3A_n257A<br>DC_5A_n78A<br>DC_5A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                                                                                                                                                                                                  |
| DC_3A-18A-42A_n78A-n257A<br>DC_3A-18A-42A_n78A-n257G<br>DC_3A-18A-42A_n78A-n257H<br>DC_3A-18A-42A_n78A-n257I<br>DC_3A-18A-42C_n78A-n257A<br>DC_3A-18A-42C_n78A-n257G<br>DC_3A-18A-42C_n78A-n257H<br>DC_3A-18A-42C_n78A-n257I                                                                                                                                                                                                                                 | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                                |
| DC_3A-41A-42A_n77A-n257A<br>DC_3A-41A-42A_n77A-n257G<br>DC_3A-41A-42A_n77A-n257H<br>DC_3A-41A-42A_n77A-n257I<br>DC_3A-41A-42C_n77A-n257A<br>DC_3A-41A-42C_n77A-n257G<br>DC_3A-41A-42C_n77A-n257H<br>DC_3A-41A-42C_n77A-n257I<br>DC_3A-41C-42A_n77A-n257A<br>DC_3A-41C-42A_n77A-n257G<br>DC_3A-41C-42A_n77A-n257H<br>DC_3A-41C-42A_n77A-n257I<br>DC_3A-41C-42C_n77A-n257A<br>DC_3A-41C-42C_n77A-n257G<br>DC_3A-41C-42C_n77A-n257H<br>DC_3A-41C-42C_n77A-n257I | DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_3A-28A-41A_n78A-n257A<br>DC_3A-28A-41A_n78A-n257G<br>DC_3A-28A-41A_n78A-n257H<br>DC_3A-28A-41A_n78A-n257I<br>DC_3A-28A-41C_n78A-n257A<br>DC_3A-28A-41C_n78A-n257G<br>DC_3A-28A-41C_n78A-n257H<br>DC_3A-28A-41C_n78A-n257I                                                                                                                                                                                                                                 | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I                                                                                                                                                                                                                |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                                  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I                                                                                                                                                                                                           |
| DC_3A-28A-42A_n78A-n257A<br>DC_3A-28A-42A_n78A-n257G<br>DC_3A-28A-42A_n78A-n257H<br>DC_3A-28A-42A_n78A-n257I<br>DC_3A-28A-42C_n78A-n257A<br>DC_3A-28A-42C_n78A-n257G<br>DC_3A-28A-42C_n78A-n257H<br>DC_3A-28A-42C_n78A-n257I                                                                                                                                                                                                                                 | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                                |
| DC_3A-41A-42A_n78A-n257A<br>DC_3A-41A-42A_n78A-n257G<br>DC_3A-41A-42A_n78A-n257H<br>DC_3A-41A-42A_n78A-n257I<br>DC_3A-41A-42C_n78A-n257A<br>DC_3A-41A-42C_n78A-n257G<br>DC_3A-41A-42C_n78A-n257H<br>DC_3A-41A-42C_n78A-n257I<br>DC_3A-41C-42A_n78A-n257A<br>DC_3A-41C-42A_n78A-n257G<br>DC_3A-41C-42A_n78A-n257H<br>DC_3A-41C-42A_n78A-n257I<br>DC_3A-41C-42C_n78A-n257A<br>DC_3A-41C-42C_n78A-n257G<br>DC_3A-41C-42C_n78A-n257H<br>DC_3A-41C-42C_n78A-n257I | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| DC_19A-21A-42A_n77A-n257A<br>DC_19A-21A-42A_n77A-n257G<br>DC_19A-21A-42A_n77A-n257H<br>DC_19A-21A-42A_n77A-n257I<br>DC_19A-21A-42C_n77A-n257A<br>DC_19A-21A-42C_n77A-n257G<br>DC_19A-21A-42C_n77A-n257H<br>DC_19A-21A-42C_n77A-n257I                                                                                                                                                                                                                         | DC_19A_n77A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n77A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                                                                                                                                           |
| DC_19A-21A-42A_n78A-n257A                                                                                                                                                                                                                                                                                                                                                                                                                                    | DC_19A_n78A                                                                                                                                                                                                                                                                                                                                                          |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                        |
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| DC_19A-21A-42A_n78A-n257G<br>DC_19A-21A-42A_n78A-n257H<br>DC_19A-21A-42A_n78A-n257I<br>DC_19A-21A-42C_n78A-n257A<br>DC_19A-21A-42C_n78A-n257G<br>DC_19A-21A-42C_n78A-n257H<br>DC_19A-21A-42C_n78A-n257I                                                                                                                                                                                                            | DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n78A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I                |
| DC_19A-21A-42A_n79A-n257A<br>DC_19A-21A-42A_n79A-n257G<br>DC_19A-21A-42A_n79A-n257H<br>DC_19A-21A-42A_n79A-n257I<br>DC_19A-21A-42C_n79A-n257A<br>DC_19A-21A-42C_n79A-n257G<br>DC_19A-21A-42C_n79A-n257H<br>DC_19A-21A-42C_n79A-n257I                                                                                                                                                                               | DC_19A_n79A<br>DC_19A_n257A<br>DC_19A_n257G<br>DC_19A_n257H<br>DC_19A_n257I<br>DC_21A_n79A<br>DC_21A_n257A<br>DC_21A_n257G<br>DC_21A_n257H<br>DC_21A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I |
| DC_19A-21A-42A_n77A-n257A<br>DC_19A-21A-42A_n77A-n257G<br>DC_19A-21A-42A_n77A-n257H<br>DC_19A-21A-42A_n77A-n257I<br>DC_19A-21A-42C_n77A-n257A<br>DC_19A-21A-42C_n77A-n257G<br>DC_19A-21A-42C_n77A-n257H<br>DC_19A-21A-42C_n77A-n257I                                                                                                                                                                               | DC_19A_n77A-n257A<br>DC_19A_n77A-n257G<br>DC_19A_n77A-n257H<br>DC_19A_n77A-n257I<br>DC_21A_n77A-n257A<br>DC_21A_n77A-n257G<br>DC_21A_n77A-n257H<br>DC_21A_n77A-n257I                                                       |
| DC_19A-21A-42A_n78A-n257A<br>DC_19A-21A-42A_n78A-n257G<br>DC_19A-21A-42A_n78A-n257H<br>DC_19A-21A-42A_n78A-n257I<br>DC_19A-21A-42C_n78A-n257A<br>DC_19A-21A-42C_n78A-n257G<br>DC_19A-21A-42C_n78A-n257H<br>DC_19A-21A-42C_n78A-n257I                                                                                                                                                                               | DC_19A_n78A-n257A<br>DC_19A_n78A-n257G<br>DC_19A_n78A-n257H<br>DC_19A_n78A-n257I<br>DC_21A_n78A-n257A<br>DC_21A_n78A-n257G<br>DC_21A_n78A-n257H<br>DC_21A_n78A-n257I                                                       |
| DC_19A-21A-42A_n79A-n257A<br>DC_19A-21A-42A_n79A-n257G<br>DC_19A-21A-42A_n79A-n257H<br>DC_19A-21A-42A_n79A-n257I<br>DC_19A-21A-42C_n79A-n257A<br>DC_19A-21A-42C_n79A-n257G<br>DC_19A-21A-42C_n79A-n257H<br>DC_19A-21A-42C_n79A-n257I                                                                                                                                                                               | DC_19A_n79A-n257A<br>DC_19A_n79A-n257G<br>DC_19A_n79A-n257H<br>DC_19A_n79A-n257I<br>DC_21A_n79A-n257A<br>DC_21A_n79A-n257G<br>DC_21A_n79A-n257H<br>DC_21A_n79A-n257I                                                       |
| DC_28A-41A-42A_n78A-n257A<br>DC_28A-41A-42A_n78A-n257G<br>DC_28A-41A-42A_n78A-n257H<br>DC_28A-41A-42A_n78A-n257I<br>DC_28A-41A-42C_n78A-n257A<br>DC_28A-41A-42C_n78A-n257G<br>DC_28A-41A-42C_n78A-n257H<br>DC_28A-41A-42C_n78A-n257I<br>DC_28A-41C-42A_n78A-n257A<br>DC_28A-41C-42A_n78A-n257G<br>DC_28A-41C-42A_n78A-n257H<br>DC_28A-41C-42A_n78A-n257I<br>DC_28A-41C-42C_n78A-n257A<br>DC_28A-41C-42C_n78A-n257G | DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H  |

| EN-DC configuration                                                                                                                                                                                                   | Uplink EN-DC configuration (NOTE 1)                                                                                                          |
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| DC_28A-41C-42C_n78A-n257H<br>DC_28A-41C-42C_n78A-n257I                                                                                                                                                                | DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.<br>NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability. |                                                                                                                                              |

5.5B.6.5 Inter-band EN-DC configurations including FR1 and FR2 (six bands)

**Table 5.5B.6.5-1: Inter-band EN-DC configurations including FR1 and FR2 (six bands)**

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                          | Uplink EN-DC configuration (NOTE 1)                                                                                                                                                                                                                                                                                                                             |
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| DC_1A-3A-5A-7A-7A_n78A-n257A<br>DC_1A-3A-5A-7A-7A_n78A-n257D<br>DC_1A-3A-5A-7A-7A_n78A-n257E<br>DC_1A-3A-5A-7A-7A_n78A-n257F<br>DC_1A-3A-5A-7A-7A_n78A-n257G<br>DC_1A-3A-5A-7A-7A_n78A-n257H<br>DC_1A-3A-5A-7A-7A_n78A-n257I<br>DC_1A-3A-5A-7A-7A_n78A-n257J<br>DC_1A-3A-5A-7A-7A_n78A-n257K<br>DC_1A-3A-5A-7A-7A_n78A-n257L<br>DC_1A-3A-5A-7A-7A_n78A-n257M | DC_1A_n78A<br>DC_3A_n78A<br>DC_5A_n78A<br>DC_7A_n78A<br>DC_1A_n257A<br>DC_3A_n257A<br>DC_5A_n257A<br>DC_7A_n257A                                                                                                                                                                                                                                                |
| DC_1A-3A-5A-7A_n78A-n257A<br>DC_1A-3A-5A-7A_n78A-n257D<br>DC_1A-3A-5A-7A_n78A-n257E<br>DC_1A-3A-5A-7A_n78A-n257F<br>DC_1A-3A-5A-7A_n78A-n257G<br>DC_1A-3A-5A-7A_n78A-n257H<br>DC_1A-3A-5A-7A_n78A-n257I<br>DC_1A-3A-5A-7A_n78A-n257J<br>DC_1A-3A-5A-7A_n78A-n257K<br>DC_1A-3A-5A-7A_n78A-n257L<br>DC_1A-3A-5A-7A_n78A-n257M                                  | DC_1A_n78A<br>DC_1A_n257A<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_5A_n78A<br>DC_5A_n257A<br>DC_7A_n78A<br>DC_7A_n257A                                                                                                                                                                                                                                                |
| DC_1A-3A-18A-42A_n78A-n257A<br>DC_1A-3A-18A-42A_n78A-n257G<br>DC_1A-3A-18A-42A_n78A-n257H<br>DC_1A-3A-18A-42A_n78A-n257I<br>DC_1A-3A-18A-42C_n78A-n257A<br>DC_1A-3A-18A-42C_n78A-n257G<br>DC_1A-3A-18A-42C_n78A-n257H<br>DC_1A-3A-18A-42C_n78A-n257I                                                                                                         | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_18A_n78A<br>DC_18A_n257A<br>DC_18A_n257G<br>DC_18A_n257H<br>DC_18A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |

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| DC_1A-3A-28A-42A_n78A-n257A<br>DC_1A-3A-28A-42A_n78A-n257G<br>DC_1A-3A-28A-42A_n78A-n257H<br>DC_1A-3A-28A-42A_n78A-n257I<br>DC_1A-3A-28A-42C_n78A-n257A<br>DC_1A-3A-28A-42C_n78A-n257G<br>DC_1A-3A-28A-42C_n78A-n257H<br>DC_1A-3A-28A-42C_n78A-n257I                                                                                                                                                                                                                                                         | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I                                                                                |
| DC_1A-3A-41A-42A_n77A-n257A<br>DC_1A-3A-41A-42A_n77A-n257G<br>DC_1A-3A-41A-42A_n77A-n257H<br>DC_1A-3A-41A-42A_n77A-n257I<br>DC_1A-3A-41C-42A_n77A-n257A<br>DC_1A-3A-41C-42A_n77A-n257G<br>DC_1A-3A-41C-42A_n77A-n257H<br>DC_1A-3A-41C-42A_n77A-n257I<br>DC_1A-3A-41A-42C_n77A-n257A<br>DC_1A-3A-41A-42C_n77A-n257G<br>DC_1A-3A-41A-42C_n77A-n257H<br>DC_1A-3A-41A-42C_n77A-n257I<br>DC_1A-3A-41C-42C_n77A-n257A<br>DC_1A-3A-41C-42C_n77A-n257G<br>DC_1A-3A-41C-42C_n77A-n257H<br>DC_1A-3A-41C-42C_n77A-n257I | DC_1A_n77A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n77A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n77A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n77A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_1A-3A-41A-42A_n78A-n257A<br>DC_1A-3A-41A-42A_n78A-n257G<br>DC_1A-3A-41A-42A_n78A-n257H<br>DC_1A-3A-41A-42A_n78A-n257I<br>DC_1A-3A-41A-42C_n78A-n257A<br>DC_1A-3A-41A-42C_n78A-n257G<br>DC_1A-3A-41A-42C_n78A-n257H<br>DC_1A-3A-41A-42C_n78A-n257I<br>DC_1A-3A-41C-42A_n78A-n257A<br>DC_1A-3A-41C-42A_n78A-n257G<br>DC_1A-3A-41C-42A_n78A-n257H<br>DC_1A-3A-41C-42A_n78A-n257I<br>DC_1A-3A-41C-42C_n78A-n257A<br>DC_1A-3A-41C-42C_n78A-n257G<br>DC_1A-3A-41C-42C_n78A-n257H<br>DC_1A-3A-41C-42C_n78A-n257I                 | DC_1A_n78A<br>DC_1A_n257A<br>DC_1A_n257G<br>DC_1A_n257H<br>DC_1A_n257I<br>DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I      |
| DC_3A-28A-41A-42A_n78A-n257A<br>DC_3A-28A-41A-42A_n78A-n257G<br>DC_3A-28A-41A-42A_n78A-n257H<br>DC_3A-28A-41A-42A_n78A-n257I<br>DC_3A-28A-41A-42C_n78A-n257A<br>DC_3A-28A-41A-42C_n78A-n257G<br>DC_3A-28A-41A-42C_n78A-n257H<br>DC_3A-28A-41A-42C_n78A-n257I<br>DC_3A-28A-41C-42A_n78A-n257A<br>DC_3A-28A-41C-42A_n78A-n257G<br>DC_3A-28A-41C-42A_n78A-n257H<br>DC_3A-28A-41C-42A_n78A-n257I<br>DC_3A-28A-41C-42C_n78A-n257A<br>DC_3A-28A-41C-42C_n78A-n257G<br>DC_3A-28A-41C-42C_n78A-n257H<br>DC_3A-28A-41C-42C_n78A-n257I | DC_3A_n78A<br>DC_3A_n257A<br>DC_3A_n257G<br>DC_3A_n257H<br>DC_3A_n257I<br>DC_28A_n78A<br>DC_28A_n257A<br>DC_28A_n257G<br>DC_28A_n257H<br>DC_28A_n257I<br>DC_41A_n78A<br>DC_41A_n257A<br>DC_41A_n257G<br>DC_41A_n257H<br>DC_41A_n257I<br>DC_41C_n78A<br>DC_41C_n257A<br>DC_41C_n257G<br>DC_41C_n257H<br>DC_41C_n257I<br>DC_42A_n257A<br>DC_42A_n257G<br>DC_42A_n257H<br>DC_42A_n257I<br>DC_42C_n257A<br>DC_42C_n257G<br>DC_42C_n257H<br>DC_42C_n257I |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## 5.5B.7 Inter-band NR-DC between FR1 and FR2

### 5.5B.7.0 General

The configurations and bandwidth combination sets for the FR1-FR2 NR-DC combinations in the following sub-sections are defined in the tables for FR1-FR2 carrier aggregation in section 5.5A.1.

## 5.5B.7.1 Inter-band NR-DC configurations between FR1 and FR2 (two bands)

Table 5.5B.7-1: Inter-band NR-DC configurations between FR1 and FR2 (two bands)

| Downlink NR DC configuration                                                                                                                                                                                                                                                                                                                                                                               | Uplink NR DC configuration                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| DC_n3A-n257A <sup>1</sup><br>DC_n3A-n257D <sup>1</sup> DC_n3A-n257G <sup>1</sup><br>DC_n3A-n257H <sup>1</sup><br>DC_n3A-n257I <sup>1</sup>                                                                                                                                                                                                                                                                 | DC_n3A-n257A<br>DC_n3A-n257D<br>DC_n3A-n257G<br>DC_n3A-n257H<br>DC_n3A-n257I                                                         |
| DC_n28A-n257A <sup>1</sup><br>DC_n28A-n257D <sup>1</sup><br>DC_n28A-n257G <sup>1</sup><br>DC_n28A-n257H <sup>1</sup><br>DC_n28A-n257I <sup>1</sup>                                                                                                                                                                                                                                                         | DC_n28A-n257A<br>DC_n28A-n257D<br>DC_n28A-n257G<br>DC_n28A-n257H<br>DC_n28A-n257I                                                    |
| DC_n77A-n257A <sup>1</sup><br>DC_n77A-n257D <sup>1</sup><br>DC_n77A-n257E <sup>1</sup><br>DC_n77A-n257F <sup>1</sup><br>DC_n77A-n257G <sup>1</sup><br>DC_n77A-n257H <sup>1</sup><br>DC_n77A-n257I <sup>1</sup><br>DC_n77A-n257J <sup>1</sup><br>DC_n77A-n257K <sup>1</sup><br>DC_n77A-n257L <sup>1</sup><br>DC_n77A-n257M <sup>1</sup><br>DC_n77C-n257A<br>DC_n77C-n257D<br>DC_n77C-n257E<br>DC_n77C-n257F | DC_n77A-n257A<br>DC_n77A-n257G<br>DC_n77A-n257H<br>DC_n77A-n257I<br>DC_n77A-n257J<br>DC_n77A-n257K<br>DC_n77A-n257L<br>DC_n77A-n257M |
| DC_n77(2A)-n257A <sup>1</sup><br>DC_n77(2A)-n257G <sup>1</sup><br>DC_n77(2A)-n257H <sup>1</sup><br>DC_n77(2A)-n257I <sup>1</sup><br>DC_n77(2A)-n257J<br>DC_n77(2A)-n257K<br>DC_n77(2A)-n257L<br>DC_n77(2A)-n257M                                                                                                                                                                                           | DC_n77A-n257A<br>DC_n77A-n257G<br>DC_n77A-n257H<br>DC_n77A-n257I<br>DC_n77A-n257J<br>DC_n77A-n257K<br>DC_n77A-n257L<br>DC_n77A-n257M |
| DC_n77A-n261A<br>DC_n77A-n261G<br>DC_n77A-n261H<br>DC_n77A-n261I<br>DC_n77A-n261J<br>DC_n77A-n261K<br>DC_n77A-n261L<br>DC_n77A-n261M                                                                                                                                                                                                                                                                       | DC_n77A-n261A<br>DC_n77A-n261G<br>DC_n77A-n261H<br>DC_n77A-n261I<br>DC_n77A-n261J<br>DC_n77A-n261K<br>DC_n77A-n261L<br>DC_n77A-n261M |
| DC_n77A-n261(2A)<br>DC_n77A-n261(2G)<br>DC_n77A-n261(2H)<br>DC_n77A-n261(2I)<br>DC_n77A-n261(3A)<br>DC_n77A-n261(4A)                                                                                                                                                                                                                                                                                       | DC_n77A-n261A                                                                                                                        |
| DC_n77A-n261(A-G)<br>DC_n77A-n261(A-H)<br>DC_n77A-n261(A-I)<br>DC_n77A-n261(G-H)<br>DC_n77A-n261(G-I)<br>DC_n77A-n261(H-I)                                                                                                                                                                                                                                                                                 | DC_n77A-n261A                                                                                                                        |
| DC_n78A-n257A <sup>1</sup><br>DC_n78A-n257D <sup>1</sup><br>DC_n78A-n257E <sup>1</sup><br>DC_n78A-n257F <sup>1</sup><br>DC_n78A-n257G <sup>1</sup><br>DC_n78A-n257H <sup>1</sup>                                                                                                                                                                                                                           | DC_n78A-n257A<br>DC_n78A-n257G<br>DC_n78A-n257H<br>DC_n78A-n257I                                                                     |

| Downlink NR DC configuration                                                                                                                                                                                                                                                                                                                           | Uplink NR DC configuration |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| DC_n78A-n257I <sup>1</sup><br>DC_n78A-n257J <sup>1</sup><br>DC_n78A-n257K <sup>1</sup><br>DC_n78A-n257L <sup>1</sup><br>DC_n78A-n257M <sup>1</sup><br>DC_n78C-n257A<br>DC_n78C-n257D<br>DC_n78C-n257E<br>DC_n78C-n257F                                                                                                                                 |                            |
| DC_n79A-n257A <sup>1</sup><br>DC_n79A-n257D <sup>1</sup><br>DC_n79A-n257E <sup>1</sup><br>DC_n79A-n257F <sup>1</sup><br>DC_n79A-n257G <sup>1</sup><br>DC_n79A-n257H <sup>1</sup><br>DC_n79A-n257I <sup>1</sup><br>DC_n79A-n257J<br>DC_n79A-n257K<br>DC_n79A-n257L<br>DC_n79A-n257M<br>DC_n79C-n257A<br>DC_n79C-n257D<br>DC_n79C-n257E<br>DC_n79C-n257F | DC_n79A-n257A              |
| NOTE 1: Applicable for UE supporting inter-band NR DC with mandatory simultaneous Rx/Tx capability.                                                                                                                                                                                                                                                    |                            |

### 5.5B.7.2 Inter-band NR-DC configurations between FR1 and FR2 (three bands)

**Table 5.5B.7-2: Inter-band NR-DC configurations between FR1 and FR2 (three bands)**

| Downlink NR DC configuration                                                                                                                     | Uplink NR DC configuration                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| DC_n3A-n28A-n257A <sup>1</sup><br>DC_n3A-n28A-n257G <sup>1</sup><br>DC_n3A-n28A-n257H <sup>1</sup><br>DC_n3A-n28A-n257I <sup>1</sup>             | DC_n3A-n28A<br>DC_n3A-n257A<br>DC_n3A-n257G<br>DC_n3A-n257H<br>DC_n3A-n257I<br>DC_n28A-n257A<br>DC_n28A-n257G<br>DC_n28A-n257H<br>DC_n28A-n257I |
| DC_n3A-n77A-n257A <sup>1</sup><br>DC_n3A-n77A-n257G <sup>1</sup><br>DC_n3A-n77A-n257H <sup>1</sup><br>DC_n3A-n77A-n257I <sup>1</sup>             | DC_n3A-n77A<br>DC_n3A-n257A<br>DC_n3A-n257G<br>DC_n3A-n257H<br>DC_n3A-n257I<br>DC_n77A-n257A<br>DC_n77A-n257G<br>DC_n77A-n257H<br>DC_n77A-n257I |
| DC_n3A-n77(2A)-n257A <sup>1</sup><br>DC_n3A-n77(2A)-n257G <sup>1</sup><br>DC_n3A-n77(2A)-n257H <sup>1</sup><br>DC_n3A-n77(2A)-n257I <sup>1</sup> | DC_n3A-n77A<br>DC_n3A-n257A<br>DC_n3A-n257G<br>DC_n3A-n257H<br>DC_n3A-n257I<br>DC_n77A-n257A<br>DC_n77A-n257G<br>DC_n77A-n257H<br>DC_n77A-n257I |
| DC_n3A-n78A-n257A <sup>1</sup><br>DC_n3A-n78A-n257G <sup>1</sup><br>DC_n3A-n78A-n257H <sup>1</sup><br>DC_n3A-n78A-n257I <sup>1</sup>             | DC_n3A-n78A<br>DC_n3A-n257A<br>DC_n3A-n257G<br>DC_n3A-n257H                                                                                     |

| Downlink NR DC configuration                                                                                                             | Uplink NR DC configuration                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                          | DC_n3A-n257I<br>DC_n78A-n257A<br>DC_n78A-n257G<br>DC_n78A-n257H<br>DC_n78A-n257I                                                                     |
| DC_n28A-n77A-n257A <sup>1</sup><br>DC_n28A-n77A-n257G <sup>1</sup><br>DC_n28A-n77A-n257H <sup>1</sup><br>DC_n28A-n77A-n257I <sup>1</sup> | DC_n28A-n77A<br>DC_n28A-n257A<br>DC_n28A-n257G<br>DC_n28A-n257H<br>DC_n28A-n257I<br>DC_n77A-n257A<br>DC_n77A-n257G<br>DC_n77A-n257H<br>DC_n77A-n257I |
| DC_n28A-n78A-n257A <sup>1</sup><br>DC_n28A-n78A-n257G <sup>1</sup><br>DC_n28A-n78A-n257H <sup>1</sup><br>DC_n28A-n78A-n257I <sup>1</sup> | DC_n28A-n78A<br>DC_n28A-n257A<br>DC_n28A-n257G<br>DC_n28A-n257H<br>DC_n28A-n257I<br>DC_n78A-n257A<br>DC_n78A-n257G<br>DC_n78A-n257H<br>DC_n78A-n257I |
| NOTE 1: Applicable for UE supporting inter-band NR DC with mandatory simultaneous Rx/Tx capability.                                      |                                                                                                                                                      |

5.5C Void

5.5D Void

5.5E Configuration for V2X operation

5.5E.1 General

The operating bands and bandwidth classes are specified for V2X operation.

5.5E.2 Intra-band contiguous V2X operation in FR1

Table 5.5E.2-1: Intra-band contiguous V2X configurations

| V2X configuration                             | SL transmission               |
|-----------------------------------------------|-------------------------------|
| V2X_(n)47AA                                   | E-UTRA Band 47 or NR band n47 |
| NOTE 1: Only single switched SL is supported. |                               |

5.5E.3 Intra-band non-contiguous V2X operation in FR1

Table 5.5E.3-1: Intra-band non-contiguous V2X configurations

| V2X configuration                             | SL transmission               |
|-----------------------------------------------|-------------------------------|
| V2X_47A_n47A                                  | E-UTRA Band 47 or NR band n47 |
| NOTE 1: Only single switched SL is supported. |                               |

5.5E.4 Inter-band V2X operation in FR1

5.5E.4.1 Inter-band V2X configurations within FR1 (two bands)

Table 5.5E.4.1-1: Inter-band V2X configurations

| V2X configuration                                                                                                  | V2X transmission configuration |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------|
| V2X_20A_n38A                                                                                                       | V2X_20A_n38A                   |
| V2X_n71A_47A                                                                                                       | V2X_n71A_47A                   |
| NOTE 1: V2X transmission configurations are the configurations supported by the present release of specifications. |                                |

## 6 Transmitter characteristics

### 6.1 General

Unless otherwise stated the transmitter characteristics are specified at the antenna connector(s) of the UE for the bands operating on frequency range 1 and over the air of the UE for the bands operating on frequency range 2. The requirements for frequency range 1 and frequency range 2 can be verified separately. For the carrier in frequency range 1, requirements can be verified with NR FR2 link disabled. For the carrier in frequency range 2, requirements can be verified in OTA mode with E-UTRA or NR FR1 connecting to the network by OTA without calibration.

Unless otherwise stated, requirements for NR transmitter written in TS 38.101-1 [2] and TS 38.101-2 [3] apply and are assumed anchor agnostic. Requirements are verified under conditions where anchor resources do not interfere NR operation. If UE indicates IE *powerClassNRPart-r16* as defined in TS 38.331 [9] in EN-DC, UE shall meet NR requirements according to this power class.

For sub-clauses with suffix A or B: the minimum requirements for band combinations including Band n41 also apply for the corresponding band combinations with Band n90 replacing Band n41 but with otherwise identical parameters. For brevity the said band combinations with Band n90 are not listed in the tables below but are covered by this specification.

The requirements for EN-DC applies for NE-DC, unless otherwise specified.

### 6.2 Void

#### 6.2A Transmitter power for CA

##### 6.2A.1 UE maximum output power for CA

###### 6.2A.1.1 Inter-band CA between FR1 and FR2

**Table 6.2A.1.1-1: Void**

For inter-band NR CA in FR1 and FR2 combined, the UE shall meet each transmitter power requirement specified in TS 38.101-1 [2] and TS 38.101-2 [3] for each frequency range independently.

##### 6.2A.2 UE maximum output power reduction for CA

###### 6.2A.2.1 Inter-band CA between FR1 and FR2

For inter-band NR CA between FR1 and FR2, UE maximum output power reduction specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for each frequency range respectively.

##### 6.2A.3 UE additional maximum output power reduction for CA

For inter-band NR CA between FR1 and FR2, UE additional maximum output power reduction specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for each frequency range respectively.

##### 6.2A.4 Configured output power for CA

###### 6.2A.4.1 Configured output power level

For inter-band NR CA between FR1 and FR2, UE configured output power specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for each frequency range respectively.

## 6.2A.4.2 $\Delta T_{IB,c}$ for CA

### 6.2A.4.2.1 $\Delta T_{IB,c}$ for Inter-band CA between FR1 and FR2

Unless otherwise stated,  $\Delta T_{IB,c}$  for NR FR1 band and FR2 band of inter-band CA defined in table 5.5A.1-1 is set to zero.

**Table 6.2A.4.2.1-1: Void**

**Table 6.2A.4.2.1-2: Void**

**Table 6.2A.4.2.1-3: Void**

## 6.2B Transmitter power for DC

### 6.2B.1 UE maximum output power for DC

#### 6.2B.1.1 Intra-band contiguous EN-DC

The following UE Power Classes define the total maximum output power for any transmission bandwidth(s) of the CG(s) configured.

The maximum output power is measured as the total maximum output power across the UE antenna connector(s). The period of measurement shall be at least one sub frame.

Table 6.2B.1.1-1: Maximum output power for EN-DC (continuous sub-blocks)

| EN-DC configuration                                                                                                                                                                                                                                                                                           | Power class 1.5<br>(dBm) | Tolerance<br>(dB)  | Power class 2<br>(dBm) | Tolerance<br>(dB)  | Power class 3<br>(dBm) | Tolerance<br>(dB)  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------|------------------------|--------------------|------------------------|--------------------|
| DC_(n)5AA <sup>3</sup>                                                                                                                                                                                                                                                                                        |                          |                    |                        |                    | 23                     | +2/-3              |
| DC_(n)12AA <sup>3</sup>                                                                                                                                                                                                                                                                                       |                          |                    |                        |                    | 23                     | +2/-3              |
| DC_(n)71AA                                                                                                                                                                                                                                                                                                    |                          |                    |                        |                    | 23                     | +2/-3              |
| DC_(n)38AA <sup>3</sup>                                                                                                                                                                                                                                                                                       |                          |                    |                        |                    | 23                     | +2/-3              |
| DC_(n)41AA                                                                                                                                                                                                                                                                                                    | 29                       | +2/-3 <sup>1</sup> | 26                     | +2/-3 <sup>1</sup> | 23                     | +2/-3 <sup>1</sup> |
| DC_(n)48AA <sup>3</sup>                                                                                                                                                                                                                                                                                       |                          |                    |                        |                    | 23                     | +2/-3              |
| NOTE 1: If all transmitted resource blocks over all component carriers are confined within F <sub>UL_low</sub> and F <sub>UL_low</sub> + 4 MHz or/and F <sub>UL_high</sub> – 4 MHz and F <sub>UL_high</sub> , the maximum output power requirement is relaxed by reducing the lower tolerance limit by 1.5 dB |                          |                    |                        |                    |                        |                    |
| NOTE 2: Power Class 3 is the default power class unless otherwise stated.                                                                                                                                                                                                                                     |                          |                    |                        |                    |                        |                    |
| NOTE 3: Only single switched UL is supported.                                                                                                                                                                                                                                                                 |                          |                    |                        |                    |                        |                    |

If UE supports a different power class than the default UE power class for EN-DC band combination, and the supported power class enables higher maximum output power than that of the default power class:

- if the E-UTRA UL/DL configuration is 0 or 6; or
- if the E-UTRA UL/DL configuration is 1 and special subframe configuration is 0 or 5; or
- if the IE *p-maxUE-FR1-r15* as defined in TS 36.331 [8] is provided and set to the maximum output power of the default power class or lower;
  - apply all requirements for the default power class, and set the configured transmitted power as specified in clause 6.2B.4;
- else
- if the UE does not support a power class with higher maximum output power than power class 2; or
- if the E-UTRA UL/DL configuration is not 2 or 4 or 5; or
- if the field of UE IE *maxUplinkDutyCycle-PC2-FR1* as defined in TS 38.331 is absent and the percentage of uplink symbols transmitted in a certain evaluation period is larger than 25% (The exact evaluation period is no less than one radio frame); or
- if the field of UE IE *maxUplinkDutyCycle-PC2-FR1* is not absent and the percentage of uplink symbols transmitted in a certain evaluation period is larger than  $0.5 \cdot \text{maxUplinkDutyCycle-PC2-FR1}$  (The exact evaluation period is no less than one radio frame); or
- if the IE P-Max as defined in TS 38.331 [9] is provided and set to the maximum output power of the power class 2 or lower;
  - apply all requirements for the power class 2 and set the configured transmitted power as specified in clause 6.2B.4;
- else
  - apply all requirements for the supported power class, and set the configured transmitted power class as specified in clause 6.2B.4;

### 6.2B.1.2 Intra-band non-contiguous EN-DC

**Table 6.2B.1.2-1: Maximum output power for EN-DC (non-continuous sub-blocks)**

| EN-DC configuration                                                                                                                                                                                                                                                                   | Power class 1.5 (dBm) | Tolerance (dB)     | Power class 2 (dBm) | Tolerance (dB)     | Power class 3 (dBm) | Tolerance (dB)     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|---------------------|--------------------|---------------------|--------------------|
| DC 2A n2A <sup>4</sup>                                                                                                                                                                                                                                                                |                       |                    |                     |                    | 23                  | +2/-3              |
| DC 3A n3A                                                                                                                                                                                                                                                                             |                       |                    |                     |                    | 23                  | +2/-3              |
| DC 5A n5A <sup>4</sup>                                                                                                                                                                                                                                                                |                       |                    |                     |                    | 23                  | +2/-3              |
| DC 7A n7A <sup>4</sup>                                                                                                                                                                                                                                                                |                       |                    |                     |                    | 23                  | +2/-3              |
| DC 48A n48A <sup>4</sup>                                                                                                                                                                                                                                                              |                       |                    |                     |                    | 23                  | +2/-3              |
| DC 41A n41A                                                                                                                                                                                                                                                                           | 29                    | +2/-3 <sup>1</sup> | 26                  | +2/-3 <sup>1</sup> | 23                  | +2/-3 <sup>1</sup> |
| DC 66A n66A <sup>4</sup>                                                                                                                                                                                                                                                              |                       |                    |                     |                    | 23                  | +2/-3              |
| NOTE 1: If all transmitted resource blocks over all component carriers are confined within $F_{UL\_low}$ and $F_{UL\_low} + 4$ MHz or/and $F_{UL\_high} - 4$ MHz and $F_{UL\_high}$ , the maximum output power requirement is relaxed by reducing the lower tolerance limit by 1.5 dB |                       |                    |                     |                    |                     |                    |
| NOTE 2: Void                                                                                                                                                                                                                                                                          |                       |                    |                     |                    |                     |                    |
| NOTE 3: Power Class 3 is the default power class unless otherwise stated.                                                                                                                                                                                                             |                       |                    |                     |                    |                     |                    |
| NOTE 4: Only single switched UL is supported                                                                                                                                                                                                                                          |                       |                    |                     |                    |                     |                    |

If UE supports a different power class than the default UE power class for EN-DC band combination, and the supported power class enables higher maximum output power than that of the default power class:

- if the E-UTRA UL/DL configuration is 0 or 6; or
- if the E-UTRA UL/DL configuration is 1 and special subframe configuration is 0 or 5; or

- if the IE *p-maxUE-FR1-r15* as defined in TS 36.331 [8] is provided and set to the maximum output power of the default power class or lower;
- apply all requirements for the default power class, and set the configured transmitted power as specified in clause 6.2B.4;
- else
- if the UE does not support a power class with higher maximum output power than power class 2; or
- if the E-UTRA UL/DL configuration is not 2 or 4 or 5; or
- if the field of UE IE *maxUplinkDutyCycle-PC2-FR1* as defined in TS 38.331 is absent and the percentage of uplink symbols transmitted in a certain evaluation period is larger than 25% (The exact evaluation period is no less than one radio frame); or
- if the field of UE IE *maxUplinkDutyCycle-PC2-FR1* is not absent and the percentage of uplink symbols transmitted in a certain evaluation period is larger than  $0.5 \cdot \text{maxUplinkDutyCycle-PC2-FR1}$  (The exact evaluation period is no less than one radio frame); or
- if the IE P-Max as defined in TS 38.331 [9] is provided and set to the maximum output power of the power class 2 or lower;
- apply all requirements for the power class 2 and set the configured transmitted power as specified in clause 6.2B.4;
- else
- apply all requirements for the supported power class, and set the configured transmitted power class as specified in clause 6.2B.4;

### 6.2B.1.3 Inter-band EN-DC within FR1

For inter-band EN-DC of E-UTRA and NR in FR1, the following UE Power Classes define the maximum output power for any transmission bandwidth within the aggregated channel bandwidth. The maximum output power is measured as the sum of the maximum output power at each UE antenna connector. The period of measurement shall be at least one sub frame (1ms). UE maximum output power shall be measured over all component carriers from different bands. If each band has separate antenna connectors, maximum output power is measured as the sum of maximum output power at each UE antenna connector.

**Table 6.2B.1.3-1: Maximum output power for inter-band EN-DC (two bands)**

| EN-DC configuration       | Power class 2<br>(dBm) | Tolerance<br>(dB) | Power class 3<br>(dBm) | Tolerance<br>(dB)  |
|---------------------------|------------------------|-------------------|------------------------|--------------------|
| DC_1A_n3A                 |                        |                   | 23                     | +2/-3              |
| DC_1A_n5A                 |                        |                   | 23                     | +2/-3              |
| DC_1A_n7A                 |                        |                   | 23                     | +2/-3              |
| DC_1A_n8A                 |                        |                   | 23                     | +2/-3              |
| DC_1A_n20A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n28A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n38A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n40A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n41A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n50A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n51A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n71A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n77A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n84A_ULSUP-TDM_n77A |                        |                   | 23                     | +2/-3              |
| DC_1A_n78A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n84A_ULSUP-TDM_n78A |                        |                   | 23                     | +2/-3              |
| DC_1A_n79A                |                        |                   | 23                     | +2/-3              |
| DC_1A_n84A_ULSUP-TDM_n79A |                        |                   | 23                     | +2/-3              |
| DC_1A_n80A                |                        |                   | 23                     | +2/-3              |
| DC_2A_n5A                 |                        |                   | 23                     | +2/-3 <sup>1</sup> |
| DC_2A_n7A                 |                        |                   | 23                     | +2/-3              |

| EN-DC configuration       | Power class 2<br>(dBm) | Tolerance<br>(dB)  | Power class 3<br>(dBm) | Tolerance<br>(dB)  |
|---------------------------|------------------------|--------------------|------------------------|--------------------|
| DC 2A n12A                |                        |                    | 23                     | +2/-3              |
| DC 2A n38A                |                        |                    | 23                     | +2/-3              |
| DC 2A n41A                |                        |                    | 23                     | +2/-3              |
| DC 2A n46A                |                        |                    | 23                     | +2/-3              |
| DC 2A n48A                |                        |                    | 23                     | +2/-3              |
| DC 2A n66A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 2A n71A                |                        |                    | 23                     | +2/-3              |
| DC 2A n78A                |                        |                    | 23                     | +2/-3              |
| DC 3A n1A                 |                        |                    | 23                     | +2/-3              |
| DC 3C n1A                 |                        |                    | 23                     | +2/-3              |
| DC 3A n5A                 |                        |                    | 23                     | +2/-3              |
| DC 3A n7A                 |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n7B                 |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3C n7A                 |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n8A                 |                        |                    | 23                     | +2/-3              |
| DC 3A n20A                |                        |                    | 23                     | +2/-3              |
| DC 3A n28A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3C n28A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n34A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n38A                |                        |                    | 23                     | +2/-3              |
| DC 3A n40A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n41A                | 26 <sup>6</sup>        | +2/-3              | 23                     | +2/-3              |
| DC 3C n41A,               | 26 <sup>6</sup>        | +2/-3              | 23                     | +2/-3              |
| DC 3A n50A                |                        |                    | 23                     | +2/-3              |
| DC 3A n51A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n71A                |                        |                    | 23                     | +2/-3              |
| DC 3A n77A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n78A                | 26 <sup>6</sup>        | +2/-3 <sup>1</sup> | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n79A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3C n79A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n80A ULSUP-TDM n41A |                        |                    | 23                     | +2/-3              |
| DC 3C n80A ULSUP-TDM n41A |                        |                    | 23                     | +2/-3              |
| DC 3A n80A ULSUP-TDM n77A |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n80A ULSUP-TDM n78A |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n80A ULSUP-TDM n79A |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n82A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 3A n84A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 4A n38A                |                        |                    | 23                     | +2/-3              |
| DC 4A n41A                |                        |                    | 23                     | +2/-3              |
| DC 4A n78A                |                        |                    | 23                     | +2/-3              |
| DC 5A n2A                 |                        |                    | 23                     | +2/-3              |
| DC 5A n7A                 |                        |                    | 23                     | +2/-3              |
| DC 5A n12A                |                        |                    | 23                     | +2/-3              |
| DC 5A n38A                |                        |                    | 23                     | +2/-3              |
| DC 5A n40A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 5A n48A                |                        |                    | 23                     | +2/-3              |
| DC 5A n66A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 5A n71A                |                        |                    | 23                     | +2/-3              |
| DC 5A n78A                |                        |                    | 23                     | +2/-3              |
| DC 5A n79A                |                        |                    | 23                     | +2/-3              |
| DC 7A n1A                 |                        |                    | 23                     | +2/-3              |
| DC 7A n3A                 |                        |                    | 23                     | +2/-3              |
| DC 7A n5A                 |                        |                    | 23                     | +2/-3              |
| DC 7C n5A                 |                        |                    | 23                     | +2/-3              |
| DC 7A n8A                 |                        |                    | 23                     | +2/-3              |
| DC 7A n20A                |                        |                    | 23                     | +2/-3              |
| DC 7A n28A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 7A n40A                |                        |                    | 23                     | +2/-3              |
| DC 7A n51A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 7A n66A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC 7A n71A                |                        |                    | 23                     | +2/-3              |
| DC 7A n77A                |                        |                    | 23                     | +2/-3              |
| DC 7A n78A                |                        |                    | 23                     | +2/-3              |

| EN-DC configuration        | Power class 2<br>(dBm) | Tolerance<br>(dB) | Power class 3<br>(dBm) | Tolerance<br>(dB)  |
|----------------------------|------------------------|-------------------|------------------------|--------------------|
| DC_7C_n78A                 |                        |                   | 23                     | +2/-3              |
| DC_7A_n80A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n1A                  |                        |                   | 23                     | +2/-3              |
| DC_8A_n3A                  |                        |                   | 23                     | +2/-3              |
| DC_8A_n20A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n28A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n34A                 |                        |                   | 23                     | +2/-3 <sup>1</sup> |
| DC_8A_n39A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n40A                 |                        |                   | 23                     | +2/-3 <sup>1</sup> |
| DC_8A_n41A,                |                        |                   | 23                     | +2/-3              |
| DC_8A_n77A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n78A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n79A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n79C                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n80A                 |                        |                   | 23                     | +2/-3              |
| DC_8A_n81A_ULSUP-TDM_n41A  |                        |                   | 23                     | +2/-3              |
| DC_8A_n81A_ULSUP-TDM_n78A  |                        |                   | 23                     | +2/-3              |
| DC_8A_n81A_ULSUP-TDM_n79A  |                        |                   | 23                     | +2/-3              |
| DC_11A_n3A                 |                        |                   | 23                     | +2/-3              |
| DC_11A_n28A                |                        |                   | 23                     | +2/-3              |
| DC_11A_n77A                |                        |                   | 23                     | +2/-3              |
| DC_11A_n78A                |                        |                   | 23                     | +2/-3              |
| DC_11A_n79A                |                        |                   | 23                     | +2/-3              |
| DC_12A_n2A                 |                        |                   | 23                     | +2/-3              |
| DC_12A_n5A                 |                        |                   | 23                     | +2/-3              |
| DC_12A_n7A                 |                        |                   | 23                     | +2/-3              |
| DC_12A_n25A                |                        |                   | 23                     | +2/-3              |
| DC_12A_n38A                |                        |                   | 23                     | +2/-3              |
| DC_12A_n41A                |                        |                   | 23                     | +2/-3              |
| DC_12A_n66A                |                        |                   | 23                     | +2/-3              |
| DC_12A_n78A                |                        |                   | 23                     | +2/-3              |
| DC_13A_n2A                 |                        |                   | 23                     | +2/-3              |
| DC_13A_n5A                 |                        |                   | 23                     | +2/-3              |
| DC_13A_n7A                 |                        |                   | 23                     | +2/-3              |
| DC_13A_n48A                |                        |                   | 23                     | +2/-3              |
| DC_13A_n66A                |                        |                   | 23                     | +2/-3              |
| DC_13A_n71A                |                        |                   | 23                     | +2/-3              |
| DC_13A_n78A                |                        |                   | 23                     | +2/-3              |
| DC_14A_n2A                 |                        |                   | 23                     | +2/-3              |
| DC_14A_n66A                |                        |                   | 23                     | +2/-3              |
| DC_18A_n3A                 |                        |                   | 23                     | +2/-3              |
| DC_18A_n77A                |                        |                   | 23                     | +2/-3              |
| DC_18A_n78A                |                        |                   | 23                     | +2/-3              |
| DC_18A_n79A                |                        |                   | 23                     | +2/-3              |
| DC_19A_n77A                |                        |                   | 23                     | +2/-3              |
| DC_19A_n78A                |                        |                   | 23                     | +2/-3              |
| DC_19A_n79A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n1A                 |                        |                   | 23                     | +2/-3              |
| DC_20A_n3A                 |                        |                   | 23                     | +2/-3              |
| DC_20A_n7A                 |                        |                   | 23                     | +2/-3              |
| DC_20A_n8A                 |                        |                   | 23                     | +2/-3              |
| DC_20A_n38A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n28A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n41A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n50A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n51A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n77A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n80A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n78A                |                        |                   | 23                     | +2/-3              |
| DC_20A_n82A_ULSUP-TDM_n78A |                        |                   | 23                     | +2/-3              |
| DC_20A_n83A                |                        |                   | 23                     | +2/-3              |
| DC_21A_n77A                |                        |                   | 23                     | +2/-3              |
| DC_21A_n78A                |                        |                   | 23                     | +2/-3              |

| EN-DC configuration        | Power class 2<br>(dBm) | Tolerance<br>(dB)  | Power class 3<br>(dBm) | Tolerance<br>(dB)  |
|----------------------------|------------------------|--------------------|------------------------|--------------------|
| DC_21A_n79A                |                        |                    | 23                     | +2/-3              |
| DC_25A_n41A                |                        |                    | 23                     | +2/-3              |
| DC_26A_n25A                |                        |                    | 23                     | +2/-3              |
| DC_26A_n41A                |                        |                    | 23                     | +2/-3              |
| DC_26A_n77A                |                        |                    | 23                     | +2/-3              |
| DC_26A_n78A                |                        |                    | 23                     | +2/-3              |
| DC_26A_n79A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n3A                 |                        |                    | 23                     | +2/-3              |
| DC_28A_n5A                 |                        |                    | 23                     | +2/-3              |
| DC_28A_n7A                 |                        |                    | 23                     | +2/-3              |
| DC_28A_n7B                 |                        |                    | 23                     | +2/-3              |
| DC_28A_n8A                 |                        |                    | 23                     | +2/-3              |
| DC_28A_n40A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n41A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n50A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n51A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n77A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n78A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n79A                |                        |                    | 23                     | +2/-3              |
| DC_28A_n83A_ULSUP-TDM_n78A |                        |                    | 23                     | +2/-3              |
| DC_30A_n2A                 |                        |                    | 23                     | +2/-3              |
| DC_30A_n5A                 |                        |                    | 23                     | +2/-3              |
| DC_30A_n66A                |                        |                    | 23                     | +2/-3              |
| DC_38A_n78A                |                        |                    | 23                     | +2/-3              |
| DC_39A_n40A                |                        |                    | 23                     | +2/-3              |
| DC_39A_n41A                | 26 <sup>5</sup>        | +2/-3 <sup>1</sup> | 23                     | +2/-3              |
| DC_39C_n41A                | 26 <sup>5</sup>        | +2/-3 <sup>1</sup> | 23                     | +2/-3              |
| DC_39A_n78A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC_39A_n79A                | 26 <sup>5</sup>        | +2/-3 <sup>1</sup> | 23                     | +2/-3 <sup>1</sup> |
| DC_40A_n1A                 |                        |                    | 23                     | +2/-3              |
| DC_40A_n41A                |                        |                    | 23                     | +2/-3              |
| DC_40A_n77A                |                        |                    | 23                     | +2/-3              |
| DC_40A_n78A                |                        |                    | 23                     | +2/-3              |
| DC_40C_n78A                |                        |                    | 23                     | +2/-3              |
| DC_40A_n79A                |                        |                    | 23                     | +2/-3              |
| DC_41A_n3A                 |                        |                    | 23                     | +2/-3              |
| DC_41C_n3A                 |                        |                    | 23                     | +2/-3              |
| DC_41A_n28A                |                        |                    | 23                     | +2/-3              |
| DC_41C_n28A                |                        |                    | 23                     | +2/-3              |
| DC_41A_n77A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC_41C_n77A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC_41A_n78A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC_41C_n78A                |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC_41A_n79A                | 26 <sup>5</sup>        | +2/-3 <sup>1</sup> | 23                     | +2/-3 <sup>1</sup> |
| DC_41C_n79A                | 26 <sup>5</sup>        | +2/-3 <sup>1</sup> | 23                     | +2/-3 <sup>1</sup> |
| DC_42A_n28A                |                        |                    | 23                     | +2/-3              |
| DC_42C_n28A                |                        |                    | 23                     | +2/-3              |
| DC_42A_n51A                |                        |                    | 23                     | +2/-3              |
| DC_42A_n77A                |                        |                    | N/A                    | N/A                |
| DC_42A_n78A                |                        |                    | N/A                    | N/A                |
| DC_42A_n79A                |                        |                    | N/A                    | N/A                |
| DC_48A_n5A                 |                        |                    | 23                     | +2/-3              |
| DC_48A_n12A                |                        |                    | 23                     | +2/-3              |
| DC_48A_n46A                |                        |                    | 23                     | +2/-3              |
| DC_48A_n66A                |                        |                    | 23                     | +2/-3              |
| DC_48A_n71A                |                        |                    | 23                     | +2/-3              |
| DC_66A_n2A                 |                        |                    | 23                     | +2/-3              |
| DC_66A_n5A                 |                        |                    | 23                     | +2/-3 <sup>1</sup> |
| DC_66A_n7A                 |                        |                    | 23                     | +2/-3              |
| DC_66A_n12A                |                        |                    | 23                     | +2/-3              |
| DC_66A_n25A                |                        |                    | 23                     | +2/-3              |
| DC_66A_n38A                |                        |                    | 23                     | +2/-3              |
| DC_66A_n41A                |                        |                    | 23                     | +2/-3              |

| EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Power class 2 (dBm) | Tolerance (dB) | Power class 3 (dBm) | Tolerance (dB) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------|---------------------|----------------|
| DC_66A_n46A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| DC_66A_n48A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| DC_66A_n71A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| DC_66A_n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| DC_66A_n86A_ULSUP-TDM_n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |                | 23                  | +2/-3          |
| DC_71A_n5A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                     |                | 23                  | +2/-3          |
| DC_71A_n38A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| DC_71A_n48A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| DC_71A_n66A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| DC_71A_n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                     |                | 23                  | +2/-3          |
| <p>NOTE 1: For the transmission bandwidths confined within <math>F_{UL\_low}</math> and <math>F_{UL\_low} + 4</math> MHz or <math>F_{UL\_high} - 4</math> MHz and <math>F_{UL\_high}</math>, the maximum output power requirement is relaxed by reducing the lower tolerance limit by 1.5 dB</p> <p>NOTE 2: <math>P_{PowerClass, EN-DC}</math> is the maximum UE power specified without taking into account the tolerance</p> <p>NOTE 3: For inter-band EN-DC the maximum power requirement should apply to the total transmitted power over all component carriers (per UE).</p> <p>NOTE 4: Power Class 3 is the default power class unless otherwise stated.</p> <p>NOTE 5: The UE is not required to support PC2 within each individual cell group. Power class support within each individual cell group is signaled separately by the UE.</p> <p>NOTE 6: The UE supports PC3 within E-UTRA cell group, and supports either PC3 or PC2 within NR cell group. Power class support within each individual cell group is signaled separately by the UE.</p> |                     |                |                     |                |

If a UE supports a different power class than the default UE power class for an E-UTRA TDD and NR TDD Inter-band EN-DC band combination and the supported power class enables higher maximum output power than that of the default power class:

- if the field of UE capability *maxUplinkDutyCycle-interBandENDC-TDD-PC2-r16* is absent and the percentage of NR uplink symbols transmitted in a certain evaluation period is larger than 30% (The exact evaluation period is no less than one radio frame); or
- if the field of UE capability *maxUplinkDutyCycle-interBandENDC-TDD-PC2-r16* is not absent and the percentage of NR uplink symbols transmitted in a certain evaluation period is larger than *maxUplinkDutyCycle-interBandENDC-TDD-PC2-r16* as defined in TS38.331 (The exact evaluation period is no less than one radio frame); or
- if the IE *p-maxUE-FR1* as defined in TS 38.331 is provided and set to the maximum output power of the default power class or lower;
  - shall apply all requirements for the default power class to the supported power class and set the configured transmitted power as specified sub-clause 6.2B.4;
- Else if the IE *p-maxUE-FR1* as defined in TS 38.331 is not provided or set to the higher value than the maximum output power of the default power class and the percentage of NR uplink symbols transmitted in a certain evaluation period is less than or equal to *maxUplinkDutyCycle-interBandENDC-TDD-PC2-r16* as defined in TS 38.331; or
- if the IE *p-maxUE-FR1* as defined in TS 38.331 is not provided or set to the higher value than the maximum output power of the default power class and the percentage of NR uplink symbols transmitted in a certain evaluation period is less than or equal to 30% when *maxUplinkDutyCycle-interBandENDC-TDD-PC2-r16* is absent. (The exact evaluation period is no less than one radio frame):
  - shall apply all requirements for the supported power class and set the configured transmitted power class as specified in sub-clause 6.2B.4.

If a UE supports a different power class than the default UE power class for an E-UTRA FDD and NR TDD EN-DC band combination and the supported power class enables higher maximum output power than that of the default power class:

If UE indicating the two capabilities *maxUplinkDutyCycle-FDD-TDD-EN-DC1* and *maxUplinkDutyCycle-FDD-TDD-EN-DC2*:

- if the IE *p-maxUE-FR1* as defined in TS 38.331 is not provided or set to the higher value than the maximum output power of the default power class, and the percentage of EUTRA uplink symbols transmitted in a certain evaluation period is between 40% and 70%, and the percentage of NR uplink symbols transmitted in a

certain evaluation period is less than or equal to *maxUplinkDutyCycle-FDD-TDD-EN-DC1* as defined in TS 38.331 (The exact evaluation period is no less than one radio frame); or

- if the IE *p-maxUE-FR1* as defined in TS 38.331 is not provided or set to the higher value than the maximum output power of the default power class, and the percentage of EUTRA uplink symbols transmitted in a certain evaluation period is no larger than 40%, and the percentage of NR uplink symbols transmitted in a certain evaluation period is less than or equal to *maxUplinkDutyCycle-FDD-TDD-EN-DC2* as defined in TS 38.331 (The exact evaluation period is no less than one radio frame)
- shall apply all requirements for the supported power class and set the configured transmitted power class as specified in sub-clause 6.2B.4.
- else
- shall apply all requirements for the default power class and set the configured transmitted power as specified sub-clause 6.2B.4;

else

- shall apply all requirements for the supported power class and set the configured transmitted power as specified sub-clause 6.2B.4;

### 6.2B.1.3a Inter-band NE-DC within FR1

For inter-band NE-DC of E-UTRA and NR in FR1, the following UE power classes define the maximum output power for any transmission bandwidth within the aggregated channel bandwidth. The maximum output power is measured as the sum of the maximum output power at each UE antenna connector. The period of measurement shall be at least one sub frame (1 ms). UE maximum output power shall be measured over all component carriers from different bands. If each band has separate antenna connectors, maximum output power is measured as the sum of maximum output power at each UE antenna connector.

**Table 6.2B.1.3a-1: Maximum output power for inter-band NE-DC (two bands)**

| NE-DC configuration | Power class 3 (dBm) | Tolerance (dB) |
|---------------------|---------------------|----------------|
| DC_n1A_28A          | 23                  | +2/-3          |

### 6.2B.1.4 Inter-band EN-DC including FR2

UE maximum output power requirement for E-UTRA single carrier and CA operation specified in clauses 6.2.2 and 6.2.2A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.2.1, 6.2A.1, and 6.2D.1 of TS 38.101-2 [3] apply.

### 6.2B.1.5 Inter-band EN-DC including both FR1 and FR2

UE maximum output power requirement for E-UTRA single carrier and CA operation specified in clauses 6.2.2 and 6.2.2A of TS 36.101 [4] and for NR single carrier specified in clause 6.2.1 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.2.1, 6.2A.1, and 6.2D.1 of TS 38.101-2 [3] apply. When uplink is EN-DC mode within FR1 only then UE maximum output power requirement is specified in clause 6.2B.1.3 of this specification.

## 6.2B.2 UE maximum output power reduction for DC

### 6.2B.2.0 General

The UE maximum output power reduction (MPR) specified in this clause is applicable for UEs configured with EN-DC when NS\_01 is indicated in the MCG and the SCG. The MPR applies subject to indication in the field *modifiedMPRbehavior* for the SCG [2].

## 6.2B.2.1 Intra-band contiguous EN-DC

### 6.2B.2.1.1 General

When the UE is configured for intra-band contiguous EN-DC, the UE determines the total allowed maximum output power reduction as specified in this clause.

For UE supporting dynamic power sharing the following:

- for the MCG,  $MPR_c$  in accordance with TS 36.101 [4]
- for the SCG,

$$MPR'_c = MPR_{NR} = \text{MAX}(MPR_{\text{single,NR}}, MPR_{\text{ENDC}})$$

- for the total configured transmission power,

$$MPR_{\text{tot}} = P_{\text{PowerClass,EN-DC}} - \min(P_{\text{PowerClass,EN-DC}}, 10 \cdot \log_{10}(10^{(P_{\text{PowerClass,E-UTRA}} - MPR_{\text{E-UTRA}})/10}) + 10^{(P_{\text{PowerClass,NR}} - MPR_{\text{NR}})/10}))$$

where

$$MPR_{\text{E-UTRA}} = \text{MAX}(MPR_{\text{single,E-UTRA}}, MPR_{\text{ENDC}})$$

with

- $MPR_{\text{single,E-UTRA}}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]
- $MPR_{\text{single,NR}}$  is the MPR defined for the NR transmission in TS 38.101-1 [2]

For UEs not supporting dynamic power sharing the following

- for the MCG,

$$MPR_c = \text{MAX}(MPR_{\text{single,E-UTRA}}, MPR_{\text{ENDC}})$$

- for the SCG,

$$MPR'_c = \text{MAX}(MPR_{\text{single,NR}}, MPR_{\text{ENDC}})$$

where

- $MPR_{\text{single,NR}}$  is the MPR defined for the NR transmission in TS 38.101-1 [2]
- $MPR_{\text{single,E-UTRA}}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]

$MPR_{\text{ENDC}}$  is defined in Clause 6.2B.2.1.2

### 6.2B.2.1.2 MPR for power class 3 and power class 2

MPR in this clause is applicable for power class 3 and power class 2 UEs indicating IE *dualPA-Architecture* supported with EN-DC power class being the same as the E-UTRA and NR power class, otherwise the UE can use as much MPR as needed to fulfil emissions requirements when scheduled with dual uplink transmission. For UEs scheduled with single uplink transmission, MPR in clause 6.2.4 of TS 36.101 [4] and 6.2.2 of TS 38.101-1 [2] apply. For a UE supporting dynamic power sharing for DC\_(n)71AA for which dual simultaneous uplink transmissions are mandatory and A-MPR defined in clause 6.2B.3.1.1 is applied as MPR. The allowed maximum output power reduction applied to transmission on the MCG and the SCG is defined as follows:

$$MPR_{\text{ENDC}} = M_A$$

Where  $M_A$  is defined as follows

$$M_A = \begin{cases} 15 & ; \quad 0 \leq B < 0.5 \\ 10 & ; \quad 0.5 \leq B < 1.0 \end{cases}$$

$$8 \quad ; \quad 1.0 \leq B < 2.0$$

$$6 \quad ; \quad 2.0 \leq B$$

Where:

For UEs supporting dynamic power sharing,

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc, NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

For UEs not supporting dynamic power sharing,

For E-UTRA

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{NR}} = 15,000$  Hz is assumed in calculation of B.

For NR

$$B = (12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc, NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{E-UTRA}} = 15,000$  Hz is assumed in calculation of B.

and  $M_A$  is reduced by 1 dB for  $B < 2$ .

## 6.2B.2.2 Intra-band non-contiguous EN-DC

### 6.2B.2.2.1 General

When the UE is configured for intra-band non-contiguous EN-DC, the UE determines the total allowed maximum output power reduction as specified in this clause.

For UE supporting dynamic power sharing the following:

- for the MCG,  $\text{MPR}_c$  in accordance with TS 36.101 [4]
- for the SCG,

$$\text{MPR}'_c = \text{MPR}_{\text{NR}} = \text{MAX}(\text{MPR}_{\text{single, NR}}, \text{MPR}_{\text{ENDC}})$$

- for the total configured transmission power,

$$\text{MPR}_{\text{tot}} = P_{\text{PowerClass, EN-DC}} - \min(P_{\text{PowerClass, EN-DC}}, 10 * \log_{10}(10^{((P_{\text{PowerClass, E-UTRA}} - \text{MPR}_{\text{E-UTRA}})/10)} + 10^{((P_{\text{PowerClass, NR}} - \text{MPR}_{\text{NR}})/10)}))$$

where

$$\text{MPR}_{\text{E-UTRA}} = \text{MAX}(\text{MPR}_{\text{single, E-UTRA}}, \text{MPR}_{\text{ENDC}})$$

with

- $\text{MPR}_{\text{single, E-UTRA}}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]
- $\text{MPR}_{\text{single, NR}}$  is the MPR defined for the NR transmission in TS 38.101-1 [2]

For UEs not supporting dynamic power sharing the following

- for the MCG,

$$\text{MPR}_c = \text{MAX}(\text{MPR}_{\text{single, E-UTRA}}, \text{MPR}_{\text{ENDC}})$$

- for the SCG,

$$\text{MPR}'_c = \text{MAX}(\text{MPR}_{\text{single, NR}}, \text{MPR}_{\text{ENDC}})$$

where

- $MPR_{\text{single,NR}}$  is the MPR defined for the NR transmission in TS 38.101-1 [2]
- $MPR_{\text{single,E-UTRA}}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]

$MPR_{\text{ENDC}}$  is defined in Clause 6.2B.2.2.2

#### 6.2B.2.2.2 MPR for power class 3 and power class 2

MPR in this clause is applicable for power class 3 and power class 2 UEs indicating IE *dualPA-Architecture* supported with EN-DC power class being the same as the E-UTRA and NR power class, otherwise the UE can use as much MPR as needed to fulfil emissions requirements when scheduled with dual uplink transmission. For UEs scheduled with single uplink transmission, MPR in clause 6.2.4 of TS 36.101 [4] and 6.2.2 of TS 38.101-1 [2] apply. The allowed maximum output power reduction for IM3 related emissions applied to transmission on the MCG and the SCG is defined as follows:

$$MPR_{\text{ENDC}} = M_A$$

Where  $M_A$  is defined as follows

$$M_A = \begin{cases} 18 & ; \quad 0 \leq B < 1.0 \\ 17 & ; \quad 1.0 \leq B < 2.0 \\ 16 & ; \quad 2.0 \leq B < 5.0 \\ 15 & ; \quad 5.0 \leq B \end{cases}$$

Where:

For UEs supporting dynamic power sharing,

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc,NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

For UEs not supporting dynamic power sharing,

For E-UTRA

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{NR}} = 15,000$  Hz is assumed in calculation of B.

For NR

$$B = (12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc,NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{E-UTRA}} = 15,000$  Hz is assumed in calculation of B.

and  $M_A$  is reduced by 1 dB for  $B < 2$ .

#### 6.2B.2.3 Inter-band EN-DC within FR1

For inter-band EN-DC between E-UTRA and FR1 NR, UE maximum output power reduction specified in TS 36.101 [4] and TS 38.101-1 [2] apply for E-UTRA and NR respectively.

#### 6.2B.2.3a Inter-band NE-DC within FR1

For inter-band NE-DC between E-UTRA and FR1 NR, UE maximum output power reduction specified in TS 36.101 [4] and TS 38.101-1 [2] apply for E-UTRA and NR respectively.

#### 6.2B.2.4 Inter-band EN-DC including FR2

UE maximum output power reduction requirement for E-UTRA single carrier and CA operation specified in clauses 6.2.3 and 6.2.3A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.2.2, 6.2A.2, and 6.2D.2 of TS 38.101-2 [3] apply.

### 6.2B.2.5 Inter-band EN-DC including both FR1 and FR2

UE maximum output power reduction requirement for E-UTRA single carrier and CA operation specified in clauses 6.2.3 and 6.2.3A of TS 36.101 [4] and for NR single carrier specified in clause 6.2.2 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.2.2, 6.2A.2 , and 6.2D.2 of TS 38.101-2 [3] apply.

## 6.2B.3 UE additional maximum output power reduction for EN-DC

### 6.2B.3.1 Intra-band contiguous EN-DC

#### 6.2B.3.1.0 General

For intra-band contiguous EN-DC band combinations with additional requirements the allowed A-MPR is specified in Table 6.2B.3.1.0-1 for UEs configured with EN-DC and combinations of network signalling values indicated in the E-UTRA and NR cell groups.

Unless otherwise stated the A-MPR specified in clause 6.2B.3.1 for intra-band contiguous EN-DC configurations is the total power reduction allowed including MPR.

**Table 6.2B.3.1.0-1: Additional maximum power reduction for Intra-band contiguous EN-DC**

| DC configuration                                                                                                                                                                                                                                                                                                                                      | Requirement (clause)       | E-UTRA network signalling value | NR network signalling value | A-MPR (clause)          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------|-----------------------------|-------------------------|
| DC_(n)71AA                                                                                                                                                                                                                                                                                                                                            | 6.5B.2.1.2.1               | NS_35                           | NS_35                       | 6.2B.3.1.1 <sup>3</sup> |
| DC_(n)41AA <sup>1</sup>                                                                                                                                                                                                                                                                                                                               | 6.5B.2.1.2.2<br>6.5B.4.1.1 | NS_01 or NS_04                  | NS_04                       | 6.2B.3.1.2 <sup>4</sup> |
| NOTE 1: Only applies to UEs that support dual UL transmission for this EN-DC combination.<br>NOTE 2: The additional emission requirement is indicated when the combination of network signalling values in the two CGs is set (only for UEs configured with EN-DC).<br>NOTE 3: The A-MPR is applied as MPR if NS_35 is not signalled.<br>NOTE 4: Void |                            |                                 |                             |                         |

#### 6.2B.3.1.1 A-MPR for DC\_(n)71AA

For UE supporting dynamic power sharing the following:

- for the MCG,  $A-MPR_c$  in accordance with TS 36.101 [4]
- for the SCG,  $A-MPR'_c = A-MPR_{DC}$
- for the total configured transmission power,  $A-MPR_{tot} = A-MPR_{DC}$

with  $A-MPR_{DC}$  as defined in this clause.

For UEs not supporting dynamic power sharing the following

- for the MCG,

$$A-MPR_c = A-MPR_{E-UTRA}$$

- for the SCG,

$$A-MPR'_c = A-MPR_{NR}$$

with  $A-MPR_{E-UTRA}$  and  $A-MPR_{NR}$  as defined in this clause.

For DC\_(n)71AA with configured with network signaling values as per Table 6.2B.3.1.0-1 the allowed A-MPR is defined by

- for UE indicating support of dynamicPowerSharing in the *UE-MRDC-Capability* IE

$$A-MPR_{DC} = \text{CEIL}\{M_{A,DC}(A), 0.5\}$$

where  $A\text{-MPR}_{\text{DC}}$  is the total power reduction allowed (dB),

- for OFDM:

$$\begin{aligned} M_{A,\text{DC}} &= 11.00 - 11.67 \cdot A; & 0.00 < A \leq 0.30 \\ &8.10 - 2.00 \cdot A; & 0.30 < A \leq 0.80 \\ &6.50; & 0.80 < A \leq 1.00 \end{aligned}$$

- for DFT-S-OFDM:

$$\begin{aligned} M_{A,\text{DC}} &= 11.00 - 13.33 \cdot A; & 0.00 < A \leq 0.30 \\ &8.00 - 3.33 \cdot A; & 0.30 < A \leq 0.60 \\ &6.00; & 0.60 < A \leq 1.00 \end{aligned}$$

where

$$A = \frac{L_{\text{CRB},E\text{-UTRA}} + L_{\text{CRB},\text{NR}}}{N_{\text{RB},E\text{-UTRA}} + N_{\text{RB},\text{NR}}}$$

with  $L_{\text{CRB},E\text{-UTRA}}$  and  $N_{\text{RB},E\text{-UTRA}}$  the number of allocated PRB and transmission bandwidth for MCG,  $L_{\text{CRB},\text{NR}}$  and  $N_{\text{RB},\text{NR}}$  the number of allocated PRB and transmission bandwidth for SCG with SCS = 15 kHz.

- for UE not indicating support of dynamicPowerSharing

$$A\text{-MPR}_{E\text{-UTRA}} = \text{CEIL}\{M_{A,E\text{-UTRA}}, 0.5\}$$

$$A\text{-MPR}_{\text{NR}} = \text{CEIL}\{M_{A,\text{NR}}, 0.5\}$$

where  $A\text{-MPR}$  is the total power reduction allowed per CG with

$$M_{A,E\text{-UTRA}} = M_{A,\text{DC}}(A_{E\text{-UTRA},wc}) - 1 - \Delta_{E\text{-UTRA}}$$

$$M_{A,\text{NR}} = M_{A,\text{DC}}(A_{\text{NR},wc}) - 1 - \Delta_{\text{NR}}$$

$$A_{E\text{-UTRA},wc} = \frac{L_{\text{CRB},E\text{-UTRA}} + 1}{N_{\text{RB},E\text{-UTRA}} + N_{\text{RB},\text{NR}}}$$

$$A_{\text{NR},wc} = \frac{1 + L_{\text{CRB},\text{NR}}}{N_{\text{RB},E\text{-UTRA}} + N_{\text{RB},\text{NR}}}$$

$$\Delta_{E\text{-UTRA}} = 10 \log_{10} \frac{N_{\text{RB},E\text{-UTRA}}}{N_{\text{RB},E\text{-UTRA}} + N_{\text{RB},\text{NR}}}$$

$$\Delta_{\text{NR}} = 10 \log_{10} \frac{N_{\text{RB},\text{NR}}}{N_{\text{RB},E\text{-UTRA}} + N_{\text{RB},\text{NR}}}$$

Where  $L_{\text{CRB},\text{NR}}$  and  $N_{\text{RB},\text{NR}}$  the number of allocated PRB and transmission bandwidth for SCG with SCS = 15 kHz.

### 6.2B.3.1.2 A-MPR for NS\_04

#### 6.2B.3.1.2.0 General

When the UE is configured for B41/n41 intra-band contiguous EN-DC and it receives IE NS\_04, the UE determines the total allowed maximum output power reduction as specified in this clause. The A-MPR for EN-DC defined in this clause is used instead of MPR defined in 6.2B.2.1, not additively, so EN-DC MPR = 0 when NS\_04 is signaled. For UEs scheduled with single uplink transmission, AMPR in clause 6.2.4 of [4] and 6.2.3 of [2] apply.

For UE supporting dynamic power sharing the following:

- for the MCG,  $A\text{-MPR}_c$  in accordance with TS 36.101 [4]

- for the SCG,

$$A-MPR'_c = A-MPR_{NR} = \text{MAX}(A-MPR_{\text{single,NR}}, A-MPR_{IM3})$$

- for the total configured transmission power,

$$A-MPR_{\text{tot}} = P_{\text{PowerClass,EN-DC}} - \min(P_{\text{PowerClass,EN-DC}}, 10^{\log_{10}((P_{\text{PowerClass,E-UTRA}} - A-MPR_{E-UTRA})/10)} + 10^{\log_{10}((P_{\text{PowerClass,NR}} - A-MPR_{NR})/10)})$$

where

$$A-MPR_{E-UTRA} = \text{MAX}(A-MPR_{\text{single,E-UTRA}} + MPR_{\text{single,E-UTRA}}, A-MPR_{IM3})$$

with

- $A-MPR_{\text{single,E-UTRA}}$  is the A-MPR defined for the E-UTRA transmission in TS 36.101 [4]
- $A-MPR_{\text{single,NR}}$  is the A-MPR defined for the NR transmission in TS 38.101-1 [2]
- $MPR_{\text{single,E-UTRA}}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]

For UEs not supporting dynamic power sharing the following

- for the MCG,

$$A-MPR_c = \text{MAX}(A-MPR_{\text{single,E-UTRA}} + MPR_{\text{single,E-UTRA}}, A-MPR_{IM3})$$

- for the SCG,

$$A-MPR'_c = \text{MAX}(A-MPR_{\text{single,NR}}, A-MPR_{IM3})$$

where

- $A-MPR_{\text{single,E-UTRA}}$  is the A-MPR defined for the E-UTRA transmission in TS 36.101 [4]
- $A-MPR_{\text{single,NR}}$  is the A-MPR defined for the NR transmission in TS 38.101-1 [2]
- $MPR_{\text{single,E-UTRA}}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]

The UE determines the Allocation Configuration Case and the value of  $A-MPR_{IM3}$  as follows:

If  $F_{IM3,low\_block,low} < 2490.5$  MHz

Allocation Configuration Case B.  $A-MPR_{IM3}$  defined in Clause 6.2B.3.1.2.2

Else

Allocation Configuration Case A.  $A-MPR_{IM3}$  defined in Clause 6.2B.3.1.2.1

where

- $F_{IM3,low\_block,low} = (2 * F_{low\_alloc,low\_edge}) - F_{high\_alloc,high\_edge}$
- $F_{low\_alloc,low\_edge}$  is the lowermost frequency of lower transmission bandwidth configuration.
- $F_{high\_alloc,high\_edge}$  is the uppermost frequency of upper transmission bandwidth configuration.

Where the transmission bandwidth configuration for NR is the maximum frequency span covering all the configured SCSSpecificCarrier for scenarios that carrier bandwidths with different SCS can be fully overlapped.

NOTE: For non-dynamic power sharing capable UEs, since the allocation is unknown for one RAT, the edges of the channel transmission bandwidth are used instead of the edges of the RB allocations for that RAT.

#### 6.2B.3.1.2.1 $A-MPR_{IM3}$ for NS\_04 to meet -13 dBm / 1MHz

A-MPR is relative to 26 dBm for a power class 2 Cell Group to support PC1.5 and PC2 EN-DC UE. The same A-MPR is used relative to 23 dBm for a power class 3 Cell Group to support PC2 and PC3 EN-DC UE. The detail A-MPR

values are decided based on the modified MPR behaviour in Annex H.1. For the UE is configured with allocation configurations Case A or Case C (defined in Clause 6.2B.3.2.1), the allowed maximum output power reduction for IM3s applied to transmission on the MCG and the SCG with non-contiguous resource allocation is defined as follows:

$$A\text{-MPR}_{\text{IM3}} = M_A$$

Where  $M_A$  is defined as follows

$$M_A = \begin{array}{ll} 12 & ; \quad 0 \leq B < 0.54 \\ 10 & ; \quad 0.54 \leq B < 1.08 \\ 9 & ; \quad 1.08 \leq B < 2.16 \\ 8.5 & ; \quad 2.16 \leq B < 3.24 \\ 8 & ; \quad 3.24 \leq B < 5.4 \\ 6 & ; \quad 5.4 \leq B \end{array}$$

Where:

For UEs supporting dynamic power sharing,

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc, NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

For UEs not supporting dynamic power sharing,

For E-UTRA

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{NR}} = 15,000$  Hz is assumed in calculation of B.

For NR

$$B = (12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc, NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{E-UTRA}} = 15,000$  Hz is assumed in calculation of B.

and  $M_A$  is reduced by 1 dB for  $B < 2.0$ .

#### 6.2B.3.1.2.2 A-MPR for NS\_04 to meet -25 dBm / 1MHz

A-MPR is relative to 26 dBm for a power class 2 Cell Group to support PC1.5 and PC2 EN-DC UE. The same A-MPR is used relative to 23 dBm for a power class 3 Cell Group to support PC2 and PC3 EN-DC UE. The detail A-MPR values are decided based on the modified MPR behaviour in Annex H.1. For the UE is configured with allocation configurations Case B or Case D (defined in Clause 6.2B.3.2.1), the allowed maximum output power reduction for IM3s applied to transmission on the MCG and the SCG with non-contiguous resource allocation is defined as follows:

$$A\text{-MPR}_{\text{IM3}} = M_A$$

Where  $M_A$  is defined as follows

$$M_A = \begin{array}{ll} 15 & ; \quad 0 \leq B < 1.08 \\ 14 & ; \quad 1.08 \leq B < 5.4 \\ 13 & ; \quad 5.4 \leq B < 8.1 \\ 12 & ; \quad 8.1 \leq B < 25.2 \\ 10 & ; \quad 25.2 \leq B \end{array}$$

Where:

For UEs supporting dynamic power sharing,

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc, NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

For UEs not supporting dynamic power sharing,

For E-UTRA

$$B = (L_{\text{CRB\_alloc, E-UTRA}} * 12 * \text{SCS}_{\text{E-UTRA}} + 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{NR}} = 15,000$  Hz is assumed in calculation of B.

For NR

$$B = (12 * \text{SCS}_{\text{E-UTRA}} + L_{\text{CRB\_alloc, NR}} * 12 * \text{SCS}_{\text{NR}}) / 1,000,000$$

Where  $\text{SCS}_{\text{E-UTRA}} = 15,000$  Hz is assumed in calculation of B.

and  $M_A$  is reduced by 1 dB.

### 6.2B.3.2 Intra-band non-contiguous EN-DC

#### 6.2B.3.2.0 General

For intra-band non-contiguous EN-DC band combinations with additional requirements the A-MPR allowed are specified in Table 6.2B.3.2.0-1 for UEs configured with EN-DC and combinations of network signalling values indicated in the E-UTRA and NR cell group(s). Unless otherwise stated the A-MPR specified in clause 6.2B.3.2 for intra-band non-contiguous EN-DC configurations is the total power reduction allowed including MPR. For UEs scheduled with single uplink transmission, AMPR in clause 6.2.4 of [4] and 6.2.3 of [2] apply.

**Table 6.2B.3.2.0-1: Allowed power reduction for intra-band non-contiguous EN-DC**

| DC configuration                                                                                                                                                                                                                            | Requirement (clause)                                                                     | E-UTRA network signalling value | NR network signalling value | A-MPR (clause) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------|-----------------------------|----------------|
| DC_41A_n41A <sup>1</sup>                                                                                                                                                                                                                    | 6.6.3.3.19 and 6.6.2.2.2 of TS 36.101 [4] and 6.5.2.3.2 and 6.5.3.3.1 of TS 38.101-1 [2] | NS_01 or NS_04                  | NS_04                       | 6.2B.3.2.1     |
| NOTE 1: Only applies to UEs that support dual UL transmission for this EN-DC combination.<br>NOTE 2: The requirement applies when the combination of network signalling values in the two CGs is set (only for UEs configured with EN-DC).. |                                                                                          |                                 |                             |                |

#### 6.2B.3.2.1 A-MPR for NS\_04

When the UE is configured for B41/n41 intra-band non-contiguous EN-DC and it receives IE NS\_04, the UE determines the total allowed maximum output power reduction as specified in this clause. The A-MPR for EN-DC defined in this clause is used instead of MPR defined in 6.2B.2.2, not additively, so EN-DC MPR=0 when NS\_04 is signaled.

For UE supporting dynamic power sharing the following:

- for the MCG,  $A\text{-MPR}_c$  in accordance with TS 36.101 [4]
- for the SCG,

$$A\text{-MPR}'_c = A\text{-MPR}_{\text{NR}} = \text{MAX}(A\text{-MPR}_{\text{single, NR}}, A\text{-MPR}_{\text{EN-DC}})$$

- for the total configured transmission power,

$$A\text{-MPR}_{\text{tot}} = P_{\text{PowerClass, EN-DC}} - \min(P_{\text{PowerClass, EN-DC}}, 10 * \log_{10}(10^{((P_{\text{PowerClass, E-UTRA}} - A\text{-MPR}_{\text{E-UTRA}})/10)} + 10^{((P_{\text{PowerClass, NR}} - A\text{-MPR}_{\text{NR}})/10)}))$$

where

$$A-MPR_{E-UTRA} = \text{MAX}( A-MPR_{\text{single},E-UTRA} + MPR_{\text{single},E-UTRA}, A-MPR_{EN-DC} )$$

$$A-MPR_{EN-DC} = \text{MAX}(A-MPR_{IM3}, A-MPR_{ACL\text{Roverlap}} )$$

with

- $A-MPR_{\text{single}, E-UTRA}$  is the A-MPR defined for the E-UTRA transmission in TS 36.101 [4]
- $A-MPR_{\text{single},NR}$  is the A-MPR defined for the NR transmission in TS 38.101-1 [2]
- $MPR_{\text{single},E-UTRA}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]

For UEs not supporting dynamic power sharing the following

- for the MCG,

$$A-MPR_c = \text{MAX}( A-MPR_{\text{single}, E-UTRA} + MPR_{\text{single},E-UTRA}, A-MPR_{IM3}, A-MPR_{ACL\text{Roverlap}} )$$

- for the SCG,

$$A-MPR'_c = \text{MAX}( A-MPR_{\text{single},NR}, A-MPR_{IM3}, A-MPR_{ACL\text{Roverlap}} )$$

where

- $A-MPR_{\text{single}, E-UTRA}$  is the A-MPR defined for the E-UTRA transmission in TS 36.101 [4]
- $A-MPR_{\text{single},NR}$  is the A-MPR defined for the NR transmission in TS 38.101-1 [2]
- $MPR_{\text{single},E-UTRA}$  is the MPR defined for the E-UTRA transmission in TS 36.101 [4]

The UE determines the Allocation Configuration Case and the value of  $A-MPR_{IM3}$  as follows:

If  $\text{AND}( F_{IM3,low\_block,high} < F_{\text{filter},low} , \text{MAX}( SEM_{-13,high}, F_{IM3,high\_block,low} ) > F_{\text{filter},high} )$

Allocation Configuration Case C.  $A-MPR_{IM3}$  defined in Clause 6.2B.3.1.2.1

Else

Allocation Configuration Case D.  $A-MPR_{IM3}$  defined in Clause 6.2B.3.1.2.2

where

- $F_{IM3,low\_block,high} = (2 * F_{\text{low\_alloc},high\_edge} ) - F_{\text{high\_alloc},low\_edge}$
- $F_{IM3,high\_block,low} = (2 * F_{\text{high\_alloc},low\_edge} ) - F_{\text{low\_alloc},high\_edge}$
- $F_{\text{low\_alloc},low\_edge}$  is the lowermost frequency of lower transmission bandwidth allocation.
- $F_{\text{low\_alloc},high\_edge}$  is the uppermost frequency of lower transmission bandwidth allocation.
- $F_{\text{high\_alloc},low\_edge}$  is the lowermost frequency of upper transmission bandwidth allocation.
- $F_{\text{high\_alloc},high\_edge}$  is the uppermost frequency of upper transmission bandwidth allocation.
- $F_{\text{filter},low} = 2480 \text{ MHz}$
- $F_{\text{filter},high} = 2745 \text{ MHz}$
- $SEM_{-13,high}$  = Threshold frequency where upper spectral emission mask for upper channel drops from -13 dBm / 1MHz to -25 dBm / 1MHz, as specified in Clause 6.6.2.2.2 in [4] and Clause 6.5.2.3.2 in [2] respectively.

Where the transmission bandwidth configuration for NR is the maximum frequency span covering all the configured SCSSpecificCarrier for scenarios that carrier bandwidths with different SCS can be fully overlapped

The UE determines the value of  $A-MPR_{ACL\text{Roverlap}}$  as specified in Table 6.2B.3.2.1-1:

**Table 6.2B.3.2.1-1: A-MPR<sub>ACLROverlap</sub>**

| $W_{\text{gap}}$                                                                                   | A-MPR <sub>ACLROverlap</sub> |
|----------------------------------------------------------------------------------------------------|------------------------------|
| $< BW_{\text{channel,E-UTRA}} + BW_{\text{channel,NR}}$                                            | 4 dB                         |
| $\geq BW_{\text{channel,E-UTRA}} + BW_{\text{channel,NR}}$                                         | 0 dB                         |
| NOTE 1: $W_{\text{gap}} = F_{\text{high\_channel,low\_edge}} - F_{\text{low\_channel,high\_edge}}$ |                              |

### 6.2B.3.3 Inter-band EN-DC within FR1

For inter-band EN-DC between E-UTRA and FR1 NR, UE additional maximum output power reduction specified in TS 36.101 [4] and TS 38.101-1 [2] apply for E-UTRA and NR respectively.

Unless specified in Table 6.2B.3.3-1, for inter-band carrier aggregation with uplink assigned to LTE and NR bands, the requirements in [2] clause 6.2.3 apply for NR uplink component carrier and the requirements in [4] clause 6.2.4 apply for LTE uplink component carrier.

Unless otherwise stated, for inter-band EN-DC with uplink assigned to LTE and NR bands and specified in Table 6.2B.3.3-1, the combined requirements and allowed A-MPR are applicable on both LTE and NR bands when LTE and NR component carriers are active. The requirements in Table 6.2B.3.3-1 are specified in terms of an additional spectrum emission requirement. The emission requirements specified in Table 6.2B.3.3-1 also apply for the frequency ranges that are less than  $F_{\text{OOB}}$  (MHz) from the edge of the channel bandwidth specified in TS 36.101 [4] and TS 38.101-1 [2], respectively.

**Table 6.2B.3.3-1: Additional Requirements for inter-band EN-DC (two-bands)**

| NR CA combination                      | Band | Applied NS | Requirements (clause) (TS 36.101 [4]) | Requirements (clause) (TS 38.101-1 [2]) | A-MPR (table/clause) (TS 36.101 [4]) | A-MPR (table/clause) (TS 38.101-1 [2]) | Note |
|----------------------------------------|------|------------|---------------------------------------|-----------------------------------------|--------------------------------------|----------------------------------------|------|
| DC_1_n3                                | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    | 1    |
|                                        | n3   | 100        | N/A                                   | 6.5.2.4.2                               | N/A                                  | Table 6.2.3.1-2                        |      |
| DC_1_n5                                | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    | 1    |
|                                        | n5   | 100        | N/A                                   | 6.5.2.4.2                               | N/A                                  | Table 6.2.3.1-2                        |      |
| DC_1_n8                                | n8   | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    | 1    |
|                                        |      | 43         | N/A                                   | 6.5.3.3.5                               | N/A                                  | Clause 6.2.3.6                         |      |
|                                        |      | 43U        | N/A                                   | 6.5.3.3.5, 6.5.2.4.2                    | N/A                                  | Clause 6.2.3.6                         |      |
| DC_1_n28                               | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    | 2    |
|                                        | n28  | 17         | N/A                                   | 6.5.3.3.2                               | N/A                                  | N/A                                    |      |
| DC_1_n40                               | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    |      |
| DC_1_n41                               | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    |      |
|                                        | n41  | 47         | N/A                                   | 6.5.3.3.15                              | N/A                                  | Table 6.2.3.18-2                       |      |
| DC_1_n77<br>DC_1_n84_ULSUP-<br>TDM_n77 | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    | 1    |
|                                        | n84  | 05         | N/A                                   | 6.5.3.3.4                               | N/A                                  | Clause 6.2.3.4                         |      |
|                                        |      | 05U        | N/A                                   | 6.5.3.3.4                               | N/A                                  | Clause 6.2.3.4                         |      |
| DC_1_n78<br>DC_1_n84_ULSUP-<br>TDM_n78 | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    | 1    |
|                                        | n84  | 05         | N/A                                   | 6.5.3.3.4                               | N/A                                  | Clause 6.2.3.4                         |      |
|                                        |      | 05U        | N/A                                   | 6.5.3.3.4, 6.5.2.4.2                    | N/A                                  | Clause 6.2.3.4                         |      |
| DC_1_n79<br>DC_1_n84_ULSUP-<br>TDM_n79 | 1    | 05         | 6.6.3.3.1                             | N/A                                     | Table 6.2.4-1 (NS_05)                | N/A                                    | 1    |
|                                        | n84  | 05         | N/A                                   | 6.5.3.3.4                               | N/A                                  | Clause 6.2.3.4                         |      |
|                                        |      | 05U        | N/A                                   | 6.5.3.3.4, 6.5.2.4.2                    | N/A                                  | Clause 6.2.3.4                         |      |
| DC_3_n1                                | n1   | 05         | N/A                                   | 6.5.3.3.4                               | N/A                                  | Clause 6.2.3.4                         | 1    |
|                                        |      | 05U        | N/A                                   | 6.5.3.3.4, 6.5.2.4.2                    | N/A                                  | Clause 6.2.3.4                         |      |
| DC_3_n5                                | n5   | 100        | N/A                                   | 6.5.2.4.2                               | N/A                                  | Table 6.2.3.1-2                        | 1    |
| DC_3_n8                                | n8   | 43         | N/A                                   | 6.5.3.3.5                               | N/A                                  | Clause 6.2.3.6                         | 1    |
|                                        |      | 43U        | N/A                                   | 6.5.3.3.5                               | N/A                                  | Clause 6.2.3.6                         |      |
| DC_3_n28                               | n28  | 17         | N/A                                   | 6.5.3.3.2                               | N/A                                  | N/A                                    | 2    |

|                                         |     |     |            |                      |                          |                  |      |
|-----------------------------------------|-----|-----|------------|----------------------|--------------------------|------------------|------|
| DC_3_n41,<br>DC_3_n80_ULSUP-<br>TDM_n41 | n41 | 47  | N/A        | 6.5.3.3.15           | N/A                      | Table 6.2.3.18-2 | 1    |
|                                         | n80 | 100 | N/A        | 6.5.2.4.2            | N/A                      | Table 6.2.3.1-2  |      |
| DC_8_n1                                 | n1  | 05  | N/A        | 6.5.3.3.4            | N/A                      | Clause 6.2.3.4   | 1, 3 |
|                                         |     | 05U | N/A        | 6.5.3.3.4, 6.5.2.4.2 | N/A                      | Clause 6.2.3.4   |      |
| DC_8_n3                                 | n3  | 100 | N/A        | 6.5.2.4.2            | N/A                      | Table 6.2.3.1-2  | 1, 3 |
| DC_8_n28                                | n28 | 17  | N/A        | 6.5.3.3.2            | N/A                      | N/A              | 2, 3 |
| DC_8_n41,<br>DC_8_n81_ULSUP-<br>TDM_n41 | n41 | 47  | N/A        | 6.5.3.3.15           | N/A                      | Table 6.2.3.18-2 | 3    |
|                                         | n81 | 43  | N/A        | 6.5.3.3.5            | N/A                      | Clause 6.2.3.6   |      |
|                                         |     | 43U | N/A        | 6.5.3.3.5            | N/A                      | Clause 6.2.3.6   |      |
| DC_11_n3                                | n3  | 100 | N/A        | 6.5.2.4.2            | N/A                      | Table 6.2.3.1-2  | 1    |
| DC_11_n28                               | n28 | 17  | N/A        | 6.5.3.3.2            | N/A                      | N/A              | 2    |
| DC_18_n3                                | n3  | 100 | N/A        | 6.5.2.4.2            | N/A                      | Table 6.2.3.1-2  | 1    |
| DC_19_n77                               | 19  | 08  | 6.6.3.3.3  | N/A                  | Table 6.2.4-1<br>(NS_08) | N/A              |      |
| DC_19_n78                               | 19  | 08  | 6.6.3.3.3  | N/A                  | Table 6.2.4-1<br>(NS_08) | N/A              |      |
| DC_19_n79                               | 19  | 08  | 6.6.3.3.3  | N/A                  | Table 6.2.4-1<br>(NS_08) | N/A              |      |
| DC_21_n77                               | 21  | 09  | 6.6.3.3.4  | N/A                  | Table 6.2.4-1<br>(NS_09) | N/A              |      |
| DC_21_n78                               | 21  | 09  | 6.6.3.3.4  | N/A                  | Table 6.2.4-1<br>(NS_09) | N/A              |      |
| DC_21_n79                               | 21  | 09  | 6.6.3.3.4  | N/A                  | Table 6.2.4-1<br>(NS_09) | N/A              |      |
| DC_28_n3                                | 28  | 17  | 6.6.3.3.10 | N/A                  | Table 6.2.4-1<br>(NS_17) | N/A              | 2    |
|                                         | n3  | 100 | N/A        | 6.5.2.4.2            | N/A                      | Table 6.2.3.1-2  |      |
| DC_28_n5                                | 28  | 17  | 6.6.3.3.10 | N/A                  | Table 6.2.4-1<br>(NS_17) | N/A              | 1, 2 |
|                                         | n5  | 100 | N/A        | 6.5.2.4.2            | N/A                      | Table 6.2.3.1-2  |      |
| DC_28_n8                                | 28  | 17  | 6.6.3.3.10 | N/A                  | Table 6.2.4-1<br>(NS_17) | N/A              | 1, 2 |
|                                         | n8  | 43  | N/A        | 6.5.3.3.5            | N/A                      | Clause 6.2.3.6   |      |
|                                         |     | 43U | N/A        | 6.5.3.3.5            | N/A                      | Clause 6.2.3.6   |      |
| DC_28_n40                               | 28  | 17  | 6.6.3.3.10 | N/A                  | Table 6.2.4-1<br>(NS_17) | N/A              | 2    |
| DC_28_n41                               | 28  | 17  | 6.6.3.3.10 | N/A                  | Table 6.2.4-1<br>(NS_17) | N/A              | 2    |
|                                         | n41 | 47  | N/A        | 6.5.3.3.15           | N/A                      | Table 6.2.3.18-2 |      |
| DC_28_n77                               | 28  | 17  | 6.6.3.3.10 | N/A                  | Table 6.2.4-1<br>(NS_17) | N/A              | 2    |
| DC_28_n78                               | 28  | 17  | N/A        | 6.5.3.3.2            | N/A                      | N/A              | 2    |
| DC_28_n79                               | 28  | 17  | 6.6.3.3.10 | N/A                  | Table 6.2.4-1<br>(NS_17) | N/A              | 2    |
| DC_40_n1                                | n1  | 05  | N/A        | 6.5.3.3.4            | N/A                      | Clause 6.2.3.4   | 1    |
|                                         |     | 05U | N/A        | 6.5.3.3.4, 6.5.2.4.2 | N/A                      | Clause 6.2.3.4   |      |
| DC_40_n41                               | n41 | 47  | N/A        | 6.5.3.3.15           | N/A                      | Table 6.2.3.18-2 |      |
| DC_41_n3                                | n3  | 100 | N/A        | 6.5.2.4.2            | N/A                      | Table 6.2.3.1-2  | 1    |
| DC_41_n28                               | n28 | 17  | N/A        | 6.5.3.3.2            | N/A                      | N/A              | 2    |
| DC_42_n28                               | n28 | 17  | N/A        | 6.5.3.3.2            | N/A                      | N/A              | 2    |

NOTE 1: NS\_05U, NS\_43U and NS\_100 can be signalled for NR bands that have UTRA services deployed and protected range is specified in clause 6.5.2.4.2 of TS38.101-1[2] and the requirements in clause 6.5.2.4.2 are only applicable to the signalling band.

NOTE 2: Applicable when the assigned NR carrier is confined within 718 MHz and 748 MHz and when the channel bandwidth used is 5 or 10 MHz.

NOTE 3: This requirement is applicable only for the following cases: A: for carriers of 5 MHz channel bandwidth when carrier centre frequency ( $F_c$ ) is within the range  $902.5 \text{ MHz} \leq F_c < 907.5 \text{ MHz}$  with an uplink transmission bandwidth less than or equal to 20 RB; B: for carriers of 5 MHz channel bandwidth when carrier centre frequency ( $F_c$ ) is within the range  $907.5 \text{ MHz} \leq F_c \leq 912.5 \text{ MHz}$  without any restriction on uplink transmission bandwidth; C: for carriers of 10 MHz channel bandwidth when carrier centre frequency ( $F_c$ ) is  $F_c = 910 \text{ MHz}$  with an uplink transmission bandwidth less than or equal to 32 RB with  $RB_{\text{start}} > 3$ .

### 6.2B.3.3A Inter-band NE-DC within FR1

Unless specified in Table 6.2B.3.3A-1, for inter-band carrier aggregation with uplink assigned to LTE and NR bands, the requirements in [2] clause 6.2.3 apply for NR uplink component carrier and the requirements in [4] clause 6.2.4 apply for LTE uplink component carrier.

Unless otherwise stated, for inter-band NE-DC with uplink assigned to NR and LTE bands and specified in Table 6.2B.3.3A-1, the combined requirements and allowed A-MPR are applicable on both LTE and NR bands when LTE and NR component carriers are active. The requirements in Table 6.2B.3.3A-1 are specified in terms of an additional spectrum emission requirement. The emission requirements specified in Table 6.2B.3.3A-1 also apply for the frequency ranges that are less than  $F_{OOB}$  (MHz) from the edge of the channel bandwidth specified in TS 36.101 [4] and TS 38.101-1 [2], respectively.

**Table 6.2B.3.3A-1: Additional Requirements for inter-band NE-DC (two-bands)**

| NR CA combination                                                                                                                                                                                                                        | Band | Applied NS | Requirements (clause) (TS 36.101 [4]) | Requirements (clause) (TS 38.101-1 [2]) | A-MPR (table/clause) (TS 36.101 [4]) | A-MPR (table/clause) (TS 38.101-1 [2]) | Note |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------|---------------------------------------|-----------------------------------------|--------------------------------------|----------------------------------------|------|
| DC_n1_28                                                                                                                                                                                                                                 | n1   | 05         | N/A                                   | 6.5.3.3.4                               | N/A                                  | Clause 6.2.3.4                         | 1, 2 |
|                                                                                                                                                                                                                                          |      | 05U        | N/A                                   | 6.5.3.3.4                               | N/A                                  | Clause 6.2.3.4                         |      |
|                                                                                                                                                                                                                                          | 28   | 17         | 6.6.3.3.10                            | N/A                                     | Table 6.2.4-1 (NS 17)                | N/A                                    |      |
| NOTE 1: NS_05U can be signalled for NR bands that have UTRA services deployed and protected range is specified in clause 6.5.2.4.2 of TS38.101-1[2] and the requirements in clause 6.5.2.4.2 are only applicable to the signalling band. |      |            |                                       |                                         |                                      |                                        |      |
| NOTE 2: Applicable when the assigned NR carrier is confined within 718 MHz and 748 MHz and when the channel bandwidth used is 5 or 10 MHz.                                                                                               |      |            |                                       |                                         |                                      |                                        |      |

### 6.2B.3.4 Inter-band EN-DC including FR2

UE additional maximum output power reduction requirement for E-UTRA single carrier and CA operation specified in clauses 6.2.4 and 6.2.4A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.2.3, 6.2A.3 and 6.2D.3 of TS 38.101-2 [3] apply.

### 6.2B.3.5 Inter-band EN-DC including both FR1 and FR2

UE additional maximum output power reduction requirement for E-UTRA single carrier and CA operation specified in clauses 6.2.4 and 6.2.4A of TS 36.101 [4] and for NR single carrier specified in clause 6.2.3 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.2.3, 6.2A.3 and 6.2D.3 of TS 38.101-2 [3] apply.

## 6.2B.4 Configured output power for DC

### 6.2B.4.1 Configured output power level

#### 6.2B.4.1.1 Intra-band contiguous EN-DC

The following requirements apply for one component carrier per CG configured for synchronous DC.

For intra-band dual connectivity with one uplink serving cell per CG on E-UTRA and NR respectively, the UE is allowed to set its configured maximum output power  $P_{CMAX,c(i),i}$  for serving cell  $c(i)$  of CG  $i$ ,  $i = 1, 2$ , and its total configured maximum transmission power for EN-DC operation  $P_{Total}^{EN-DC} = 10\log_{10}(\hat{P}_{total}^{EN-DC})$  with  $\hat{P}_{total}^{EN-DC}$  as specified in clause 7.6 of TS 38.213 [10].

The configured maximum output power  $P_{CMAX\_E-UTRA,c}(p)$  in sub-frame  $p$  for the configured E-UTRA uplink carrier shall be set within the bounds:

$$P_{CMAX\_L\_E-UTRA,c}(p) \leq P_{CMAX\_E-UTRA,c}(p) \leq P_{CMAX\_H\_E-UTRA,c}(p)$$

where  $P_{\text{CMAX\_L\_E-UTRA},c}$  and  $P_{\text{CMAX\_H\_E-UTRA},c}$  are the limits for a serving cell  $c$  as specified in TS 36.101 [4] clause 6.2.5 modified by  $P_{\text{LTE}}$  as follows:

$$P_{\text{CMAX\_L\_E-UTRA},c} = \text{MIN} \{ \text{MIN}(P_{\text{EMAX},c}, P_{\text{EMAX, EN-DC}}, P_{\text{LTE}}) - \Delta t_{\text{C\_E-UTRA},c}, (P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}}), (P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}}) - \text{MAX}(MPR_c + A\text{-}MPR_c + \Delta T_{\text{IB},c} + \Delta T_{\text{C\_E-UTRA},c} + \Delta T_{\text{ProSe}}, P\text{-}MPR_c) \}$$

$$P_{\text{CMAX\_H\_E-UTRA},c} = \text{MIN} \{ P_{\text{EMAX},c}, P_{\text{EMAX, EN-DC}}, P_{\text{LTE}}, P_{\text{PowerClass, EN-DC}}, P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}} \}$$

where

- $P_{\text{EMAX, EN-DC}}$  is the value given by the field *p-maxUE-FR1* of the *RRCCONNECTIONRECONFIGURATION-v1530* IE as defined in TS 36.331 [8];
- $P_{\text{LTE}}$  is the value given by the field *p-maxEUTRA-r15* of the *RRCCONNECTIONRECONFIGURATION-v1510* IE as defined in TS 36.331 [8] which is the same as  $P_{\text{LTE}}$  in TS 38.213 [10];
- $\Delta t_{\text{C\_E-UTRA},c} = 1.5$  dB when NOTE 2 in Table 6.2.2-1 of TS 36.101 [4] applies;  $\Delta t_{\text{C\_E-UTRA},c} = 0$  dB otherwise;

and whenever NS\_01 is not indicated within CG 1:

- for a UE indicating support of dynamicPowerSharing, the  $MPR_c$  and the  $A\text{-}MPR_c$  are determined in accordance with the DCI of serving cell  $c$  of the CG 1 and the specification in clause 6.2.4 of TS 36.101 [4];
- for a UE not indicating support of dynamicPowerSharing, the  $A\text{-}MPR_c$  is determined in accordance with clause 6.2B.3.1 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $MPR_c = 0$  dB;

and whenever NS\_01 is indicated in CG 1:

- for a UE indicating support of dynamicPowerSharing, the  $MPR_c$  is determined in accordance with the DCI of serving cell  $c$  of the CG 1 and the specification in clause 6.2.4 of TS 36.101 [4];
- for a UE not indicating support of dynamicPowerSharing, the  $MPR_c$  is determined in accordance with clause 6.2B.2.1 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $A\text{-}MPR_c = 0$  dB;

The configured maximum output power  $P_{\text{CMAX},f,c,\text{NR}}(q)$  in physical channel  $q$  for the configured NR carrier shall be set within the bounds:

$$P_{\text{CMAX\_L},f,c,\text{NR}}(q) \leq P_{\text{CMAX},f,c,\text{NR}}(q) \leq P_{\text{CMAX\_H},f,c,\text{NR}}(q)$$

where  $P_{\text{CMAX\_L},f,c,\text{NR}}$  and  $P_{\text{CMAX\_H},f,c,\text{NR}}$  are the limits for a serving cell  $c$  as specified in clause 6.2.4 of TS 38.101-1 [2] modified as follows:

$$P_{\text{CMAX\_L},f,c,\text{NR}} = \text{MIN} \{ \text{MIN}(P_{\text{EMAX},c}, P_{\text{EMAX, EN-DC}}, P_{\text{NR}}) - \Delta T_{\text{C\_NR},c}, (P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}}), (P_{\text{PowerClass, NR}} - \Delta P_{\text{PowerClass, NR}}) - \text{MAX}(\text{MAX}(MPR_c, A\text{-}MPR_c) + \Delta T_{\text{IB},c} + \Delta T_{\text{C\_NR},c} + \Delta T_{\text{RxSRS}}, P\text{-}MPR_c) \}$$

$$P_{\text{CMAX\_H},f,c,\text{NR}} = \text{MIN} \{ P_{\text{EMAX},c}, P_{\text{EMAX, EN-DC}}, P_{\text{NR}}, P_{\text{PowerClass, EN-DC}}, P_{\text{PowerClass, NR}} - \Delta P_{\text{PowerClass, NR}} \}$$

where

- $P_{\text{EMAX, EN-DC}}$  is the value given by the field *p-maxUE-FR1* of the *RRCCONNECTIONRECONFIGURATION-v1530* IE as defined in TS 36.331 [8];
- $P_{\text{LTE}}$  signalled by RRC as *p-MaxEUTRA-r15* in TS 36.331 [8];
- $P_{\text{NR}}$  is the value given by the field *p-NR-FR1* of the *PhysicalCellGroupConfig* IE as defined in [9] and signalled by RRC;
- $\Delta T_{\text{C\_E-UTRA},c} = 1.5$  dB when NOTE 2 in Table 6.2.2-1 in TS 36.101 [4] applies for a serving cell  $c$ , otherwise  $\Delta T_{\text{C\_E-UTRA},c} = 0$  dB;
- $\Delta T_{\text{C\_NR},c} = 1.5$  dB when NOTE 3 in Table 6.2.1-1 in TS 38.101-1 [2] applies for a serving cell  $c$ , otherwise  $\Delta T_{\text{C\_NR},c} = 0$  dB;

- $\Delta T_{IB,c}$  specified in clause 6.2B.4.2.1 for EN-DC, the individual Power Class defined in table 6.2B.1.1 and any other additional power reductions parameters specified in clauses 6.2B.2 and 6.2B.3 for EN-DC are applicable to  $P_{CMAX\_E-UTRA,c}$  and  $P_{CMAX,f,c,NR}$  evaluations.
- $P_{PowerClass, EN-DC}$  is defined in clause 6.2B.1.1 for intra-band contiguous EN-DC;
- $P_{PowerClass,NR}$  is the nominal UE power of the power class that the UE supports for the NR band of the EN-DC combination as defined in clause 6.2.1 of 38.101-1 [2]; in case IE *powerClassNRPart-r16* as defined in TS 38.331 [9] is indicated,  $P_{PowerClass,NR}$  should use that value instead;
- $\Delta P_{PowerClass,NR}$  is 3 dB, 6 dB, or 0 dB according to clause 6.2.4 of TS 38.101-1 [2] for a UE that supports power class 2 or power class 1.5 in the NR band of the EN-DC combination as defined in clause 6.2.1 of TS 38.101-1 [2];
- $P_{PowerClass,E-UTRA}$  is the nominal UE power of the power class that the UE supports for the E-UTRA band of the EN-DC combination as defined in clause 6.2.2 of 36.101 [4];
- $\Delta P_{PowerClass,E-UTRA}$  is 3 dB or 0 dB according to clause 6.2.5 of TS 36.101 [4] for a UE that supports power class 2 in the E-UTRA band of the EN-DC combination as defined in clause 6.2.2 of TS 36.101 [4];
- $\Delta P_{PowerClass,EN-DC}$  is 3 dB for a power class 2 capable EN-DC UE when LTE UL/DL configuration is 0 or 6; or LTE UL/DL configuration is 1 and special subframe configuration is 0 or 5;  $\Delta P_{PowerClass,EN-DC} = 3$  dB when the IE *p-maxUE-FR1* as defined in TS 36.331 [4] is provided and set to the maximum output power of the default power class or lower;  $\Delta P_{PowerClass,EN-DC}$  is 6 dB for a power class 1.5 capable EN-DC UE when the LTE UL duty cycle is greater than  $\max(50\%, \maxUplinkDutyCycle-PC2-FR1)$ ;  $\Delta P_{PowerClass,EN-DC}$  is 3 dB for a power class 1.5 capable EN-DC UE when the LTE UL duty cycle is between  $\max(50\%, \maxUplinkDutyCycle-PC2-FR1)$  and  $\max(25\%, 0.5 * \maxUplinkDutyCycle-PC2-FR1)$ ; otherwise  $\Delta P_{PowerClass,EN-DC} = 0$  dB; The IE *maxUplinkDutyCycle-PC2-FR1* is defined in TS 38.331 [9].

and whenever an NS signalling other than NS\_01 is indicated within CG 2:

- for a UE indicating support of dynamicPowerSharing,  $A-MPR_c = A-MPR'_c$  with  $A-MPR'_c$  determined in accordance with clause 6.2B.3.1 and  $MPR_c = 0$  dB if transmission(s) in subframe  $p$  on CG 1 overlap in time with physical channel  $q$  on CG 2;
- for a UE indicating support of dynamicPowerSharing,  $A-MPR_c$  is determined in accordance with TS 38.101-1 [2] if transmission(s) in subframe  $p$  on CG 1 does not overlap in time with physical channel  $q$  on CG 2;
- for a UE not indicating support of dynamicPowerSharing, the  $A-MPR_c$  is determined in accordance with clause 6.2B.3.1 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $MPR_c = 0$  dB;

and whenever NS\_01 is indicated in CG 2.

- for a UE indicating support of dynamicPowerSharing,  $MPR_c = MPR'_c$  with  $MPR'_c$  determined in accordance with clause 6.2B.2.1 and  $A-MPR_c = 0$  dB if transmission(s) in subframe  $p$  on CG 1 overlap in time with physical channel  $q$  on CG 2;
- for a UE indicating support of dynamicPowerSharing,  $MPR_c$  is determined in accordance with TS 38.101-1 [2] if transmission(s) in subframe  $p$  on CG 1 does not overlap in time with physical channel  $q$  on CG 2;
- for a UE not indicating support of dynamicPowerSharing, the  $MPR_c$  is determined in accordance with clause 6.2B.2.1 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $A-MPR_c = 0$  dB;

If the transmissions from NR and E-UTRA do not overlap, then the complete clauses for configured transmitted power for E-UTRA and NR respectively from their own specifications apply with the modifications specified above. The lower value between  $P_{PowerClass, EN-DC}$  or  $P_{EMAX, EN-DC}$  shall not be exceeded at any time by UE.

If the EN-DC UE is not supporting dynamic power sharing, then the complete clauses for configured transmitted power for E-UTRA and NR respectively from their own specifications TS 36.101 [4] and TS 38.101-1 [2] respectively apply with the modifications specified above.

If the UE does not support dynamic power sharing,

$$P_{Total}^{EN-DC} = \text{MIN} \{ P_{EMAX, EN-DC}, P_{PowerClass, EN-DC} - \Delta P_{PowerClass, EN-DC} \} + 0.3 \text{ dB}$$

For UEs indicating support of dynamicPowerSharing in the *UE-MRDC-Capability* IE the UE can configure the total maximum transmission power  $P_{Total}^{EN-DC}$  within the range

$$P_{EN-DC,tot\_L} \leq P_{Total}^{EN-DC} \leq P_{EN-DC,tot\_H}$$

where

$$P_{EN-DC,tot\_L}(p,q) = \text{MIN}\{P_{PowerClass,EN-DC} - \Delta P_{PowerClass,EN-DC} - \text{MAX}\{MPR_{tot}, A-MPR_{tot}\}, P_{EMAX,EN-DC}\}$$

$$P_{EN-DC,tot\_H}(p,q) = \text{MIN}\{P_{PowerClass,EN-DC}, P_{EMAX,EN-DC}\}$$

for sub-frame  $p$  on CG 1 overlapping with physical channel  $q$  on CG 2 and with  $MPR_{tot}$  and  $A-MPR_{tot}$  in accordance with 6.2B.2.1 and clause 6.2B.3.1, respectively.

The measured total maximum output power  $P_{UMAX}$  over both CGs/RATs, measured over the transmission reference time duration is

$$P_{UMAX} = 10 \log_{10} [p_{UMAX,c,E-UTRA} + p_{UMAX,f,c,NR}],$$

where  $p_{UMAX,c,E-UTRA}$  and  $p_{UMAX,c,NR}$  denotes the measured output power of serving cell  $c$  for *E-UTRA* and *NR* respectively, expressed in linear scale.

For UEs indicating support of dynamicPowerSharing, the measured total configured maximum output power  $P_{UMAX}$  shall be within the following bounds:

$$P_{CMAX\_L} - T_{LOW}(P_{CMAX\_L}) \leq P_{UMAX} \leq P_{CMAX\_H} + T_{HIGH}(P_{CMAX\_H})$$

with the tolerances  $T_{LOW}(P_{CMAX\_L})$  and  $T_{HIGH}(P_{CMAX\_H})$  for applicable values of  $P_{CMAX\_L}$  and  $P_{CMAX\_H}$  specified in Table 6.2B.4.1.1-2.

When an UL subframe transmission  $p$  from E-UTRA overlap with a physical channel  $q$  from the NR, then for  $P_{UMAX}$  evaluation, the E-UTRA subframe  $p$  is taken as reference period  $T_{REF}$  and always considered as the reference measurement duration and the following rules are applicable.

$T_{REF}$  and  $T_{eval}$  are specified in Table 6.2B.4.1.1-1 when same or different subframes and physical channel durations are used in aggregated carriers. The lesser of  $P_{PowerClass,EN-DC}$  and  $P_{EMAX,EN-DC}$  shall not be exceeded by the UE during any evaluation period of time.

**Table 6.2B.4.1.1-1:  $P_{CMAX}$  evaluation window**

| transmission duration                                     | $T_{REF}$       | $T_{eval}$                                                    |
|-----------------------------------------------------------|-----------------|---------------------------------------------------------------|
| Different transmission duration in different RAT carriers | E-UTRA Subframe | $\text{Min}(T_{no\_hopping}, \text{Physical Channel Length})$ |

For each  $T_{REF}$ , the  $P_{CMAX\_H}$  is evaluated per  $T_{eval}$  and given by the maximum value over the transmission(s) within the  $T_{eval}$  as follows:

$$P_{CMAX\_H} = \text{MAX}\{P_{CMAX\_EN-DC\_H}(p,q), P_{CMAX\_EN-DC\_H}(p,q+1), \dots, P_{CMAX\_EN-DC\_H}(p,q+n)\}$$

where  $P_{CMAX\_EN-DC\_H}$  are the applicable upper limits for each overlapping scheduling unit pairs  $(p,q)$ ,  $(p,q+1)$ , up to  $(p,q+n)$  for each applicable  $T_{eval}$  duration, where  $q+n$  is the last NR UL physical channel overlapping with E-UTRA subframe  $p$ .

While  $P_{CMAX\_L}$  is computed as follows:

$$P_{CMAX\_L} = \text{MIN}\{P_{CMAX\_EN-DC\_L}(p,q), P_{CMAX\_EN-DC\_L}(p,q+1), \dots, P_{CMAX\_EN-DC\_L}(p,q+n)\}$$

where  $P_{CMAX\_EN-DC\_L}$  are the applicable lower limits for each overlapping scheduling unit pairs  $(p,q)$ ,  $(p,q+1)$ , up to  $(p,q+n)$  for each applicable  $T_{eval}$  duration, where  $q+n$  is the last NR UL physical channel overlapping with E-UTRA subframe  $p$ ,

With

$$P_{CMAX\_EN-DC\_H}(p,q) = \text{MIN}\{10 \log_{10} [p_{CMAX\_H\_E-UTRA,c}(p) + p_{CMAX\_H,f,c,NR}(q)], P_{EMAX,EN-DC}, P_{PowerClass,EN-DC}\}$$

And:

$$a = 10 \log_{10} [p_{\text{CMAX\_E-UTRA},c}(p) + p_{\text{CMAX},f,c,NR}(q)] > P_{\text{EN-DC,tot\_L}}$$

$$b = 10 \log_{10} [p_{\text{CMAX\_E-UTRA},c}(p) + p_{\text{CMAX},f,c,NR}(q) / X_{\text{scale}}] > P_{\text{EN-DC,tot\_L}}$$

If a= FALSE and the configured transmission power spectral density between the MCG and SCG differs by less than 6 dB

$$P_{\text{CMAX\_EN-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA},c}(p) + p_{\text{CMAX\_L},f,c,NR}(q)], P_{\text{EMAX, EN-DC}}, P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}} \}$$

ELSE If (a=TRUE) AND (b=FALSE) and the configured transmission power spectral density between the MCG and SCG differs by less than 6 dB

$$P_{\text{CMAX\_EN-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA},c}(p) + p_{\text{CMAX\_L},f,c,NR}(q) / X_{\text{scale}}], P_{\text{EMAX, EN-DC}}, P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}} \}$$

ELSE If b= TRUE or the transmission power after power scaling spectral density between the MCG and SCG differs by more than 6 dB

$$P_{\text{CMAX\_EN-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA},c}(p)], P_{\text{EMAX, EN-DC}}, P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}} \}$$

where

- $p_{\text{CMAX\_H\_E-UTRA},c}(p)$  is the E-UTRA higher limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_H},f,c,NR}(q)$  is the NR higher limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_L\_E-UTRA},c}(p)$  is the E-UTRA lower limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_L},f,c,NR}(q)$  is the NR lower limit of the maximum configured power expressed in linear scale;
- $P_{\text{PowerClass, EN-DC}}$  is defined in clause 6.2B.1.1 for intra-band EN-DC;
- $X_{\text{scale}}$  is the linear value of X dB which is configured by RRC and can only take values [0 , 6] dB
- $p_{\text{CMAX\_E-UTRA},c}(p)$  is the linear value of  $P_{\text{CMAX\_E-UTRA},c}(p)$ , the real configured max power for E-UTRA
- $p_{\text{CMAX},f,c,NR}(q)$  is the linear value of  $P_{\text{CMAX},f,c,NR}(q)$ , the real configured max power of NR

**Table 6.2B.4.1.1-2:  $P_{\text{CMAX}}$  tolerance for Dual Connectivity E-UTRA-NR**

| $P_{\text{CMAX}}(\text{dBm})$     | Tolerance<br>$T_{\text{LOW}}(P_{\text{CMAX\_L}})$ (dB) | Tolerance<br>$T_{\text{HIGH}}(P_{\text{CMAX\_H}})$ (dB) |
|-----------------------------------|--------------------------------------------------------|---------------------------------------------------------|
| $23 \leq P_{\text{CMAX}} \leq 33$ | 3.0                                                    | 2.0                                                     |
| $22 \leq P_{\text{CMAX}} < 23$    | 5.0                                                    | 2.0                                                     |
| $21 \leq P_{\text{CMAX}} < 22$    | 5.0                                                    | 3.0                                                     |
| $20 \leq P_{\text{CMAX}} < 21$    | 6.0                                                    | 4.0                                                     |
| $16 \leq P_{\text{CMAX}} < 20$    | 5.0                                                    |                                                         |
| $11 \leq P_{\text{CMAX}} < 16$    | 6.0                                                    |                                                         |
| $-40 \leq P_{\text{CMAX}} < 11$   | 7.0                                                    |                                                         |

If the UE supports dynamic power sharing, and when E-UTRA and NR transmissions overlap and the condition (If (a=TRUE) AND (b=FALSE)) is met, SCG shall be transmitted and the following supplementary minimum requirement apply for the measured SCG power,  $P_{\text{UMAX},f,c,NR}(q)$ , under nominal conditions and unless otherwise stated

$$10 \log(p_{\text{CMAX\_L},f,c,NR}(q) / X_{\text{scale}}) - T_{\text{LOW}}(10 \log(p_{\text{CMAX\_L},f,c,NR}(q) / X_{\text{scale}})) \leq P_{\text{UMAX},f,c,NR}(q) \leq 10 \log(p_{\text{CMAX\_H},f,c,NR}(q)) + T_{\text{HIGH}}(10 \log(p_{\text{CMAX\_H},f,c,NR}(q)))$$

with the tolerances  $T_{\text{LOW}}$  and  $T_{\text{HIGH}}$  for applicable values of  $P_{\text{CMAX}}$  specified in Table 6.2B.4.1.1-2.

If the UE supports dynamic power sharing, the measured maximum output power in subframe  $p$  on CG 1,  $p_{\text{UMAX},c,E-UTRA}$ , shall meet the requirements in clause 6.2.5 in TS 36.101 [4] with the limits  $P_{\text{CMAX\_L},c}$  and  $P_{\text{CMAX\_H},c}$  replaced by  $P_{\text{CMAX\_L\_E-UTRA},c}$  and  $P_{\text{CMAX\_H\_E-UTRA},c}$  as specified above, respectively.

If the configured transmission power spectral density between the MCG and SCG differs by more than 6 dB, then

$$P_{\text{UMAX},f,c,\text{NR}}(q) \leq 10\log(p_{\text{CMAX},H,f,c,\text{NR}}(q)) + T_{\text{HIGH}}(10\log(p_{\text{CMAX},H,f,c,\text{NR}}(q))).$$

#### 6.2B.4.1.2 Intra-band non-contiguous EN-DC

The following requirements apply for one component carrier per CG configured for synchronous DC. The CG(s) are indexed by  $j = 1$  for MCG and  $j = 2$  for SCG.

The configured maximum output power  $P_{\text{CMAX},E\text{-UTRA},c}(p)$  in sub-frame  $p$  for the configured E-UTRA uplink carrier shall be set in accordance with clause 6.2B.4.1.1 but where

- for a UE not indicating support of dynamicPowerSharing, the  $A\text{-MPR}_c$  determined in accordance with clause 6.2B.3.2 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $\text{MPR}_c = 0$  dB;

whenever NS\_01 is not indicated within CG 1 while

- for a UE not indicating support of dynamicPowerSharing, the  $\text{MPR}_c$  determined in accordance with clause 6.2B.2.2 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $A\text{-MPR}_c = 0$  dB;

whenever NS\_01 is indicated in CG 1.

The configured maximum output power  $P_{\text{CMAX},f,c,\text{NR}}(q)$  in physical channel  $q$  for the configured NR carrier shall be set in accordance with clause 6.2B.4.1.1 but where

- for a UE indicating support of dynamicPowerSharing,  $A\text{-MPR}_c = A\text{-MPR}'_c$  with  $A\text{-MPR}'_c$  determined in accordance with clause 6.2B.3.2 and  $\text{MPR}_c = 0$  dB if transmission(s) in subframe  $p$  on CG 1 overlap in time with physical channel  $q$  on CG 2;
- for a UE indicating support of dynamicPowerSharing,  $A\text{-MPR}_c$  is determined in accordance with TS 38.101-1 [2] if transmission(s) in subframe  $p$  on CG 1 does not overlap in time with physical channel  $q$  on CG 2;
- for a UE not indicating support of dynamicPowerSharing, the  $A\text{-MPR}_c$  is determined in accordance with clause 6.2B.3.2 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $\text{MPR}_c = 0$  dB;

whenever NS\_01 is not indicated in CG 2 while

- for a UE indicating support of dynamicPowerSharing,  $\text{MPR}_c = \text{MPR}'_c$  with  $\text{MPR}'_c$  determined in accordance with clause 6.2B.2.2 and  $A\text{-MPR}_c = 0$  dB if transmission(s) in subframe  $p$  on CG 1 overlap in time with physical channel  $q$  on CG 2;
- for a UE indicating support of dynamicPowerSharing,  $\text{MPR}_c$  is determined in accordance with TS 38.101-1 [2] if transmission(s) in subframe  $p$  on CG 1 does not overlap in time with physical channel  $q$  on CG 2;
- for a UE not indicating support of dynamicPowerSharing, the  $\text{MPR}_c$  is determined in accordance with clause 6.2B.2.2 with parameters applicable for UEs not indicating support of dynamicPowerSharing and  $A\text{-MPR}_c = 0$  dB;

whenever NS\_01 is indicated in CG 2.

For UEs indicating support of dynamicPowerSharing in the *UE-MRDC-Capability IE*, the UE can configure the total transmission power in accordance with clause 6.2B.4.1.1 but with  $P_{\text{powerclass,EN-DC}}$  the EN-DC power class of the intra-band non-contiguous band combination configured and  $A\text{-MPR}$  determined in accordance with clause 6.2B.3.2.

The total maximum output power  $P_{\text{UMAX}}$  over both CGs is measured in accordance with clause 6.2B.4.1.1 and shall be within the limits specified in clause 6.2B.4.1.1 but with parameters applicable for the non-contiguous band combination configured.

The maximum output power levels  $p_{\text{UMAX},c,E\text{-UTRA}}$  and  $p_{\text{UMAX},f,c,\text{NR}}$  for the CGs are measured in accordance with clause 6.2B.4.1.1 and shall be within the limits specified in clause 6.2B.4.1.1 but with parameters applicable for the non-contiguous band combination configured.

### 6.2B.4.1.3 Inter-band EN-DC within FR1

For inter-band dual connectivity with one uplink serving cell or more than one uplink serving cells configured for intra-band UL CA on the E-UTRA CG and one uplink serving cell on the NR CG or more than one uplink serving cells configured for intra-band UL CA, the UE is allowed to set its configured maximum output power  $P_{\text{CMAX},c(i),i}$  for serving cell  $c(i)$  of CG  $i$ ,  $i = 1, 2$ , and its total configured maximum transmission power for EN-DC operation,  $P_{\text{Total}}^{\text{EN-DC}} = 10 \log_{10}(\hat{P}_{\text{total}}^{\text{EN-DC}})$  with  $\hat{P}_{\text{total}}^{\text{EN-DC}}$  as specified in clause 7.6 of TS 38.213 [10]. For EN-DC with more than one uplink serving cells configured for intra-band UL CA on the E-UTRA CG, the  $P_{\text{CMAX}}$  applies to the entire E-UTRA CG. For EN-DC with more than one uplink serving cells configured for intra-band UL CA on the NR CG, the  $P_{\text{CMAX}}$  applies to the entire NR CG.

For a UE configured with EN-DC and serving cell frame structure type 1, if the UE is configured with *subframeAssignment-r15* for the serving cell and E-UTRA Pcell is FDD, the UE is not expected to be configured with more than one serving cells in the uplink.

The configured maximum output power  $P_{\text{CMAX\_E-UTRA},c}(p)$  in sub-frame  $p$  for the configured E-UTRA uplink carrier(s) shall be set within the bounds:

$$P_{\text{CMAX\_L\_E-UTRA},c}(p) \leq P_{\text{CMAX\_E-UTRA},c}(p) \leq P_{\text{CMAX\_H\_E-UTRA},c}(p)$$

where  $P_{\text{CMAX\_L\_E-UTRA},c}$  and  $P_{\text{CMAX\_H\_E-UTRA},c}$  are the limits for a serving cell  $c$  as specified in TS 36.101 [4] clause 6.2.5 modified by  $P_{\text{LTE}}$  as follows:

$$P_{\text{CMAX\_L\_E-UTRA},c} = \text{MIN} \{ P_{\text{EMAX, EN-DC}}, (P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}}), \text{MIN}(P_{\text{EMAX},c}, P_{\text{LTE}}) - \Delta t_{\text{C\_E-UTRA},c}, (P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}}) - \text{MAX}(M_{\text{PR}_c} + A - M_{\text{PR}_c} + \Delta T_{\text{IB},c} + \Delta t_{\text{C\_E-UTRA},c} + \Delta T_{\text{ProSe}}, P - M_{\text{PR}_c}) \}$$

$$P_{\text{CMAX\_H\_E-UTRA},c} = \text{MIN} \{ P_{\text{EMAX},c}, P_{\text{EMAX, EN-DC}}, (P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}}), P_{\text{LTE}}, P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}} \}$$

For EN-DC with more than one uplink serving cells configured for intra-band UL CA on the E-UTRA CG,  $P_{\text{CMAX\_L\_E-UTRA},c}$  and  $P_{\text{CMAX\_H\_E-UTRA},c}$  are the limits for the E-UTRA CG as specified in TS 36.101 [4] clause 6.2.5A modified by  $P_{\text{LTE}}$  as follows:

$$P_{\text{CMAX\_L\_E-UTRA},c} = \text{MIN} \{ 10 \log_{10} \sum p_{\text{EMAX},c} - \Delta T_{\text{C}}, (P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}}) - \text{MAX}(M_{\text{PR}} + A - M_{\text{PR}} + \Delta T_{\text{IB},c} + \Delta T_{\text{C}} + \Delta T_{\text{ProSe}}, P - M_{\text{PR}}), P_{\text{LTE}}, P_{\text{PowerClass, EN-DC}} \}$$

$$P_{\text{CMAX\_H\_E-UTRA},c} = \text{MIN} \{ 10 \log_{10} \sum p_{\text{EMAX},c}, P_{\text{PowerClass, E-UTRA}}, P_{\text{LTE}}, P_{\text{PowerClass, EN-DC}} \}$$

The configured maximum output power  $P_{\text{CMAX},f,c,\text{NR}}(q)$  in physical-channel  $q$  for the configured NR carrier shall be set within the bounds:

$$P_{\text{CMAX\_L},f,c,\text{NR}}(q) \leq P_{\text{CMAX},f,c,\text{NR}}(q) \leq P_{\text{CMAX\_H},f,c,\text{NR}}(q)$$

where  $P_{\text{CMAX\_L},f,c,\text{NR}}$  and  $P_{\text{CMAX\_H},f,c,\text{NR}}$  are the limits for a serving cell  $c$  as specified in clause 6.2.4 of TS 38.101-1 [2] modified as follows:

$$P_{\text{CMAX\_L},f,c,\text{NR}} = \text{MIN} \{ P_{\text{EMAX, EN-DC}}, (P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}}), \text{MIN}(P_{\text{EMAX},c}, P_{\text{NR}}) - \Delta T_{\text{C\_NR},c}, (P_{\text{PowerClass, NR}} - \Delta P_{\text{PowerClass, NR}}) - \text{MAX}(\text{MAX}(M_{\text{PR}_c}, A - M_{\text{PR}_c}) + \Delta T_{\text{IB},c} + \Delta T_{\text{C\_NR},c} + \Delta T_{\text{RxSRS}}, P - M_{\text{PR}_c}) \}$$

$$P_{\text{CMAX\_H},f,c,\text{NR}} = \text{MIN} \{ P_{\text{EMAX},c}, P_{\text{EMAX, EN-DC}}, (P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}}), P_{\text{NR}}, P_{\text{PowerClass, NR}} - \Delta P_{\text{PowerClass, NR}} \}$$

For EN-DC with more than one uplink serving cells configured for intra-band UL CA on the NR CG,  $P_{\text{CMAX\_L},f,c,\text{NR}}$  and  $P_{\text{CMAX\_H},f,c,\text{NR}}$  are the limits for the NR CG as specified in [2] subclause 6.2A.4 modified by  $P_{\text{NR}}$  as follows:

$$P_{\text{CMAX\_L},f,c,\text{NR}} = \text{MIN} \{ 10 \log_{10} \sum p_{\text{EMAX},c} - \Delta T_{\text{C}}, P_{\text{EMAX,CA}}, P_{\text{PowerClass, NR}} - \text{MAX}(M_{\text{PR}} + A - M_{\text{PR}} + \Delta T_{\text{IB},c} + \Delta T_{\text{NR},c} + \Delta T_{\text{RxSRS}}, P - M_{\text{PR}}), P_{\text{NR}}, P_{\text{PowerClass, EN-DC}} \}$$

$$P_{\text{CMAX\_H},f,c,\text{NR}} = \text{MIN} \{ 10 \log_{10} \sum p_{\text{EMAX},c}, P_{\text{EMAX,CA}}, P_{\text{PowerClass, NR}}, P_{\text{NR}}, P_{\text{PowerClass, EN-DC}} \}$$

where

- $P_{\text{EMAX,EN-DC}}$  is the value given by the field *p-maxUE-FR1* of the *RRCCONNECTIONRECONFIGURATION-v1530* IE as defined in TS 36.331 [8];

- If more than one E-UTRA uplink serving cell is configured as intra-band UL CA in the E-UTRA CG,  $P_{\text{PowerClass}}$  refers to the maximum output power of the E-UTRA intra-band CA power class given in Table 6.2.2A-1 of TS 36.101 [4],
- If more than one NR uplink serving cell is configured as intra-band UL CA in the NR CG,  $P_{\text{PowerClass}}$  refers to the maximum output power of the NR intra-band CA power class given in sub clause 6.2A.1 of [2],
- $P_{\text{LTE}}$  is the value given by the field *p-maxEUTRA-r15* of the *RRCConnectionReconfiguration-v1510* IE as defined in TS 36.331 [8];
- If more than one E-UTRA uplink serving cell is configured as intra-band UL CA in the E-UTRA CG,  $\text{MPR}_c = \text{MPR}$  and  $\text{A-MPR}_c = \text{A-MPR}$  with MPR and A-MPR specified in clause 6.2.3A and clause 6.2.4A of TS 36.101 [4] respectively. There is one power management term for the UE, denoted P-MPR, and  $\text{P-MPR}_c = \text{P-MPR}$ .  $P_{\text{CMAX\_E-UTRA},c}$  is calculated under the assumption that the transmit power is increased by the same amount in dB on all component carriers within the E-UTRA CG.
- If more than one NR uplink serving cell is configured as intra-band UL CA in the NR CG,  $\text{MPR}_c$  and  $\text{A-MPR}_c$  are determined by subclause 6.2.2 of [2]. There is one power management term for the UE, denoted P-MPR, and  $\text{P-MPR}_c = \text{P-MPR}$ .
- $P_{\text{NR}}$  is the value given by the field *p-NR-FR1* of the *PhysicalCellGroupConfig* IE as defined in TS 38.331 [9];
- $\Delta t_{\text{c\_E-UTRA},c} = 1.5$  dB when NOTE 2 in Table 6.2.2-1 in TS 36.101 [4] applies for a serving cell *c*, otherwise  $\Delta t_{\text{c\_E-UTRA},c} = 0$  dB;
- $\Delta T_{\text{c\_NR},c} = 1.5$  dB when NOTE 3 in Table 6.2.1-1 in TS 38.101-1 [2] applies for a serving cell *c*, otherwise  $\Delta T_{\text{c\_NR},c} = 0$  dB;  $\Delta T_{\text{c\_NR},c}$  is the highest value  $\Delta T_{\text{c\_NR},c}$  among all serving cells *c* if more than one NR uplink serving cell is configured as intra-band UL CA in the NR CG;
- $P_{\text{PowerClass, EN-DC}}$  is defined in clause 6.2B.1.3 for inter-band EN-DC;
- $\Delta P_{\text{PowerClass, EN-DC}} = 3$  dB for a power class 2 capable EN-DC UE when requirements of default power class had been applied as specified in sub-clause 6.2B.1; otherwise  $\Delta P_{\text{PowerClass, EN-DC}} = 0$  dB;
- $P_{\text{PowerClass, NR}}$  is the nominal UE power of the power class that the UE supports for the NR band of the EN-DC combination as defined in clause 6.2.1 of 38.101-1 [2]; in case IE *powerClassNRPart-r16* as defined in TS 38.331 [9] is indicated,  $P_{\text{PowerClass, NR}}$  should use that value instead;
- $\Delta P_{\text{PowerClass, NR}}$  is 3 dB or 0 dB according to clause 6.2.4 of TS 38.101-1 [2] for a UE that supports power class 2 in the NR band of the EN-DC combination as defined in clause 6.2.1 of TS 38.101-1 [2];
- $P_{\text{PowerClass, E-UTRA}}$  is the nominal UE power of the power class that the UE supports for the E-UTRA band of the EN-DC combination as defined in clause 6.2.2 of 36.101 [4];
- $\Delta P_{\text{PowerClass, E-UTRA}}$  is 3 dB or 0 dB according to clause 6.2.5 of TS 36.101 [4] for a UE that supports power class 2 in the E-UTRA band of the EN-DC combination as defined in clause 6.2.2 of TS 36.101 [4];
- $\Delta T_{\text{IB},c}$  specified in clause 6.2B.4.2.3 for EN-DC, the individual Power Class defined in table 6.2B.1.3 and any other additional power reductions parameters specified in clauses 6.2B.2 and 6.2B.3 for EN-DC are applicable to  $P_{\text{CMAX\_E-UTRA},c}$  and  $P_{\text{CMAX},f,c,\text{NR}}$  evaluations.
- $\Delta T_{\text{RxsRS}}$  is the highest value among all serving cells *c*.

If the transmissions from NR and E-UTRA do not overlap, then the complete clauses for configured transmitted power for E-UTRA and NR respectively from their own specifications apply with the modifications specified above. The lower value between  $P_{\text{PowerClass, EN-DC}}$  or  $P_{\text{EMAX, EN-DC}}$  shall not be exceeded at any time by UE.

$P_{\text{Total}}^{\text{EN-DC}} = 10\log_{10}(\hat{P}_{\text{total}}^{\text{EN-DC}})$  with  $P_{\text{Total}}^{\text{EN-DC}}$  the configured maximum transmission power for EN-DC operation as specified in clause 7.6 of TS 38.213 [10].

The total configured maximum transmission power for both synchronous and non-synchronous operation is

$$P_{\text{Total}}^{\text{EN-DC}} = \text{MIN} \{ P_{\text{EMAX, EN-DC}}, P_{\text{PowerClass, EN-DC}} - \Delta P_{\text{PowerClass, EN-DC}} \}$$

If the UE does not support dynamic power sharing,

$$P_{Total}^{EN-DC} = \text{MIN} \{ P_{EMAX, EN-DC}, P_{PowerClass, EN-DC} - \Delta P_{PowerClass, EN-DC} \} + 0.3 \text{ dB}$$

If the EN-DC UE does not support dynamic power sharing, then the complete clauses for configured transmitted power for E-UTRA and NR respectively from their own specifications TS 36.101 [4] and TS 38.101-1 [2] respectively apply with the modifications specified above and  $P_{Total}^{EN-DC}$  applies.

When a UE supporting dynamic sharing is configured for overlapping E-UTRA uplink and NR uplink transmissions, the UE can set its configured maximum output power  $P_{CMAX\_E-UTRA,c}$  and  $P_{CMAX,f,c,NR}$  for the configured E-UTRA and NR uplink carriers, respectively, and its configured maximum transmission power for EN-DC operation,  $\hat{P}_{Total}^{EN-DC}$ , as specified above.

The measured total maximum output power  $P_{UMAX}$  over both CGs/RATs, measured over the transmission reference time duration is

$$P_{UMAX} = 10 \log_{10} [p_{UMAX,c,E-UTRA} + p_{UMAX,c,NR}],$$

where  $p_{UMAX,c,E-UTRA}$  and  $p_{UMAX,c,NR}$  denotes the measured output power of serving cell  $c$  for E-UTRA and NR respectively, expressed in linear scale.

The measured total configured maximum output power  $P_{UMAX}$  shall be within the following bounds:

$$P_{CMAX\_L} - T_{LOW}(P_{CMAX\_L}) \leq P_{UMAX} \leq P_{CMAX\_H} + T_{HIGH}(P_{CMAX\_H})$$

with the tolerances  $T_{LOW}(P_{CMAX\_H})$  and  $T_{HIGH}(P_{CMAX\_H})$  for applicable values of  $P_{CMAX}$  specified in Table 6.2B.4.1.3-2.

When an UL subframe transmission  $p$  from E-UTRA overlap with a physical-channel  $q$  from the NR, then for  $P_{UMAX}$  evaluation, the E-UTRA subframe  $p$  is taken as reference period  $T_{REF}$  and always considered as the reference measurement duration and the following rules are applicable.

$T_{REF}$  and  $T_{eval}$  are specified in Table 6.2B.4.1.3-1 when same or different subframe and physical-channel durations are used in aggregated carriers. The lesser of  $P_{PowerClass, EN-DC}$  and  $P_{EMAX, EN-DC}$  shall not be exceeded by the UE during any evaluation period of time.

**Table 6.2B.4.1.3-1:  $P_{CMAX}$  evaluation window**

| transmission duration                                     | $T_{REF}$                                         | $T_{eval}$                                                                                  |
|-----------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------|
| Different transmission duration in different RAT carriers | E-UTRA Subframe on all aggregated cells of E-UTRA | $\text{Min}(T_{no\_hopping}, \text{Physical Channel Length})$ on all aggregated cells of NR |

For each  $T_{REF}$ , the  $P_{CMAX\_H}$  is evaluated per  $T_{eval}$  and given by the maximum value over the transmission(s) within the  $T_{eval}$  as follows:

$$P_{CMAX\_H} = \text{MAX} \{ P_{CMAX\_EN-DC\_H}(p,q), P_{CMAX\_EN-DC\_H}(p,q+1), \dots, P_{CMAX\_EN-DC\_H}(p,q+n) \}$$

where  $P_{CMAX\_EN-DC\_H}$  are the applicable upper limits for each overlapping scheduling unit pairs  $(p,q)$ ,  $(p, q+1)$ , up to  $(p, q+n)$  for each applicable  $T_{eval}$  duration, where  $q+n$  is the last NR UL physical-channel overlapping with E-UTRA subframe  $p$ .

While  $P_{CMAX\_L}$  is computed as follows:

$$P_{CMAX\_L} = \text{MIN} \{ P_{CMAX\_EN-DC\_L}(p,q), P_{CMAX\_EN-DC\_L}(p,q+1), \dots, P_{CMAX\_EN-DC\_L}(p,q+n) \}$$

where  $P_{CMAX\_EN-DC\_L}$  are the applicable lower limits for each overlapping scheduling unit pairs  $(p,q)$ ,  $(p, q+1)$ , up to  $(p, q+n)$  for each applicable  $T_{eval}$  duration, where  $q+n$  is the last NR UL physical-channel overlapping with E-UTRA subframe  $p$ ,

With

$$P_{CMAX\_EN-DC\_H}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{CMAX\_H\_E-UTRA,c}(p) + p_{CMAX\_H,f,c,NR}(q)], P_{EMAX, EN-DC}, P_{PowerClass, EN-DC} \}$$

And:

$$a = 10 \log_{10} [p_{CMAX\_E-UTRA,c}(p) + p_{CMAX,f,c,NR}(q)] > P_{Total}^{EN-DC}$$

$$b = 10 \log_{10} [p_{CMAX\_E-UTRA,c}(p) + p_{CMAX,f,c,NR}(q) / X\_scale] > P_{Total}^{EN-DC}$$

If a= FALSE

$$P_{\text{CMAX\_EN-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA,c}}(p) + p_{\text{CMAX\_L,f,c,NR}}(q)], P_{\text{EMAX, EN-DC}}, P_{\text{PowerClass, EN-DC}} \}$$

ELSE If (a=TRUE) AND (b=FALSE)

$$P_{\text{CMAX\_EN-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA,c}}(p) + p_{\text{CMAX\_L,f,c,NR}}(q) / X_{\text{scale}} ], P_{\text{EMAX, EN-DC}}, P_{\text{PowerClass, EN-DC}} \}$$

ELSE If b= TRUE

$$P_{\text{CMAX\_EN-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA,c}}(p) ], P_{\text{EMAX, EN-DC}}, P_{\text{PowerClass, EN-DC}} \}$$

where

- $p_{\text{CMAX\_H\_E-UTRA,c}}(p)$  is the E-UTRA higher limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_L,f,c,NR}}(q)$  is the NR higher limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_L\_E-UTRA,c}}(p)$  is the E-UTRA lower limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_L,f,c,NR}}(q)$  is the NR lower limit of the maximum configured power expressed in linear scale;
- $P_{\text{PowerClass, EN-DC}}$  is defined in clause 6.2B.1.3-1 for inter-band EN-DC;
- $X_{\text{scale}}$  is the linear value of X dB which is configured by RRC and can only take values [0 , 6]
- $p_{\text{CMAX\_E-UTRA,c}}(p)$  is the linear value of  $P_{\text{CMAX\_E-UTRA,c}}(p)$ , the configured max power for E-UTRA. If more than one E-UTRA uplink serving cell is configured as intra-band UL CA in the E-UTRA CG,  $P_{\text{CMAX\_E-UTRA,c}}(p)$  will be replaced by  $P_{\text{CMAX}}(p)$  which is the configured maximum power for the entire E-UTRA CG.
- $p_{\text{CMAX,f,c,NR}}(q)$  is the linear value of  $P_{\text{CMAX,f,c,NR}}(q)$ , the configured max power of NR, If more than one NR uplink serving cell is configured as intra-band UL CA in the NR CG,  $P_{\text{CMAX\_NR,c}}(q)$  will be replaced by  $P_{\text{CMAX}}(q)$  which is the configured maximum power for the entire NR CG.

**Table 6.2B.4.1.3-2:  $P_{\text{CMAX}}$  tolerance for Dual Connectivity E-UTRA-NR**

| <b>P<sub>CMAX</sub>(dBm)</b>                                                                                                                      | <b>Tolerance<br/>T<sub>LOW</sub> (P<sub>CMAX_L</sub>) (dB)</b> | <b>Tolerance<br/>T<sub>HIGH</sub> (P<sub>CMAX_H</sub>) (dB)</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-----------------------------------------------------------------|
| 23 ≤ P <sub>CMAX</sub> ≤ 33                                                                                                                       | 3.0                                                            | 2.0                                                             |
| 22 ≤ P <sub>CMAX</sub> < 23                                                                                                                       | 5.0                                                            | 2.0                                                             |
| 21 ≤ P <sub>CMAX</sub> < 22                                                                                                                       | 5.0                                                            | 3.0                                                             |
| 20 ≤ P <sub>CMAX</sub> < 21                                                                                                                       | 6.0                                                            | 4.0                                                             |
| 16 ≤ P <sub>CMAX</sub> < 20                                                                                                                       | 5.0                                                            |                                                                 |
| 11 ≤ P <sub>CMAX</sub> < 16                                                                                                                       | 6.0                                                            |                                                                 |
| -40 ≤ P <sub>CMAX</sub> < 11                                                                                                                      | 7.0                                                            |                                                                 |
| NOTE 1: For UEs not indicating support of dynamic power sharing, the upper tolerance T <sub>high</sub> shall be reduced by 0.3 dB for P ≥ 20 dBm. |                                                                |                                                                 |

When E-UTRA and NR transmissions overlap and the condition (If (a=TRUE) AND (b=FALSE)) is met, SCG shall be transmitted and the following supplementary minimum requirement apply for the measured SCG power,  $P_{\text{UMAX,f,c,NR}}(q)$ , under nominal conditions.

$$10\log(p_{\text{CMAX\_L,f,c,NR}}(q)/X_{\text{scale}}) - T_{\text{LOW}}(10\log(p_{\text{CMAX\_L,f,c,NR}}(q)/X_{\text{scale}})) \leq P_{\text{UMAX,f,c,NR}}(q) \leq 10\log(p_{\text{CMAX\_H,f,c,NR}}(q)) + T_{\text{HIGH}}(10\log(p_{\text{CMAX\_H,f,c,NR}}(q))).$$

with the tolerances  $T_{\text{LOW}}$  and  $T_{\text{HIGH}}$  for applicable values of  $P_{\text{CMAX}}$  specified in Table 6.2B.4.1.3-2.

#### 6.2B.4.1.3a Inter-band NE-DC within FR1

For inter-band dual connectivity with one uplink serving cell per CG on E-UTRA and NR respectively, the UE is allowed to set its configured maximum output power  $P_{\text{CMAX,c}(i)}$  for serving cell  $c(i)$  of CG  $i$ ,  $i = 1, 2$ , and its total configured maximum transmission power for NE-DC operation,  $P_{\text{Total}}^{\text{NE-DC}} = 10\log_{10}(\hat{P}_{\text{total}}^{\text{NE-DC}})$  with  $\hat{P}_{\text{total}}^{\text{NE-DC}}$  as specified in clause 7.6.1A of TS 38.213 [10].

The configured maximum output power  $P_{\text{CMAX\_E-UTRA},c}(p)$  in sub-frame  $p$  for the configured E-UTRA uplink carrier shall be set within the bounds:

$$P_{\text{CMAX\_L\_E-UTRA},c}(p) \leq P_{\text{CMAX\_E-UTRA},c}(p) \leq P_{\text{CMAX\_H\_E-UTRA},c}(p)$$

where  $P_{\text{CMAX\_L\_E-UTRA},c}$  and  $P_{\text{CMAX\_H\_E-UTRA},c}$  are the limits for a serving cell  $c$  as specified in TS 36.101 [4] clause 6.2.5 modified by  $P_{\text{LTE}}$  as follows:

$$P_{\text{CMAX\_L\_E-UTRA},c} = \text{MIN} \{ P_{\text{EMAX, NE-DC}}, (P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}}), \text{MIN}(P_{\text{EMAX},c}, P_{\text{LTE}}) - \Delta t_{\text{C\_E-UTRA},c}, (P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}}) - \text{MAX}(M_{\text{PR},c} + A - M_{\text{PR},c} + \Delta T_{\text{IB},c} + \Delta T_{\text{C\_E-UTRA},c} + \Delta T_{\text{ProSe}}, P - M_{\text{PR},c}) \}$$

$$P_{\text{CMAX\_H\_E-UTRA},c} = \text{MIN} \{ P_{\text{EMAX},c}, P_{\text{EMAX, NE-DC}}, (P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}}), P_{\text{LTE}}, P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}} \}$$

with exception that

- if no symbol of slot  $i_1$  of the NR that is indicated as uplink or flexible by *TDD-UL-DL-ConfigurationCommon* or *TDD-UL-DL-ConfigDedicated* overlaps with subframe  $i_2$  of the E-UTRA; or
- if NR slot(s) that is indicated as downlink by *TDD-UL-DL-ConfigurationCommon* or *TDD-UL-DL-ConfigDedicated* does not overlap with subframe  $i_2$  of the E-UTRA; then

$$P_{\text{CMAX\_L\_E-UTRA},c} = \text{MIN} \{ P_{\text{EMAX, NE-DC}}, (P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}}), P_{\text{EMAX},c} - \Delta t_{\text{C\_E-UTRA},c}, (P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}}) - \text{MAX}(M_{\text{PR},c} + A - M_{\text{PR},c} + \Delta T_{\text{IB},c} + \Delta T_{\text{C\_E-UTRA},c} + \Delta T_{\text{ProSe}}, P - M_{\text{PR},c}) \}$$

$$P_{\text{CMAX\_H\_E-UTRA},c} = \text{MIN} \{ P_{\text{EMAX},c}, P_{\text{EMAX, NE-DC}}, (P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}}), P_{\text{PowerClass, E-UTRA}} - \Delta P_{\text{PowerClass, E-UTRA}} \}$$

The configured maximum output power  $P_{\text{CMAX},f,c,\text{NR}}(q)$  in physical-channel  $q$  for the configured NR carrier shall be set within the bounds:

$$P_{\text{CMAX\_L},f,c,\text{NR}}(q) \leq P_{\text{CMAX},f,c,\text{NR}}(q) \leq P_{\text{CMAX\_H},f,c,\text{NR}}(q)$$

where  $P_{\text{CMAX\_L},f,c,\text{NR}}$  and  $P_{\text{CMAX\_H},f,c,\text{NR}}$  are the limits for a serving cell  $c$  as specified in clause 6.2.4 of TS 38.101-1 [2] modified by  $P_{\text{NR}}$  as follows:

$$P_{\text{CMAX\_L},f,c,\text{NR}} = \text{MIN} \{ P_{\text{EMAX, NE-DC}}, (P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}}), \text{MIN}(P_{\text{EMAX},c}, P_{\text{NR}}) - \Delta T_{\text{C\_NR},c}, (P_{\text{PowerClass, NR}} - \Delta P_{\text{PowerClass, NR}}) - \text{MAX}(M_{\text{PR},c} + A - M_{\text{PR},c} + \Delta T_{\text{IB},c} + \Delta T_{\text{C\_NR},c} + \Delta T_{\text{RxSRS}}, P - M_{\text{PR},c}) \}$$

$$P_{\text{CMAX\_H},f,c,\text{NR}} = \text{MIN} \{ P_{\text{EMAX},c}, P_{\text{EMAX, NE-DC}}, (P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}}), P_{\text{NR}}, P_{\text{PowerClass, NR}} - \Delta P_{\text{PowerClass, NR}} \}$$

- $P_{\text{EMAX, NE-DC}}$  signalled by RRC as  $p\text{-UE-FR1}$  in TS 38.331 [9];
- $P_{\text{LTE}}$  signalled by RRC as  $p\text{-MaxEUTRA}$  in TS 36.331 [8];
- $P_{\text{NR}}$  signalled by RRC as  $p\text{-NR-FR1}$  defined in TS 38.331 [9];

$-\Delta T_{\text{C\_E-UTRA},c} = 1.5\text{dB}$  when NOTE 2 in Table 6.2.2-1 in TS 36.101 [4] applies for a serving cell  $c$ , otherwise  $\Delta T_{\text{C\_E-UTRA},c} = 0\text{dB}$ ;

- $\Delta T_{\text{C\_NR},c} = 1.5\text{dB}$  when NOTE 3 in Table 6.2.1-1 in TS 38.101-1 [2] applies for a serving cell  $c$ , otherwise  $\Delta T_{\text{C\_NR},c} = 0\text{dB}$ ;
- $\Delta T_{\text{IB},c}$  specified in clause 6.2B.4.2.3 for NE-DC, the individual Power Class defined in table 6.2B.1.3a and any other additional power reductions parameters specified in clauses 6.2B.2.3a for NE-DC are applicable to  $P_{\text{CMAX\_E-UTRA},c}$  and  $P_{\text{CMAX},f,c,\text{NR}}$  evaluations.
- $P_{\text{PowerClass, NE-DC}}$  is defined in clause 6.2B.1.3a for inter-band NE-DC;
- $P_{\text{PowerClass, NR}}$  is the nominal UE power of the power class that the UE supports for the NR band of the EN-DC combination as defined in clause 6.2.1 of 38.101-1 [2]; in case IE *powerClassNRPart-r16* as defined in TS 38.331 [9] is indicated,  $P_{\text{PowerClass, NR}}$  should use that value instead.
- $P_{\text{PowerClass, E-UTRA}}$  is the nominal UE power of the power class that the UE supports for the E-UTRA band of the NE-DC combination as defined in clause 6.2.2 of 36.101 [4];

- $\Delta P_{\text{PowerClass,NE-DC}} = 3 \text{ dB}$  for a power class 2 capable NE-DC UE when requirements of default power class had been applied as specified in sub-clause 6.2B.1; otherwise  $\Delta P_{\text{PowerClass,NE-DC}} = 0 \text{ dB}$ ;

If the transmissions from NR and E-UTRA do not overlap, then the complete clauses for configured transmitted power for E-UTRA and NR respectively from their own specifications apply with the modifications specified above. The lower value between  $P_{\text{PowerClass, NE-DC}}$  or  $P_{\text{EMAX, NE-DC}}$  shall not be exceeded at any time by UE.

$P_{\text{Total}}^{\text{NE-DC}} = 10 \log_{10}(\hat{P}_{\text{total}}^{\text{NE-DC}})$  with  $P_{\text{Total}}^{\text{NE-DC}}$  the configured maximum transmission power for NE-DC operation as specified in clause 7.6 of TS 38.213 [10].

The total configured maximum transmission power for both synchronous and non-synchronous operation is

$$P_{\text{Total}}^{\text{NE-DC}} = \text{MIN} \{ P_{\text{EMAX, NE-DC}}, P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}} \}$$

If the UE does not support dynamic power sharing,

$$P_{\text{Total}}^{\text{NE-DC}} = \text{MIN} \{ P_{\text{EMAX, NE-DC}}, P_{\text{PowerClass, NE-DC}} - \Delta P_{\text{PowerClass, NE-DC}} \} + 0.3 \text{ dB}$$

If the NE-DC UE does not support dynamic power sharing, then the complete clauses for configured transmitted power for E-UTRA and NR respectively from their own specifications TS 36.101 [4] and TS 38.101-1 [2] respectively apply with the modifications specified above and  $P_{\text{Total}}^{\text{NE-DC}}$  applies.

When a UE supporting dynamic sharing is configured for overlapping E-UTRA uplink and NR uplink transmissions, the UE can set its configured maximum output power  $P_{\text{CMAX\_E-UTRA,c}}$  and  $P_{\text{CMAX,f,c,NR}}$  for the configured E-UTRA and NR uplink carriers, respectively, and its configured maximum transmission power for NE-DC operation,  $\hat{P}_{\text{Total}}^{\text{NE-DC}}$ , as specified above.

The measured total maximum output power  $P_{\text{UMAX}}$  over both CGs/RATs, measured over the transmission reference time duration is

$$P_{\text{UMAX}} = 10 \log_{10} [p_{\text{UMAX,c,E-UTRA}} + p_{\text{UMAX,c,NR}}],$$

where  $p_{\text{UMAX,c,E-UTRA}}$  and  $p_{\text{UMAX,c,NR}}$  denotes the measured output power of serving cell  $c$  for E-UTRA and NR respectively, expressed in linear scale.

The measured total configured maximum output power  $P_{\text{UMAX}}$  shall be within the following bounds:

$$P_{\text{CMAX\_L}} - T_{\text{LOW}}(P_{\text{CMAX\_L}}) \leq P_{\text{UMAX}} \leq P_{\text{CMAX\_H}} + T_{\text{HIGH}}(P_{\text{CMAX\_H}})$$

with the tolerances  $T_{\text{LOW}}(P_{\text{CMAX\_L}})$  and  $T_{\text{HIGH}}(P_{\text{CMAX\_H}})$  for applicable values of  $P_{\text{CMAX}}$  specified in Table 6.2B.4.1.3a-2.

When an UL subframe transmission  $p$  from E-UTRA overlap with a physical-channel  $q$  from the NR, then for  $P_{\text{UMAX}}$  evaluation, the E-UTRA subframe  $p$  is taken as reference period  $T_{\text{REF}}$  and always considered as the reference measurement duration and the following rules are applicable.

$T_{\text{REF}}$  and  $T_{\text{eval}}$  are specified in Table 6.2B.4.1.3a-1 when same or different subframe and physical-channel durations are used in aggregated carriers.  $P_{\text{PowerClass,NE-DC}}$  shall not be exceeded by the UE during any evaluation period of time.

**Table 6.2B.4.1.3a-1:  $P_{\text{CMAX}}$  evaluation window**

| transmission duration                                     | $T_{\text{REF}}$ | $T_{\text{eval}}$                                                    |
|-----------------------------------------------------------|------------------|----------------------------------------------------------------------|
| Different transmission duration in different RAT carriers | LTE Subframe     | $\text{Min}(T_{\text{no\_hopping}}, \text{Physical Channel Length})$ |

For each  $T_{\text{REF}}$ , the  $P_{\text{CMAX\_H}}$  is evaluated per  $T_{\text{eval}}$  and given by the maximum value over the transmission(s) within the  $T_{\text{eval}}$  as follows:

$$P_{\text{CMAX\_H}} = \text{MAX} \{ P_{\text{CMAX\_NE-DC\_H}}(p, q), P_{\text{CMAX\_NE-DC\_H}}(p, q+1), \dots, P_{\text{CMAX\_NE-DC\_H}}(p, q+n) \}$$

where  $P_{\text{CMAX\_NE-DC\_H}}$  are the applicable upper limits for each overlapping scheduling unit pairs  $(p, q)$ ,  $(p, q+1)$ , up to  $(p, q+n)$  for each applicable  $T_{\text{eval}}$  duration, where  $q+n$  is the last NR UL physical-channel overlapping with LTE subframe  $p$ .

While  $P_{\text{CMAX\_L}}$  is computed as follows:

$$P_{\text{CMAX\_L}} = \text{MIN} \{ P_{\text{CMAX\_NE-DC\_L}}(p,q), P_{\text{CMAX\_NE-DC\_L}}(p,q+1), \dots, P_{\text{CMAX\_NE-DC\_L}}(p,q+n) \}$$

where  $P_{\text{CMAX\_NE-DC\_L}}$  are the applicable lower limits for each overlapping scheduling unit pairs  $(p,q)$ ,  $(p, q+1)$ , up to  $(p, q+n)$  for each applicable  $T_{\text{eval}}$  duration, where  $q+n$  is the last NR UL physical-channel overlapping with LTE subframe  $p$ ,

With

$$P_{\text{CMAX\_NE-DC\_H}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_H\_E-UTRA,c}}(p) + p_{\text{CMAX\_H,f,c,NR}}(q)], P_{\text{EMAX, NE-DC}}, P_{\text{PowerClass, NE-DC}} \}$$

And:

$$a = 10 \log_{10} [p_{\text{CMAX\_E-UTRA,c}}(p) + p_{\text{CMAX,f,c,NR}}(q)] > P_{\text{Total}}^{\text{NE-DC}}$$

If  $a = \text{TRUE}$

$$P_{\text{CMAX\_NE-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA,c}}(p)], P_{\text{EMAX, NE-DC}}, P_{\text{PowerClass, NE-DC}} \}$$

Else

$$P_{\text{CMAX\_NE-DC\_L}}(p,q) = \text{MIN} \{ 10 \log_{10} [p_{\text{CMAX\_L\_E-UTRA,c}}(p) + p_{\text{CMAX\_L,f,c,NR}}(q)], P_{\text{EMAX, NE-DC}}, P_{\text{PowerClass, NE-DC}} \}$$

where

- $p_{\text{CMAX\_H\_E-UTRA,c}}(p)$  is the E-UTRA higher limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_H,f,c,NR}}(q)$  is the NR higher limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_L\_E-UTRA,c}}(p)$  is the E-UTRA lower limit of the maximum configured power expressed in linear scale;
- $p_{\text{CMAX\_L,f,c,NR}}(q)$  is the NR lower limit of the maximum configured power expressed in linear scale;
- $P_{\text{PowerClass, NE-DC}}$  is defined in clause 6.2B.1.3a for inter-band NE-DC;
- $p_{\text{CMAX\_E-UTRA,c}}(p)$  is the linear value of  $P_{\text{CMAX\_E-UTRA,c}}(p)$ , the real configured max power for E-UTRA
- $p_{\text{CMAX,f,c,NR}}(q)$  is the linear value of  $P_{\text{CMAX,f,c,NR}}(q)$ , the real configured max power of NR

**Table 6.2B.4.1.3a-2:  $P_{\text{CMAX}}$  tolerance for Dual Connectivity E-UTRA-NR**

| P <sub>CMAX</sub> (dBm)                                                                                                                           | Tolerance<br>T <sub>LOW</sub> (P <sub>CMAX_L</sub> ) (dB) | Tolerance<br>T <sub>HIGH</sub> (P <sub>CMAX_H</sub> ) (dB) |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------------------|
| 23 ≤ P <sub>CMAX</sub> ≤ 33                                                                                                                       | 3.0                                                       | 2.0                                                        |
| 22 ≤ P <sub>CMAX</sub> < 23                                                                                                                       | 5.0                                                       | 2.0                                                        |
| 21 ≤ P <sub>CMAX</sub> < 22                                                                                                                       | 5.0                                                       | 3.0                                                        |
| 20 ≤ P <sub>CMAX</sub> < 21                                                                                                                       | 6.0                                                       | 4.0                                                        |
| 16 ≤ P <sub>CMAX</sub> < 20                                                                                                                       | 5.0                                                       |                                                            |
| 11 ≤ P <sub>CMAX</sub> < 16                                                                                                                       | 6.0                                                       |                                                            |
| -40 ≤ P <sub>CMAX</sub> < 11                                                                                                                      | 7.0                                                       |                                                            |
| NOTE 1: For UEs not indicating support of dynamic power sharing, the upper tolerance T <sub>high</sub> shall be reduced by 0.3 dB for P ≥ 20 dBm. |                                                           |                                                            |

When E-UTRA and NR transmissions overlap and the condition  $a = \text{TRUE}$ ,  $P_{\text{UMAX,f,c,NR}}(q)$  for MCG, under nominal conditions, shall meet

$$P_{\text{UMAX,f,c,NR}}(q) \leq 10 \log(p_{\text{CMAX\_H,f,c,NR}}(q)) + T_{\text{HIGH}}(10 \log(p_{\text{CMAX\_H,f,c,NR}}(q))).$$

with the tolerances  $T_{\text{LOW}}$  and  $T_{\text{HIGH}}$  for applicable values of  $P_{\text{CMAX}}$  specified in Table 6.2B.4a.1.3-2.

When LTE and NR transmissions overlap and the condition  $a = \text{FALSE}$ , then  $P_{\text{UMAX}}$ , under nominal conditions, shall be within the following bounds:

$$P_{\text{CMAX\_L}} - T_{\text{LOW}}(P_{\text{CMAX\_L}}) \leq P_{\text{UMAX}} \leq P_{\text{CMAX\_H}} + T_{\text{HIGH}}(P_{\text{CMAX\_H}})$$

where  $P_{\text{CMAX\_L}}$ ,  $P_{\text{CMAX\_H}}$ , and  $P_{\text{UMAX}}$  are specified above with the tolerances  $T_{\text{LOW}}$  and  $T_{\text{HIGH}}$  specified in Table 6.2B.4a.1.3-2 for applicable values of  $P_{\text{CMAX\_L}}$  and  $P_{\text{CMAX\_H}}$ .

#### 6.2B.4.1.4 Inter-band EN-DC including FR2

For inter-band dual connectivity with one uplink serving cell per CG on E-UTRA and NR respectively, with NR configured in FR2, the UE is allowed to set its configured maximum output power  $P_{\text{CMAX},c(i),i}$  for serving cell  $c(i)$  of CG  $i$ ,  $i = 1, 2$ .

The UE maximum configured power  $P_{\text{CMAX},c(i)}$ , on E-UTRA for the subframe  $i$  shall be set according to clause 6.2.5 from TS 36.101 [4]. Applicable inter-band  $\Delta T_{\text{IB},c}$  parameters shall be used according to the clauses 6.2B.4.2.4 or 6.2B.4.2.5.

The UE maximum configured power  $P_{\text{CMAX},c(j)}$ , on NR for the slot  $j$  shall be set according to subclass 6.2.4 from TS 38.101-2 [3].

For the configured power measurements TS 36.101 [4] clause 6.2.5 and TS 38.101-2 [3] clause 6.2.4 are applicable.

#### 6.2B.4.1.5 Inter-band EN-DC including both FR1 and FR2

For inter-band dual connectivity with one uplink serving cell per CG on E-UTRA and NR respectively, with both CGs configured in FR1, the requirements specified in clause 6.2B.4.1.3 apply.

For inter-band dual connectivity with one uplink serving cell per CG on E-UTRA and NR respectively, with NR configured in FR2, the requirements specified in clause 6.2B.4.1.4 apply.

For inter-band dual connectivity with one uplink serving cell in first CG on E-UTRA and two uplink serving cells in second CG on NR FR1 and NR FR2 respectively, the UE is allowed to set its configured maximum output power  $P_{\text{CMAX},c(i),i}$  for serving cell  $c(i)$ ,  $i = 1, 2, 3$  with  $i=1$  for E-UTRA,  $i=2$  for NR FR1 and  $i=3$  for NR FR2.

- For serving cell on FR2, the requirements specified in clause 6.2.4 in TS 38.101-2 [3] apply to the UE maximum configured power  $P_{\text{CMAX},c(3),3}$  and the measured maximum configured power.
- For remaining inter-band dual connectivity involving CG1 and CG2, the requirements specified in clause 6.2B.4.1.3 apply.

### 6.2B.4.2 $\Delta T_{\text{IB},c}$ for DC

#### 6.2B.4.2.0 General

For the UE which supports inter-band EN-DC or NE-DC configuration,  $\Delta T_{\text{IB},c}$  in Tables below applies where unless otherwise stated, the same  $\Delta T_{\text{IB},c}$  is applicable to NR band(s) part for DC configurations which have the same NR operating band combination. Unless otherwise stated,  $\Delta T_{\text{IB},c}$  is set to zero.

Unless  $\Delta T_{\text{IB},c}$  is specified for the NE-DC configuration, the specified  $\Delta T_{\text{IB},c}$  for the EN-DC configuration including same bands as the corresponding NE-DC configuration is applicable for the NE-DC configuration.

#### 6.2B.4.2.1 Intra-band contiguous EN-DC

$\Delta T_{\text{IB},c}$  is not applicable for intra-band contiguous EN-DC.

#### 6.2B.4.2.2 Intra-band non-contiguous EN-DC

$\Delta T_{\text{IB},c}$  is not applicable for intra-band non-contiguous EN-DC.

#### 6.2B.4.2.3 Inter-band EN-DC within FR1

##### 6.2B.4.2.3.1 $\Delta T_{\text{IB},c}$ for EN-DC two bands

**Table 6.2B.4.2.3.1-1:  $\Delta T_{\text{IB},c}$  due to EN-DC(two bands)**

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{\text{IB},c}$ (dB) |
|--------------------------------|-------------------|-------------------------------|
| DC_1_n3                        | 1                 | 0.3                           |
|                                | n3                | 0.3                           |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1_n5                        | 1                 | 0.3                    |
|                                | n5                | 0.3                    |
| DC_1_n7,<br>DC_1-1_n7          | 1                 | 0.5                    |
|                                | n7                | 0.6                    |
| DC_1_n8                        | 1                 | 0.3                    |
|                                | n8                | 0.3                    |
| DC_1_n20                       | 1                 | 0.3                    |
|                                | n20               | 0.3                    |
| DC_1_n28                       | 1                 | 0.3                    |
|                                | n28               | 0.6                    |
| DC_1_n38                       | 1                 | 0.5                    |
|                                | n38               | 0.5                    |
| DC_1_n40                       | 1                 | 0.5                    |
|                                | n40               | 0.5                    |
| DC_1_n50                       | 1                 | 0.5                    |
|                                | n50               | 0.5                    |
| DC_1_n41                       | 1                 | 0.5                    |
|                                | n41               | 0.5                    |
| DC_1_n51                       | 1                 | 0.6                    |
|                                | n51               | 0.6                    |
| DC_1_n71                       | 1                 | 0.3                    |
|                                | n71               | 0.3                    |
| DC_1_n77                       | 1                 | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1_n78                       | 1                 | 0.3                    |
|                                | n78               | 0.8                    |
| DC_2_n5,<br>DC_2-2_n5          | 2                 | 0.3                    |
|                                | n5                | 0.3                    |
| DC_2_n7                        | 2                 | 0.5                    |
|                                | n7                | 0.5                    |
| DC_2_n12                       | 2                 | 0.3                    |
|                                | n12               | 0.3                    |
| DC_2_n38,<br>DC_2-2_n38        | 2                 | 0.5                    |
|                                | n38               | 0.9                    |
| DC_2_n41,<br>DC_2-2_n41        | 2                 | 0.5                    |
|                                |                   | 0.4 <sup>1</sup>       |
|                                |                   | 0.9 <sup>2</sup>       |
| DC_2_n48                       | 2                 | 0.6                    |
|                                | n48               | 0.8                    |
| DC_2_n66,<br>DC_2-2_n66        | 2                 | 0.5                    |
|                                | n66               | 0.5                    |
| DC_2_n71,<br>DC_2-2_n71        | 2                 | 0.3                    |
|                                | n71               | 0.3                    |
| DC_2_n78,<br>DC_2-2_n78        | 2                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_3_n1                        | 3                 | 0.3                    |
|                                | n1                | 0.3                    |
| DC_3_n5                        | 3                 | 0.3                    |
|                                | n5                | 0.3                    |
| DC_3_n8                        | 3                 | 0.3                    |
|                                | n8                | 0.3                    |
| DC_3_n7,<br>DC_3-3_n7          | 3                 | 0.5                    |
|                                | n7                | 0.5                    |
| DC_3_n20                       | 3                 | 0.3                    |
|                                | n20               | 0.3                    |
| DC_3_n28                       | 3                 | 0.3                    |
|                                | n28               | 0.3                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_3_n34                       | 3                 | 0.5                    |
|                                | n34               | 0.5                    |
| DC_3_n38                       | 3                 | 0.5                    |
|                                | n38               | 0.5                    |
| DC_3_n40                       | 3                 | 0.5                    |
|                                | n40               | 0.5                    |
| DC_3_n41                       | 3                 | 0.5                    |
|                                | n41               | 0.3 <sup>3</sup>       |
|                                |                   | 0.8 <sup>4</sup>       |
| DC_3_n50                       | 3                 | 0.5                    |
|                                | n50               | 0.5                    |
| DC_3_n51                       | 3                 | 0.3                    |
|                                | n51               | 0.3                    |
| DC_3_n71                       | 3                 | 0.3                    |
|                                | n71               | 0.3                    |
| DC_3_n77, DC_3-3_n77           | 3                 | 0.6                    |
|                                | n77               | 0.8                    |
| DC_3_n78, DC_3-3_n78           | 3                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_4_n38                       | 4                 | 0.5                    |
|                                | n38               | 0.8                    |
| DC_4_n41                       | 4                 | 0.5                    |
|                                | n41               | 0.8 <sup>1</sup>       |
|                                |                   | 1.3 <sup>2</sup>       |
| DC_4_n78                       | 4                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_5_n2,<br>DC_5-5_n2          | 5                 | 0.3                    |
|                                | n2                | 0.3                    |
| DC_5_n7                        | 5                 | 0.3                    |
|                                | n7                | 0.3                    |
| DC_5_n12                       | 5                 | 0.8                    |
|                                | n12               | 0.4                    |
| DC_5_n38                       | 5                 | 0.3                    |
|                                | n38               | 0.3                    |
| DC_5_n40                       | 5                 | 0.3                    |
|                                | n40               | 0.3                    |
| DC_5_n48                       | 5                 | 0.3                    |
|                                | n48               | 0.3                    |
| DC_5_n66,<br>DC_5-5_n66        | 5                 | 0.3                    |
|                                | n66               | 0.3                    |
| DC_5_n71                       | 5                 | 0.5                    |
|                                | n71               | 0.5                    |
| DC_5_n78                       | 5                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_7_n1, DC_7-7_n1             | 7                 | 0.6                    |
|                                | n1                | 0.5                    |
| DC_7_n3                        | 7                 | 0.5                    |
|                                | n3                | 0.5                    |
| DC_7_n5,<br>DC_7-7_n5          | 7                 | 0.3                    |
|                                | n5                | 0.3                    |
| DC_7_n8                        | 7                 | 0.3                    |
|                                | n8                | 0.6                    |
| DC_7_n20                       | 7                 | 0.3                    |
|                                | n20               | 0.3                    |
| DC_7_n28                       | 7                 | 0.3                    |
|                                | n28               | 0.3                    |
| DC_7_n40                       | 7                 | 0.5                    |
|                                | n40               | 0.6                    |
| DC_7_n51                       | 7                 | 0.3                    |
|                                | n51               | 0.3                    |
| DC_7_n66, DC_7-7_n66           | 7                 | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_7_n71                       | n66               | 0.5                    |
|                                | 7                 | 0.3                    |
| DC_7_n77, DC_7-7_n77           | n71               | 0.6                    |
|                                | 7                 | 0.5                    |
| DC_7_n78, DC_7-7_n78           | n77               | 0.8                    |
|                                | 7                 | 0.5                    |
| DC_8_n1                        | n78               | 0.8                    |
|                                | 8                 | 0.3                    |
| DC_8_n3                        | n1                | 0.3                    |
|                                | 8                 | 0.3                    |
| DC_8_n20                       | n3                | 0.3                    |
|                                | 8                 | 0.4                    |
| DC_8_n28                       | n20               | 0.4                    |
|                                | 8                 | 0.6                    |
| DC_8_n34                       | n28               | 0.5                    |
|                                | 8                 | 0.3                    |
| DC_8_n39                       | n34               | 0.3                    |
|                                | 8                 | 0.3                    |
| DC_8_n40                       | n39               | 0.3                    |
|                                | 8                 | 0.3                    |
| DC_8_n41                       | n40               | 0.3                    |
|                                | 8                 | 0.3                    |
| DC_8_n77                       | n41               | 0.3                    |
|                                | 8                 | 0.6                    |
| DC_8_n78                       | n77               | 0.8                    |
|                                | 8                 | 0.6                    |
| DC_11_n3                       | n78               | 0.8                    |
|                                | 11                | 0.8                    |
| DC_11_n28                      | n3                | 0.9                    |
|                                | 11                | 0.4                    |
| DC_11_n77                      | n28               | 0.6                    |
|                                | 11                | 0.4                    |
| DC_11_n78                      | n77               | 0.8                    |
|                                | 11                | 0.4                    |
| DC_12_n2                       | n78               | 0.8                    |
|                                | 12                | 0.3                    |
| DC_12_n5                       | n2                | 0.3                    |
|                                | 12                | 0.4                    |
| DC_12_n7                       | n5                | 0.8                    |
|                                | 12                | 0.3                    |
| DC_12_n25                      | n7                | 0.3                    |
|                                | 12                | 0.3                    |
| DC_12_n38                      | n25               | 0.3                    |
|                                | 12                | 0.3                    |
| DC_12_n41                      | n38               | 0.3                    |
|                                | 12                | 0.3                    |
| DC_12_n66                      | n41               | 0.3                    |
|                                | 12                | 0.8                    |
| DC_12_n78                      | n66               | 0.3                    |
|                                | 12                | 0.5                    |
| DC_13_n2                       | n78               | 0.8                    |
|                                | 13                | 0.3                    |
| DC_13_n5                       | n2                | 0.3                    |
|                                | 13                | 0.5                    |
| DC_13_n7                       | n5                | 0.5                    |
|                                | 13                | 0.5                    |
| DC_13_n48                      | n7                | 0.5                    |
|                                | 13                | 0.3                    |
| DC_13_n66                      | n48               | 0.3                    |
|                                | 13                | 0.3                    |
| DC_13_n71                      | n66               | 0.3                    |
|                                | 13                | 0.5                    |
|                                | n71               | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_13_n78                      | 13                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_14_n2                       | 14                | 0.3                    |
|                                | n2                | 0.3                    |
| DC_14_n66                      | 14                | 0.3                    |
|                                | n66               | 0.3                    |
| DC_18_n3                       | 18                | 0.3                    |
|                                | n3                | 0.3                    |
| DC_18_n77                      | 18                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_18_n78                      | 18                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_19_n77                      | 19                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_19_n78                      | 19                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_20_n1                       | 20                | 0.3                    |
|                                | n1                | 0.3                    |
| DC_20_n3                       | 20                | 0.3                    |
|                                | n3                | 0.3                    |
| DC_20_n7                       | 20                | 0.3                    |
|                                | n7                | 0.3                    |
| DC_20_n8                       | 20                | 0.4                    |
|                                | n8                | 0.4                    |
| DC_20_n28                      | 20                | 0.5                    |
|                                | n28               | 0.5                    |
| DC_20_n38                      | 20                | 0.5                    |
|                                | n38               | 0.3                    |
| DC_20_n41                      | 20                | 0.3                    |
|                                | n41               | 0.3                    |
| DC_20_n50                      | 20                | 0.3                    |
|                                | n50               | 0.4                    |
| DC_20_n51                      | 20                | 0.5                    |
|                                | n51               | 0.5                    |
| DC_20_n77                      | 20                | 0.6                    |
|                                | n77               | 0.8                    |
| DC_20_n78                      | 20                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_21_n77                      | 21                | 0.4                    |
|                                | n77               | 0.8                    |
| DC_21_n78                      | 21                | 0.4                    |
|                                | n78               | 0.8                    |
| DC_25_n41,<br>DC_25-25_n41     | 25                | 0.5                    |
|                                | n41               | 0.4 <sup>1</sup>       |
|                                |                   | 0.9 <sup>2</sup>       |
| DC_26_n25                      | 26                | 0.3                    |
|                                | n25               | 0.3                    |
| DC_26_n41                      | 26                | 0.3                    |
|                                | n41               | 0.3                    |
| DC_26_n77                      | 26                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_26_n78                      | 26                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_28_n3                       | 28                | 0.3                    |
|                                | n3                | 0.3                    |
| DC_28_n5                       | 28                | 0.5                    |
|                                | n5                | 0.5                    |
| DC_28_n7                       | 28                | 0.3                    |
|                                | n7                | 0.3                    |
| DC_28_n8                       | 28                | 0.5                    |
|                                | n8                | 0.6                    |
| DC_28_n40                      | 28                | 0.3                    |

| Inter-band EN-DC configuration               | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|----------------------------------------------|-------------------|------------------------|
|                                              | n40               | 0.3                    |
| DC_28_n41                                    | 28                | 0.3                    |
|                                              | n41               | 0.3                    |
| DC_28_n50                                    | 28                | 0.3                    |
|                                              | n50               | 0.4                    |
| DC_28_n51                                    | 28                | 0.5                    |
|                                              | n51               | 0.5                    |
| DC_28_n77                                    | 28                | 0.5                    |
|                                              | n77               | 0.8                    |
| DC_28_n78                                    | 28                | 0.5                    |
|                                              | n78               | 0.8                    |
| DC_30_n2                                     | 30                | 0.3                    |
|                                              | n2                | 0.5                    |
| DC_30_n5                                     | 30                | 0.3                    |
|                                              | n5                | 0.3                    |
| DC_30_n66                                    | 30                | 0.5                    |
|                                              | n66               | 0.8                    |
| DC_38_n78                                    | n78               | 0.5                    |
| DC_39-n41                                    | 39                | 0.5                    |
|                                              | n41               | 0.5                    |
| DC_39_n78                                    | 39                | 0.3                    |
|                                              | n78               | 0.8                    |
| DC_39_n79                                    | 39                | 0.3                    |
|                                              | n79               | 0.8                    |
| DC_40_n1                                     | n1                | 0.5                    |
|                                              | 40                | 0.5                    |
| DC_40_n41 <sup>5</sup>                       | 40                | 0.5                    |
|                                              | n41               | 0.5                    |
| DC_40_n77                                    | n77               | 0.5                    |
| DC_40_n78                                    | n78               | 0.5 <sup>6</sup>       |
| DC_40_n79                                    | 40                | 0.3                    |
|                                              | n79               | 0.8                    |
| DC_41_n3                                     | 41                | 0.3 <sup>3</sup>       |
|                                              |                   | 0.8 <sup>4</sup>       |
|                                              | n3                | 0.5                    |
| DC_41_n28                                    | 41                | 0.3                    |
|                                              | n28               | 0.3                    |
| DC_41_n77                                    | 41                | 0.3                    |
|                                              | n77               | 0.8                    |
| DC_41_n78                                    | 41                | 0.3                    |
|                                              | n78               | 0.8                    |
| DC_41_n79                                    | 41                | 0.3                    |
|                                              | n79               | 0.8                    |
| DC_42_n28                                    | 42                | 0.5                    |
|                                              | n28               | 0.8                    |
| DC_42_n51                                    | 42                | 0.6                    |
|                                              | n51               | 0.8                    |
| DC_48_n5                                     | 48                | 0.3                    |
|                                              | n5                | 0.3                    |
| DC_48_n12                                    | 48                | 0.3                    |
|                                              | n12               | 0.3                    |
| DC_48_n46                                    | 48                | 0.8                    |
| DC_48_n66                                    | 48                | 0.8                    |
|                                              | n66               | 0.6                    |
| DC_48_n71<br>DC_48-48_n71<br>DC_48-48-48_n71 | 48                | 0.3                    |
|                                              | n71               | 0.3                    |
| DC_66_n2,<br>DC_66-66_n2                     | 66                | 0.5                    |
|                                              | n2                | 0.5                    |
| DC_66_n5,<br>DC_66-66_n5,<br>DC_66-66-66_n5  | 66                | 0.3                    |
|                                              | n5                | 0.3                    |

| Inter-band EN-DC configuration                                                                                                          | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
| DC_66_n7,<br>DC_66-66_n7                                                                                                                | 66                | 0.5                    |
|                                                                                                                                         | n7                | 0.5                    |
| DC_66_n12                                                                                                                               | 66                | 0.8                    |
|                                                                                                                                         | n12               | 0.3                    |
| DC_66_n25                                                                                                                               | 66                | 0.5                    |
|                                                                                                                                         | n25               | 0.5                    |
| DC_66_n38,<br>DC_66-66_n38                                                                                                              | 66                | 0.5                    |
|                                                                                                                                         | n38               | 0.5                    |
| DC_66_n41                                                                                                                               | 66                | 0.5                    |
|                                                                                                                                         | n41               | 0.8 <sup>1</sup>       |
|                                                                                                                                         |                   | 1.3 <sup>2</sup>       |
| DC_66_n48,<br>DC_66-66_n48                                                                                                              | 66                | 0.6                    |
|                                                                                                                                         | n48               | 0.8                    |
| DC_66_n71,<br>DC_66-66_n71                                                                                                              | 66                | 0.3                    |
|                                                                                                                                         | n71               | 0.3                    |
| DC_66_n78,<br>DC_66-66_n78                                                                                                              | 66                | 0.6                    |
|                                                                                                                                         | n78               | 0.8                    |
| DC_71_n5                                                                                                                                | 71                | 0.5                    |
|                                                                                                                                         | n5                | 0.5                    |
| DC_71_n38                                                                                                                               | 71                | 0.6                    |
|                                                                                                                                         | n38               | 0.3                    |
| DC_71_n48                                                                                                                               | 71                | 0.3                    |
|                                                                                                                                         | n48               | 0.3                    |
| DC_71_n66                                                                                                                               | 71                | 0.3                    |
|                                                                                                                                         | n66               | 0.3                    |
| DC_71_n78                                                                                                                               | 71                | 0.5                    |
|                                                                                                                                         | n78               | 0.8                    |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545-2690 MHz.                                         |                   |                        |
| NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496-2545 MHz.                                         |                   |                        |
| NOTE 3: Applicable for the frequency range of 2515 – 2690 MHz.                                                                          |                   |                        |
| NOTE 4: Applicable for the frequency range of 2496 - 2515 MHz.                                                                          |                   |                        |
| NOTE 5: Applicable for UE supporting inter-band EN-DC without simultaneous Rx/Tx.                                                       |                   |                        |
| NOTE 6: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. |                   |                        |

## 6.2B.4.2.3.2

 $\Delta T_{IB,c}$  for EN-DC three bandsTable 6.2B.4.2.3.2-1:  $\Delta T_{IB,c}$  due to EN-DC (three bands)

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-3_n5                      | 1                 | 0.3                    |
|                                | 3                 | 0.3                    |
|                                | n5                | 0.3                    |
| DC_1-3_n7                      | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | n7                | 0.6                    |
| DC_1-3_n8                      | 1                 | 0.3                    |
|                                | 3                 | 0.3                    |
|                                | n8                | 0.3                    |
| DC_1-3_n28                     | 1                 | 0.3                    |
|                                | 3                 | 0.3                    |
|                                | n28               | 0.6                    |
| DC_1_n3-n28                    | 1                 | 0.3                    |
|                                | n3                | 0.3                    |
|                                | n28               | 0.6                    |
| DC_1-3_n38                     | 1                 | 0.5                    |
|                                | 3                 | 0.5                    |
|                                | n38               | 0.5                    |
| DC_1-3_n40                     | 1                 | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
|                                | 3                 | 0.5                    |
|                                | n40               | 0.5                    |
| DC_1-3_n41                     | 1                 | 0.5                    |
|                                | 3                 | 0.5                    |
|                                | n41               | $0.3^3/0.8^4$          |
|                                | 3                 | 0.6                    |
| DC_1-3_n77                     | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | n77               | 0.8                    |
|                                | 1                 | 0.3                    |
| DC_1-3_n71                     | 3                 | 0.3                    |
|                                | n71               | 0.3                    |
|                                | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
| DC_1-3_n78                     | n78               | 0.8                    |
|                                | 1                 | 0.3                    |
| DC_1-3_n79                     | 3                 | 0.3                    |
|                                | 1                 | 0.6                    |
| DC_1_n3-n78                    | n3                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-5_n78                     | 1                 | 0.3                    |
|                                | 5                 | 0.6                    |
|                                | n78               | 0.8                    |
|                                | 1                 | 0.3                    |
| DC_1-5_n79                     | 5                 | 0.3                    |
|                                | 1                 | 0.6                    |
| DC_1-7_n3                      | 7                 | 0.6                    |
|                                | n3                | 0.6                    |
|                                | 1                 | 0.5                    |
|                                | 7                 | 0.6                    |
| DC_1-7_n5                      | n5                | 0.3                    |
|                                | 1                 | 0.5                    |
| DC_1-7_n7                      | 7                 | 0.6                    |
|                                | n7                | 0.6                    |
|                                | 1                 | 0.5                    |
|                                | 7                 | 0.6                    |
| DC_1-7_n8                      | n8                | 0.6                    |
|                                | 1                 | 0.5                    |
| DC_1-7_n28                     | 7                 | 0.6                    |
|                                | n28               | 0.6                    |
|                                | 1                 | 0.6                    |
|                                | 7                 | 0.8                    |
| DC_1-7_n40                     | n40               | 0.9                    |
|                                | 1                 | 0.6                    |
| DC_1-7_n78<br>DC_1-7-7_n78     | 7                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1_n7-n78                    | 1                 | 0.6                    |
|                                | n7                | 0.6                    |
|                                | n78               | 0.8                    |
|                                | 1                 | 0.3                    |
| DC_1-8_n3                      | 8                 | 0.3                    |
|                                | n3                | 0.3                    |
|                                | 1                 | 0.3                    |
|                                | 8                 | 0.6                    |
| DC_1-8_n28                     | n28               | 0.6                    |
|                                | 1                 | 0.3                    |
| DC_1_n8-n40                    | n8                | 0.3                    |
|                                | n40               | 0.5                    |
| DC_1-8_n77                     | 1                 | 0.3                    |
|                                | 8                 | 0.6                    |
|                                | n77               | 0.8                    |
|                                | 1                 | 0.3                    |
| DC_1-8_n78<br>DC_1_n8-n78      |                   |                        |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
|                                | 8                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-8_n79                     | 1                 | 0.3                    |
|                                | 8                 | 0.3                    |
| DC_1-11_n3                     | 1                 | 0.3                    |
|                                | 11                | 0.8                    |
|                                | n3                | 0.9                    |
| DC_1-11_n77                    | 1                 | 0.6                    |
|                                | 11                | 0.4                    |
|                                | n77               | 0.8                    |
| DC_1-11_n78                    | 1                 | 0.3                    |
|                                | 11                | 0.4                    |
|                                | n78               | 0.8                    |
| DC_1-18-n3                     | 1                 | 0.3                    |
|                                | 18                | 0.3                    |
|                                | n3                | 0.3                    |
| DC_1-18_n77                    | 1                 | 0.3                    |
|                                | 18                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_1-18_n78                    | 1                 | 0.3                    |
|                                | 18                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-19_n77                    | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_1-19_n78                    | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-19_n79                    | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
| DC_1-20_n3                     | 1                 | 0.3                    |
|                                | 20                | 0.3                    |
|                                | n3                | 0.3                    |
| DC_1-20_n8                     | 1                 | 0.3                    |
|                                | 20                | 0.4                    |
|                                | n8                | 0.4                    |
| DC_1-20_n28                    | 1                 | 0.5                    |
|                                | 20                | 0.6                    |
|                                | n28               | 0.6                    |
| DC_1-20_n38                    | 1                 | 0.5                    |
|                                | 20                | 0.3                    |
|                                | n38               | 0.5                    |
| DC_1-20_n41                    | 1                 | 0.5                    |
|                                | 20                | 0.3                    |
|                                | n41               | 0.5 <sup>1</sup>       |
|                                |                   | 1.2 <sup>2</sup>       |
| DC_1-20_n78                    | 1                 | 0.3                    |
|                                | 20                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-21_n77                    | 1                 | 0.3                    |
|                                | 21                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_1-21_n78                    | 1                 | 0.6                    |
|                                | 21                | 0.4                    |
|                                | n78               | 0.8                    |
| DC_1-21_n79                    | 1                 | 0.3                    |
|                                | 21                | 0.3                    |
| DC_1-28-n3                     | 1                 | 0.3                    |
|                                | 28                | 0.6                    |
|                                | n3                | 0.3                    |
| DC_1-28_n5                     | 1                 | 0.3                    |
|                                | 28                | 0.5                    |
|                                | n5                | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-28_n7                     | 1                 | 0.5                    |
|                                | 28                | 0.6                    |
|                                | n7                | 0.6                    |
| DC_1-28_n77                    | 1                 | 0.3                    |
|                                | 28                | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1-28_n78<br>DC_1_n28-n78    | 1                 | 0.3                    |
|                                | 28 or n28         | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1_n28-n79                   | 1                 | 0.3                    |
|                                | n28               | 0.3                    |
| DC_1_n28-n40                   | 1                 | 0.6                    |
|                                | n28               | 0.3                    |
|                                | n40               | 0.5                    |
| DC_1_n28-n77                   | 1                 | 0.6                    |
|                                | n28               | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1-28_n40                    | 1                 | 0.6                    |
|                                | 28                | 0.3                    |
|                                | n40               | 0.5                    |
| DC_1-32_n78                    | 1                 | 0.5                    |
|                                | n78               | 0.8                    |
| DC_1-(n)38                     | 1                 | 0.5                    |
|                                | 38                | 0.5                    |
|                                | n38               | 0.5                    |
| DC_1_n40-n78                   | 1                 | 0.3                    |
|                                | n40               | 0.5                    |
|                                | n78               | 0.8                    |
| DC_1-41_n3                     | 1                 | 0.5                    |
|                                | 41                | $0.3^3/0.8^4$          |
|                                | n3                | 0.5                    |
| DC_1-41_n28                    | 1                 | 0.5                    |
|                                | 41                | 0.5                    |
|                                | n28               | 0.5                    |
| DC_1-(n)41                     | 1                 | 0.5                    |
|                                | 41                | 0.5                    |
|                                | n41               | 0.5                    |
| DC_1-41_n41                    | 1                 | 0.5                    |
|                                | 41                | 0.5                    |
|                                | n41               | 0.5                    |
| DC_1-41_n77                    | 1                 | 0.5                    |
|                                | 41                | 0.5                    |
|                                | n77               | 0.8                    |
| DC_1-41_n78<br>DC_1_n41-n78    | 1                 | 0.5                    |
|                                | 41 or n41         | 0.5                    |
|                                | n78               | 0.8                    |
| DC_1-41_n79                    | 1                 | 0.5                    |
|                                | 41                | 0.5                    |
| DC_1-42_n28                    | 1                 | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n28               | 0.8                    |
| DC_1-42_n77                    | 1                 | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-42_n78                    | 1                 | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_1-42_n79                    | 1                 | 0.3                    |
|                                | 42                | 0.8                    |
| DC_1_n77-n79                   | 1                 | 0.6                    |
|                                | n77               | 0.8                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1_SUL_n77-n80               | 1                 | 0.6                    |
|                                | n77               | 0.8                    |
|                                | n80               | 0.6                    |
| DC_1_SUL_n77-n84               | 1                 | 0.6                    |
|                                | n77               | 0.8                    |
|                                | n84               | 0.6                    |
| DC_1_SUL_n78-n84               | 1                 | 0.3                    |
|                                | n78               | 0.8                    |
|                                | n84               | 0.3                    |
| DC_1_n78-n79                   | 1                 | 0.3                    |
|                                | n78               | 0.8                    |
|                                | n79               | 0.5                    |
| DC_1_n75-n78                   | 1                 | 0.5                    |
|                                | n78               | 0.8                    |
| DC_1_SUL_n78-n80               | 1                 | 0.6                    |
|                                | n80               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_2-4_n38                     | 2                 | 0.5                    |
|                                | 4                 | 0.5                    |
|                                | n38               | 0.5                    |
| DC_2-4_n41                     | 2                 | 0.5                    |
|                                | 4                 | 0.5                    |
|                                | n41               | 0.5                    |
| DC_2-5_n2<br>DC_2-5-5_n2       | 2                 | 0.3                    |
|                                | 5                 | 0.3                    |
|                                | n2                | 0.3                    |
| DC_2-5_n5<br>DC_2-2-5_n5       | 2                 | 0.3                    |
|                                | 5                 | 0.3                    |
|                                | n5                | 0.3                    |
| DC_2-5_n66<br>DC_2-5-5_n66     | 2                 | 0.5                    |
|                                | 5                 | 0.3                    |
|                                | n66               | 0.5                    |
| DC_2-5_n71                     | 2                 | 0.3                    |
|                                | 5                 | 0.5                    |
|                                | n71               | 0.5                    |
| DC_2-7_n38<br>DC_2-2-7_n38     | 2                 | 0.5                    |
| DC_2-7_n71                     | 2                 | 0.5                    |
|                                | 7                 | 0.5                    |
|                                | n71               | 0.6                    |
| DC_2-7_n66<br>DC_2-7-7_n66     | 2                 | 0.5                    |
|                                | 7                 | 0.5                    |
|                                | n66               | 0.5                    |
| DC_2-7_n78                     | 2                 | 0.5                    |
|                                | 7                 | 0.5                    |
| DC_2_n7-n78                    | 2                 | 0.6                    |
|                                | n7                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_2-12_n2                     | 2                 | 0.3                    |
|                                | 12                | 0.3                    |
| DC_2_(n)12                     | 2                 | 0.3                    |
|                                | 12                | 0.3                    |
|                                | n12               | 0.3                    |
| DC_2-12_n66, DC_2-2-12_n66     | 2                 | 0.5                    |
|                                | 12                | 0.8                    |
|                                | n66               | 0.5                    |
| DC_2-13_n2                     | 2                 | 0.3                    |
|                                | 13                | 0.3                    |
|                                | n2                | 0.3                    |

| Inter-band EN-DC configuration                     | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|----------------------------------------------------|-------------------|------------------------|
| DC_2-13_n5<br>DC_2-2-13_n5                         | 2                 | 0.3                    |
|                                                    | 13                | 0.5                    |
|                                                    | n5                | 0.5                    |
| DC_2-13_n66<br>DC_2-2-13_n66                       | 2                 | 0.5                    |
|                                                    | 13                | 0.3                    |
|                                                    | n66               | 0.5                    |
| DC_2-14_n2                                         | 2                 | 0.3                    |
|                                                    | 14                | 0.3                    |
|                                                    | n2                | 0.3                    |
| DC_2-14_n66<br>DC_2-2-14_n66                       | 2                 | 0.5                    |
|                                                    | 14                | 0.3                    |
|                                                    | n66               | 0.5                    |
| DC_2-29_n66<br>DC_2-2-29_n66                       | 2                 | 0.5                    |
|                                                    | n66               | 0.5                    |
| DC_2-30_n2                                         | 2                 | 0.5                    |
|                                                    | 30                | 0.3                    |
|                                                    | n2                | 0.5                    |
| DC_2-30_n5, DC_2-2-30_n5                           | 2                 | 0.5                    |
|                                                    | 30                | 0.3                    |
|                                                    | n5                | 0.3                    |
| DC_2-30_n66, DC_2-2-30_n66                         | 2                 | 0.5                    |
|                                                    | 30                | 0.3                    |
|                                                    | n66               | 0.5                    |
| DC_2_n38-n78                                       | 2                 | 0.6                    |
|                                                    | n38               | 0.9                    |
|                                                    | n78               | 0.8                    |
| DC_2_n41-n66                                       | 2                 | 0.5                    |
|                                                    | n41               | 0.5                    |
|                                                    | n66               | 0.5                    |
| DC_2_n41-n71                                       | 2                 | 0.5                    |
|                                                    | n41               | 0.5                    |
|                                                    | n71               | 0.3                    |
| DC_2_n41-n66                                       | 2                 | 0.5                    |
|                                                    | n41               | 0.5                    |
|                                                    | n66               | 0.5                    |
| DC_2_n41-n71                                       | 2                 | 0.5                    |
|                                                    | n41               | 0.5                    |
|                                                    | n71               | 0.3                    |
| DC_2-46_n41                                        | 2                 | 0.5                    |
|                                                    | n41               | 0.4 <sup>1</sup>       |
|                                                    |                   | 0.9 <sup>2</sup>       |
| DC_2-46_n66                                        | 2                 | 0.5                    |
|                                                    | n66               | 0.5                    |
| DC_2-48_n12                                        | 2                 | 0.6                    |
|                                                    | 48                | 0.3                    |
|                                                    | n12               | 0.8                    |
| DC_2-48_n66                                        | 2                 | 0.6                    |
|                                                    | 48                | 0.8                    |
|                                                    | n66               | 0.6                    |
| DC_2-48_n71                                        | 2                 | 0.6                    |
|                                                    | 48                | 0.8                    |
|                                                    | n71               | 0.3                    |
| DC_2-66_n2                                         | 2                 | 0.5                    |
|                                                    | 66                | 0.5                    |
|                                                    | n2                | 0.5                    |
| DC_2-66_n5,<br>DC_2A-2A-66A_n5A,<br>DC_2-66-66_n5, | 2                 | 0.5                    |

| Inter-band EN-DC configuration                 | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|------------------------------------------------|-------------------|------------------------|
| DC_2A-2A-66A-66A_n5A,<br>DC_2-66-66-66_n5      |                   |                        |
|                                                | 66                | 0.5                    |
|                                                | n5                | 0.3                    |
| DC_2-66_n12                                    | 2                 | 0.5                    |
|                                                | 66                | 0.5                    |
|                                                | n12               | 0.8                    |
| DC_2-66_n25                                    | 2                 | 0.5                    |
|                                                | 66                | 0.5                    |
|                                                | n25               | 0.5                    |
| DC_2-66_n38<br>DC_2-2-66_n38<br>DC_2-66-66_n38 | 2                 | 0.5                    |
|                                                | 66                | 0.5                    |
|                                                | n38               | 0.9                    |
| DC_2-66_n41                                    | 2                 | 0.5                    |
|                                                | 66                | 0.5                    |
|                                                | n41               | 0.8 <sup>1</sup>       |
|                                                |                   | 1.3 <sup>2</sup>       |
| DC_2-66_n48<br>DC_2-66-66_n48                  | 2                 | 0.6                    |
|                                                | 66                | 0.6                    |
|                                                | n48               | 0.8                    |
| DC_2-66_n66                                    | 2                 | 0.5                    |
|                                                | 66                | 0.5                    |
|                                                | n66               | 0.5                    |
| DC_2-66_n71<br>DC_2_n66-n71                    | 2                 | 0.5                    |
|                                                | 66                | 0.5                    |
|                                                | n71               | 0.3                    |
| DC_2-66_n78<br>DC_2-66-66_n78<br>DC_2_n66-n78  | 2                 | 0.6                    |
|                                                | 66                | 0.6                    |
|                                                | n78               | 0.8                    |
| DC_2-71_n38<br>DC_2-2-71_n38                   | 2                 | 0.5                    |
|                                                | 71                | 0.3                    |
|                                                | n38               | 0.5                    |
| DC_2-71_n66<br>DC_2-2-71_n66                   | 2                 | 0.5                    |
|                                                | 71                | 0.3                    |
|                                                | n66               | 0.5                    |
| DC_2-(n)71                                     | 2                 | 0.3                    |
|                                                | 71                | 0.3                    |
|                                                | n71               |                        |
| DC_2-71_n78<br>DC_2-2-71_n78                   | 2                 | 0.6                    |
|                                                | 71                | 0.6                    |
|                                                | n78               | 0.8                    |
| DC_3_n1-n7                                     | 3                 | 0.6                    |
|                                                | n1                | 0.6                    |
|                                                | n7                | 0.6                    |
| DC_3_n1-n28                                    | 3                 | 0.3                    |
|                                                | n1                | 0.3                    |
|                                                | n28               | 0.6                    |
| DC_3_n1-n40                                    | 3                 | 0.5                    |
|                                                | n1                | 0.5                    |
|                                                | n40               | 0.5                    |
| DC_3_n1-n77                                    | 3                 | 0.6                    |
|                                                | n1                | 0.6                    |
|                                                | n77               | 0.8                    |
| DC_3_n1-n78                                    | 3                 | 0.6                    |

| Inter-band EN-DC configuration                                | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|---------------------------------------------------------------|-------------------|------------------------|
| DC_3_n1-n79                                                   | n1                | 0.6                    |
|                                                               | n78               | 0.8                    |
|                                                               | 3                 | 0.3                    |
| DC_3_n3-n77                                                   | n1                | 0.3                    |
|                                                               | n79               | 0.0                    |
|                                                               | 3                 | 0.6                    |
| DC_3_n3-n78                                                   | n3                | 0.6                    |
|                                                               | n77               | 0.8                    |
|                                                               | 3                 | 0.6                    |
| DC_3-5_n78                                                    | n3                | 0.6                    |
|                                                               | n78               | 0.8                    |
|                                                               | 3                 | 0.6                    |
| DC_3-5_n79                                                    | 3                 | 0.6                    |
|                                                               | 5                 | 0.6                    |
|                                                               | n78               | 0.8                    |
| DC_3-7_n1,<br>DC_3-3-7_n1,<br>DC_3-7-7_n1,<br>DC_3-3-7-7_n1   | 3                 | 0.3                    |
|                                                               | 7                 | 0.6                    |
|                                                               | n1                | 0.5                    |
| DC_3-7_n5                                                     | 3                 | 0.5                    |
|                                                               | 7                 | 0.5                    |
|                                                               | n5                | 0.3                    |
| DC_3-7_n7                                                     | 3                 | 0.5                    |
|                                                               | 7                 | 0.5                    |
|                                                               | n7                | 0.5                    |
| DC_3-7_n8                                                     | 3                 | 0.5                    |
|                                                               | 7                 | 0.5                    |
|                                                               | n8                | 0.6                    |
| DC_3-7_n28<br>DC_3_n7-n28                                     | 3                 | 0.5                    |
|                                                               | 7 or n7           | 0.5                    |
|                                                               | n28               | 0.3                    |
| DC_3-7_n40                                                    | 3                 | 0.6                    |
|                                                               | 7                 | 0.8                    |
|                                                               | n40               | 0.9                    |
| DC_3-7_n77<br>DC_3-3-7_n77<br>DC_3-7-7_n77<br>DC_3-3-7-7_n77  | 3                 | 0.6                    |
|                                                               | 7                 | 0.6                    |
|                                                               | n77               | 0.8                    |
| DC_3-7_n78, DC_3-7-<br>7_n78, DC_3-3-7_n78,<br>DC_3-3-7-7_n78 | 3                 | 0.6                    |
|                                                               | 7                 | 0.6                    |
|                                                               | n78               | 0.8                    |
| DC_3_n7-n78                                                   | 3                 | 0.6                    |
|                                                               | n7                | 0.6                    |
|                                                               | n78               | 0.8                    |
| DC_3-8_n1<br>DC_3-3-8_n1                                      | 3                 | 0.3                    |
|                                                               | 8                 | 0.3                    |
|                                                               | n1                | 0.3                    |
| DC_3_n8-n40                                                   | 3                 | 0.5                    |
|                                                               | n8                | 0.3                    |
|                                                               | n40               | 0.5                    |
| DC_3-8_n28                                                    | 3                 | 0.3                    |
|                                                               | 8                 | 0.6                    |
|                                                               | n28               | 0.5                    |
| DC_3-8_n77                                                    | 3                 | 0.6                    |
|                                                               | 8                 | 0.6                    |

| Inter-band EN-DC configuration            | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|-------------------------------------------|-------------------|------------------------|
|                                           | n77               | 0.8                    |
| DC_3-8_n78<br>DC_3-3-8_n78<br>DC_3_n8-n78 | 3                 | 0.6                    |
|                                           | 8 or n8           | 0.6                    |
|                                           | n78               | 0.8                    |
|                                           |                   |                        |
| DC_3-8_n79                                | 3                 | 0.3                    |
|                                           | 8                 | 0.3                    |
| DC_3-18-n77                               | 3                 | 0.6                    |
|                                           | 18                | 0.3                    |
|                                           | n77               | 0.8                    |
| DC_3-18-n78                               | 3                 | 0.6                    |
|                                           | 18                | 0.3                    |
|                                           | n78               | 0.8                    |
|                                           |                   |                        |
| DC_3-18-n79                               | 3                 | 0.3                    |
|                                           | 18                | 0.3                    |
| DC_3-19_n77                               | 3                 | 0.6                    |
|                                           | 19                | 0.3                    |
|                                           | n77               | 0.8                    |
| DC_3-19_n78                               | 3                 | 0.6                    |
|                                           | 19                | 0.3                    |
|                                           | n78               | 0.8                    |
| DC_3-19_n79                               | 3                 | 0.3                    |
|                                           | 19                | 0.3                    |
| DC_3-20_n1                                | 3                 | 0.3                    |
|                                           | 20                | 0.3                    |
|                                           | n1                | 0.3                    |
| DC_3-20_n7                                | 3                 | 0.5                    |
|                                           | 20                | 0.3                    |
|                                           | n7                | 0.5                    |
| DC_3-20_n8                                | 3                 | 0.3                    |
|                                           | 20                | 0.4                    |
|                                           | n8                | 0.4                    |
| DC_3-20_n28                               | 3                 | 0.3                    |
|                                           | 20                | 0.5                    |
|                                           | n28               | 0.5                    |
| DC_3-20_n38                               | 3                 | 0.5                    |
|                                           | 20                | 0.3                    |
|                                           | n38               | 0.5                    |
| DC_3-20_n41                               | 3                 | 0.5                    |
|                                           | 20                | 0.3                    |
|                                           | n41               | 0.5 <sup>3</sup>       |
| DC_3-20_n78                               |                   | 1.2 <sup>4</sup>       |
|                                           | 3                 | 0.5                    |
|                                           | 20                | 0.3                    |
| DC_3_n20-n78                              | n78               | 0.8                    |
|                                           | 3                 | 0.5                    |
|                                           | n20               | 0.3                    |
| DC_3-21_n77                               | n78               | 0.8                    |
|                                           | 3                 | 0.8                    |
|                                           | 21                | 0.9                    |
| DC_3-21_n78                               | n77               | 0.8                    |
|                                           | 3                 | 0.8                    |
|                                           | 21                | 0.9                    |
| DC_3-21_n79                               | n78               | 0.8                    |
|                                           | 3                 | 0.8                    |
|                                           | 21                | 0.9                    |
| DC_3-28_n5                                | 3                 | 0.3                    |
|                                           | 28                | 0.5                    |
|                                           | n5                | 0.5                    |
| DC_3-28_n7                                | 3                 | 0.5                    |
|                                           | 28                | 0.3                    |
|                                           | n7                | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB)             |
|--------------------------------|-------------------|------------------------------------|
| DC_3_n28-n40                   | 3                 | 0.5                                |
|                                | n28               | 0.3                                |
|                                | n40               | 0.5                                |
| DC_3-28_n40                    | 3                 | 0.5                                |
|                                | 28                | 0.3                                |
|                                | n40               | 0.5                                |
| DC_3-28_n41                    | 3                 | 0.5                                |
|                                | 28                | 0.5                                |
|                                | n41               | 0.3 <sup>3</sup> /0.8 <sup>4</sup> |
| DC_3-28_n77<br>DC_3_n28-n77    | 3                 | 0.6                                |
|                                | 28 or n28         | 0.5                                |
|                                | n77               | 0.8                                |
| DC_3-28_n78                    | 3                 | 0.5                                |
|                                | 28                | 0.3                                |
|                                | n78               | 0.8                                |
| DC_3_n28-n78                   | 3                 | 0.5                                |
|                                | n28               | 0.3                                |
|                                | n78               | 0.8                                |
| DC_3-32_n78                    | 3                 | 0.6                                |
|                                | n78               | 0.8                                |
| DC_3-38_n78                    | 3                 | 0.6                                |
|                                | n78               | 0.8                                |
| DC_3-40_n1                     | 3                 | 0.5                                |
|                                | 40                | 0.5                                |
|                                | n1                | 0.5                                |
| DC_3_n40-n41                   | 3                 | 0.5                                |
|                                | n40               | 0.5                                |
|                                | n41               | 0.5 <sup>3</sup>                   |
|                                |                   | 0.8 <sup>4</sup>                   |
| DC_3_n40-n78                   | 3                 | 0.6                                |
|                                | n40               | 0.5                                |
|                                | n78               | 0.8                                |
| DC_3_n40-n79                   | 3                 | 0.5                                |
|                                | n40               | 0.5                                |
| DC_3-41_n28                    | 3                 | 0.5                                |
|                                | 41                | 0.3 <sup>3</sup> /0.8 <sup>4</sup> |
|                                | n28               | 0.3                                |
| DC_3-(n)41                     | 3                 | 0.5                                |
|                                | 41                | 0.3 <sup>3</sup>                   |
|                                |                   | 0.8 <sup>4</sup>                   |
|                                | n41               | 0.3 <sup>3</sup>                   |
| DC_3-41_n41                    | 3                 | 0.8 <sup>4</sup>                   |
|                                |                   | 0.3 <sup>3</sup>                   |
|                                | n41               | 0.3 <sup>3</sup>                   |
|                                |                   | 0.8 <sup>4</sup>                   |
| DC_3-41-n77                    | 3                 | 0.6                                |
|                                | 41                | 0.3 <sup>3</sup>                   |
|                                |                   | 0.8 <sup>4</sup>                   |
|                                | n77               | 0.8                                |
| DC_3-41_n78<br>DC_3_n41-n78    | 3                 | 0.6                                |
|                                | 41 or n41         | 0.3 <sup>3</sup>                   |
|                                |                   | 0.8 <sup>4</sup>                   |
|                                | n78               | 0.8                                |
| DC_3-41-n79,<br>DC_3_n41-n79   | 3                 | 0.6                                |
|                                | 41 or n41         | 0.3 <sup>3</sup>                   |
|                                |                   | 0.8 <sup>4</sup>                   |
| DC_3_SUL_n41-n80               | 3                 | 0.5                                |
|                                | n41               | 0.3 <sup>3</sup>                   |
|                                |                   | 0.8 <sup>4</sup>                   |

| Inter-band EN-DC configuration                                 | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|----------------------------------------------------------------|-------------------|------------------------|
|                                                                | n80               | 0.5                    |
| DC_3-42_n28                                                    | 3                 | 0.6                    |
|                                                                | 42                | 0.8                    |
|                                                                | n28               | 0.8                    |
| DC_3-42_n77                                                    | 3                 | 0.6                    |
|                                                                | 42                | 0.8                    |
|                                                                | n77               | 0.8                    |
| DC_3-42_n78                                                    | 3                 | 0.6                    |
|                                                                | 42                | 0.8                    |
|                                                                | n78               | 0.8                    |
| DC_3-42_n79                                                    | 3                 | 0.6                    |
|                                                                | 42                | 0.8                    |
| DC_3_n75-n78                                                   | 3                 | 0.6                    |
|                                                                | n78               | 0.8                    |
| DC_3_n77-n79                                                   | 3                 | 0.6                    |
|                                                                | n77               | 0.8                    |
| DC_3_SUL_n77-n80                                               | 3                 | 0.6                    |
|                                                                | n77               | 0.8                    |
|                                                                | n80               | 0.6                    |
| DC_3_SUL_n77-n84                                               | 3                 | 0.6                    |
|                                                                | n77               | 0.8                    |
|                                                                | n84               | 0.6                    |
| DC_3_n78-n79                                                   | 3                 | 0.6                    |
|                                                                | n78               | 0.8                    |
|                                                                | n79               | 0.5                    |
| DC_3_SUL_n78-n80                                               | 3                 | 0.6                    |
|                                                                | n78               | 0.8                    |
|                                                                | n80               | 0.6                    |
| DC_3_SUL_n78-n82                                               | 3                 | 0.5                    |
|                                                                | n78               | 0.8                    |
|                                                                | n82               | 0.3                    |
| DC_3_SUL_n78-n84                                               | 3                 | 0.6                    |
|                                                                | n78               | 0.8                    |
|                                                                | n84               | 0.6                    |
| DC_5-7_n71                                                     | 5                 | 0.5                    |
|                                                                | 7                 | 0.3                    |
|                                                                | n71               | 0.6                    |
| DC_5-7_n78, DC_5-7-7_n78, DC_5_n7-n78                          | 5                 | 0.6                    |
|                                                                | 7 or n7           | 0.6                    |
|                                                                | n78               | 0.8                    |
| DC_5_(n)12                                                     | 5                 | 0.8                    |
|                                                                | 12                | 0.4                    |
|                                                                | n12               | 0.4                    |
| DC_5-13_n2                                                     | 5                 | 0.5                    |
|                                                                | 13                | 0.5                    |
|                                                                | n2                | 0.3                    |
| DC_5-30_n66                                                    | 5                 | 0.3                    |
|                                                                | 30                | 0.3                    |
|                                                                | n66               | 0.5                    |
| DC_5-41_n79                                                    | 5                 | 0.3                    |
|                                                                | 41                | 0.3                    |
| DC_5-66_n2<br>DC_5-5-66_n2<br>DC_5-66-66_n2<br>DC_5-5-66-66_n2 | 5                 | 0.3                    |
|                                                                | 66                | 0.5                    |
|                                                                | n2                | 0.5                    |
| DC_5-66_n5<br>DC_5-66-66_n5                                    | 5                 | 0.3                    |
|                                                                | 66                | 0.3                    |
|                                                                | n5                | 0.3                    |
| DC_5-66_n66<br>DC_5-5-66_n66                                   | 5                 | 0.3                    |

| Inter-band EN-DC configuration            | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|-------------------------------------------|-------------------|------------------------|
| DC_5-66-66_n66<br>DC_5-5-66-66_n66        |                   |                        |
|                                           | 66                | 0.3                    |
|                                           | n66               | 0.3                    |
| DC_5-66_n71                               | 5                 | 0.5                    |
|                                           | 66                | 0.3                    |
|                                           | n71               | 0.5                    |
| DC_5-66_n78                               | 5                 | 0.6                    |
|                                           | 66                | 0.6                    |
|                                           | n78               | 0.8                    |
| DC_5-66_n66                               | 5                 | 0.3                    |
|                                           | 66                | 0.3                    |
|                                           | n66               | 0.3                    |
| DC_7_n1-n40                               | n1                | 0.6                    |
|                                           | 7                 | 0.8                    |
|                                           | n40               | 0.9                    |
| DC_7_n1-n78                               | 7                 | 0.6                    |
|                                           | n1                | 0.6                    |
|                                           | n78               | 0.8                    |
| DC_7_n3-n78                               | 7                 | 0.6                    |
|                                           | n3                | 0.6                    |
|                                           | n78               | 0.8                    |
| DC_7_n7-n78                               | 7                 | 0.5                    |
|                                           | n7                | 0.5                    |
|                                           | n78               | 0.8                    |
| DC_7-8_n1<br>DC_7-7-8_n1                  | 7                 | 0.6                    |
|                                           | 8                 | 0.6                    |
|                                           | n1                | 0.5                    |
| DC_7-8_n3                                 | 7                 | 0.5                    |
|                                           | 8                 | 0.6                    |
|                                           | n3                | 0.5                    |
| DC_7_n8-n40                               | 7                 | 0.5                    |
|                                           | n8                | 0.6                    |
|                                           | n40               | 0.6                    |
| DC_7-8_n77                                | 7                 | 0.5                    |
|                                           | 8                 | 0.6                    |
|                                           | n77               | 0.8                    |
| DC_7-8_n78<br>DC_7-7-8_n78<br>DC_7_n8-n78 | 7                 | 0.5                    |
|                                           | 8 or n8           | 0.6                    |
|                                           | n78               | 0.8                    |
| DC_7-13_n66                               | 7                 | 0.5                    |
|                                           | 13                | 0.3                    |
|                                           | n66               | 0.5                    |
| DC_7-20_n1                                | 7                 | 0.6                    |
|                                           | 20                | 0.3                    |
|                                           | n1                | 0.5                    |
| DC_7-20_n3                                | 7                 | 0.5                    |
|                                           | 20                | 0.3                    |
|                                           | n3                | 0.5                    |
| DC_7-20_n8                                | 7                 | 0.3                    |
|                                           | 20                | 0.4                    |
|                                           | n8                | 0.4                    |
| DC_7-20_n28                               | 7                 | 0.3                    |
|                                           | 20                | 0.6                    |
|                                           | n28               | 0.6                    |
| DC_7-20_n78                               | 7                 | 0.3                    |
|                                           | 20                | 0.3                    |
|                                           | n78               | 0.8                    |
| DC_7-28_n3                                | 7                 | 0.5                    |
|                                           | 28                | 0.3                    |
|                                           | n3                | 0.5                    |

| Inter-band EN-DC configuration                                     | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------------------------------------------|-------------------|------------------------|
| DC_7-28_n5                                                         | 7                 | 0.3                    |
|                                                                    | 28                | 0.5                    |
|                                                                    | n5                | 0.5                    |
| DC_7-28_n7                                                         | 7                 | 0.3                    |
|                                                                    | 28                | 0.3                    |
|                                                                    | n7                | 0.3                    |
| DC_7_n28-n40                                                       | 7                 | 0.5                    |
|                                                                    | n28               | 0.3                    |
|                                                                    | n40               | 0.6                    |
| DC_7-28_n40                                                        | 7                 | 0.5                    |
|                                                                    | 28                | 0.3                    |
|                                                                    | n40               | 0.6                    |
| DC_7-28_n78                                                        | 7                 | 0.3                    |
|                                                                    | 28                | 0.3                    |
|                                                                    | n78               | 0.8                    |
| DC_7_n28-n78                                                       | 7                 | 0.3                    |
|                                                                    | n28               | 0.3                    |
|                                                                    | n78               | 0.8                    |
| DC_7-40_n1                                                         | 7                 | 0.8                    |
|                                                                    | 40                | 0.9                    |
|                                                                    | n1                | 0.6                    |
| DC_7-46_n78                                                        | 7                 | 0.5                    |
|                                                                    | n78               | 0.8                    |
| DC_7-66_n38                                                        | 66                | 0.5                    |
| DC_7-66_n66<br>DC_7-7-66_n66                                       | 7                 | 0.5                    |
|                                                                    | 66                | 0.5                    |
|                                                                    | n66               | 0.5                    |
| DC_7-66_n71<br>DC_7-66-66_n71                                      | 7                 | 0.5                    |
|                                                                    | 66                | 0.5                    |
|                                                                    | n71               | 0.5                    |
| DC_7-66_n78<br>DC_7-7-66_n78<br>DC_7-66-66_n78<br>DC_7-7-66-66_n78 | 7                 | 0.5                    |
|                                                                    | 66                | 0.5                    |
| DC_7_n66-n78<br>DC_7-7_n66-n78                                     | 7                 | 0.5                    |
|                                                                    | n66               | 0.6                    |
|                                                                    | n78               | 0.8                    |
| DC_7_SUL_n78-n80                                                   | 7                 | 0.6                    |
|                                                                    | n80               | 0.6                    |
|                                                                    | n78               | 0.8                    |
| DC_8_n1-n78                                                        | 8                 | 0.6                    |
|                                                                    | n1                | 0.3                    |
|                                                                    | n78               | 0.8                    |
| DC_8_n3-n28                                                        | 8                 | 0.6                    |
|                                                                    | n3                | 0.3                    |
|                                                                    | n28               | 0.5                    |
| DC_8-11_n3                                                         | 8                 | 0.3                    |
|                                                                    | 11                | 0.8                    |
|                                                                    | n3                | 0.9                    |
| DC_8-11_n77                                                        | 8                 | 0.6                    |
|                                                                    | 11                | 0.4                    |
|                                                                    | n77               | 0.8                    |
| DC_8-11_n78                                                        | 8                 | 0.6                    |
|                                                                    | 11                | 0.4                    |
|                                                                    | n78               | 0.8                    |
| DC_8-20_n78                                                        | 8                 | 0.6                    |
|                                                                    | 20                | 0.6                    |
|                                                                    | n78               | 0.8                    |
| DC_8_n28-n77                                                       | 8                 | 0.6                    |
|                                                                    | n28               | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
|                                | n77               | 0.8                    |
| DC_8_n40-n41                   | 8                 | 0.3                    |
|                                | n40               | 0.3                    |
|                                | n41               | 0.3                    |
| DC_8_n40-n79                   | 8                 | 0.3                    |
|                                | n40               | 0.3                    |
| DC_8_n41-n79                   | 8                 | 0.3                    |
|                                | n41               | 0.3                    |
| DC_8_SUL_n41-n81               | 8                 | 0.3                    |
|                                | n41               | 0.3                    |
|                                | n81               | 0.3                    |
| DC_8-42_n28                    | 8                 | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n28               | 0.8                    |
| DC_8-42_n77                    | 8                 | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_8_SUL_n78-n80               | 8                 | 0.6                    |
|                                | n80               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_8_SUL_n78- n81              | 8                 | 0.6                    |
|                                | n78               | 0.8                    |
|                                | n81               | 0.6                    |
| DC_11-18_n77                   | 11                | 0.4                    |
|                                | 18                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_11-18_n78                   | 11                | 0.4                    |
|                                | 18                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_12_(n)5                     | 5                 | 0.8                    |
|                                | 12                | 0.4                    |
|                                | n5                | 0.8                    |
| DC_12_n7-n78                   | 12                | 0.5                    |
|                                | n7                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_12-30_n2                    | 12                | 0.3                    |
|                                | 30                | 0.3                    |
|                                | n2                | 0.5                    |
| DC_12-30_n66                   | 12                | 0.8                    |
|                                | 30                | 0.3                    |
|                                | n66               | 0.5                    |
| DC_12-66_n2                    | 12                | 0.8                    |
|                                | 66                | 0.5                    |
|                                | n2                | 0.5                    |
| DC_12-66_n25                   | 12                | 0.8                    |
|                                | 66                | 0.5                    |
|                                | n25               | 0.5                    |
| DC_12-66_n66                   | 12                | 0.8                    |
|                                | 66                | 0.3                    |
|                                | n66               | 0.3                    |
| DC_13-46_n5                    | 13                | 0.5                    |
|                                | n5                | 0.5                    |
| DC_13-48_n2                    | 13                | 0.3                    |
|                                | 48                | 0.8                    |
|                                | n2                | 0.6                    |
| DC_13-48_n66                   | 13                | 0.3                    |
|                                | 48                | 0.8                    |
|                                | n66               | 0.6                    |
| DC_13-66_n2<br>DC_13-66-66_n2  | 13                | 0.3                    |
|                                | 66                | 0.5                    |
|                                | n2                | 0.5                    |
| DC_13-66_n48                   | 13                | 0.3                    |

| Inter-band EN-DC configuration  | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|---------------------------------|-------------------|------------------------|
| DC_13-66-66_n48                 |                   |                        |
|                                 | 66                | 0.6                    |
|                                 | n48               | 0.8                    |
| DC_13-66_n66<br>DC_13-66-66_n66 | 13                | 0.3                    |
|                                 | 66                | 0.3                    |
|                                 | n66               | 0.3                    |
| DC_14-66_n2<br>DC_14-66-66_n2   | 14                | 0.3                    |
|                                 | 66                | 0.5                    |
|                                 | n2                | 0.5                    |
| DC_14-66_n66                    | 14                | 0.3                    |
|                                 | 66                | 0.3                    |
|                                 | n66               | 0.3                    |
| DC_18_n3-n77                    | 18                | 0.3                    |
|                                 | n3                | 0.6                    |
|                                 | n77               | 0.8                    |
| DC_18_n3-n78                    | 18                | 0.3                    |
|                                 | n3                | 0.6                    |
|                                 | n78               | 0.8                    |
| DC_18-28_n77                    | 18                | 0.5                    |
|                                 | 28                | 0.5                    |
|                                 | n77               | 0.8                    |
| DC_18-28_n78                    | 18                | 0.5                    |
|                                 | 28                | 0.5                    |
|                                 | n78               | 0.8                    |
| DC_18-28_n79                    | 18                | 0.5                    |
|                                 | 28                | 0.5                    |
|                                 |                   |                        |
| DC_18-41_n3                     | 18                | 0.3                    |
|                                 | 41                | $0.3^3/0.8^4$          |
|                                 | n3                | 0.5                    |
| DC_18-41_n77                    | 18                | 0.3                    |
|                                 | 41                | 0.3                    |
|                                 | n77               | 0.8                    |
| DC_18-41_n78                    | 18                | 0.3                    |
|                                 | 41                | 0.3                    |
|                                 | n78               | 0.8                    |
| DC_18-42_n77                    | 18                | 0.3                    |
|                                 | 42                | 0.8                    |
|                                 | n77               | 0.8                    |
| DC_18-42_n78                    | 18                | 0.3                    |
|                                 | 42                | 0.8                    |
|                                 | n78               | 0.8                    |
| DC_18-42_n79                    | 18                | 0.3                    |
|                                 | 42                | 0.8                    |
|                                 |                   |                        |
| DC_19-21_n77                    | 19                | 0.3                    |
|                                 | 21                | 0.4                    |
|                                 | n77               | 0.8                    |
| DC_19-21_n78                    | 19                | 0.3                    |
|                                 | 21                | 0.4                    |
|                                 | n78               | 0.8                    |
| DC_19-21_n79                    | 19                | 0.3                    |
|                                 | 21                | 0.4                    |
|                                 |                   |                        |
| DC_19-42_n77                    | 19                | 0.3                    |
|                                 | 42                | 0.8                    |
|                                 | n77               | 0.8                    |
| DC_19-42_n78                    | 19                | 0.3                    |
|                                 | 42                | 0.8                    |
|                                 | n78               | 0.8                    |
| DC_19-42_n79                    | 19                | 0.3                    |
|                                 | 42                | 0.8                    |
|                                 |                   |                        |
| DC_19_n77-n79                   | 19                | 0.3                    |
|                                 | n77               | 0.8                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_19_n78-n79                  | 19                | 0.3                    |
|                                | n78               | 0.8                    |
|                                | n79               | 0.5                    |
| DC_20_n1-n7                    | 20                | 0.3                    |
|                                | n1                | 0.5                    |
|                                | n7                | 0.6                    |
| DC_20_n1-n28                   | 20                | 0.3                    |
|                                | n1                | 0.6                    |
|                                | n28               | 0.6                    |
| DC_20_n1-n78                   | 20                | 0.3                    |
|                                | n1                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_20_n3-n78                   | 20                | 0.3                    |
|                                | n3                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_20_n7-n28                   | 20                | 0.5                    |
|                                | n7                | 0.3                    |
|                                | n28               | 0.5                    |
| DC_20_n8-n75                   | 20                | 0.4                    |
|                                | n8                | 0.4                    |
| DC_20_n28-n75                  | 20                | 0.5                    |
|                                | n28               | 0.7                    |
| DC_20_n28-n78                  | 20                | 0.6                    |
|                                | n28               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_20-32_n78                   | 20                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_20-(n)38                    | 20                | 0.3                    |
|                                | 38                | 0.3                    |
|                                | n38               | 0.3                    |
| DC_20-38_n78                   | 20                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_20_n41-n78                  | 20                | 0.5                    |
|                                | n41               | 0.3                    |
|                                | n78               | 0.8                    |
| DC_20_n75-n78                  | 20                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_20_n76-n78                  | 20                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_20_SUL_n78-n80              | 20                | 0.3                    |
|                                | n80               | 0.5                    |
|                                | n78               | 0.8                    |
| DC_20_SUL_n78-n82              | 20                | 0.6                    |
|                                | n78               | 0.8                    |
|                                | n82               | 0.6                    |
| DC_20_SUL_n78-n83              | 20                | 0.8                    |
|                                | n78               | 0.8                    |
|                                | n83               | 0.8                    |
| DC_20_n78-n92                  | 20                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_21-42_n77                   | 21                | 0.4                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_21-42_n78                   | 21                | 0.4                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_21-42_n79                   | 21                | 0.4                    |
|                                | 42                | 0.8                    |
| DC_21_n77-n79                  | 21                | 0.4                    |
|                                | n77               | 0.8                    |
| DC_21_n78-n79                  | 21                | 0.4                    |
|                                | n78               | 0.8                    |
|                                | n79               | 0.5                    |

| Inter-band EN-DC configuration                                   | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|------------------------------------------------------------------|-------------------|------------------------|
| DC_25-41_n41<br>DC_25_(n)41<br>DC_25-25-41_n41<br>DC_25-25_(n)41 | 25                | 0.5                    |
|                                                                  | 41                | 0.4 <sup>1</sup>       |
|                                                                  |                   | 0.9 <sup>2</sup>       |
|                                                                  | n41               | 0.4 <sup>1</sup>       |
|                                                                  |                   | 0.9 <sup>2</sup>       |
| DC_28_n3-n77                                                     | 28                | 0.5                    |
|                                                                  | n3                | 0.6                    |
|                                                                  | n77               | 0.8                    |
| DC_28_n3-n78                                                     | 28                | 0.3                    |
|                                                                  | n3                | 0.6                    |
|                                                                  | n78               | 0.8                    |
| DC_28_n7-n78                                                     | 28                | 0.3                    |
|                                                                  | n7                | 0.3                    |
|                                                                  | n78               | 0.8                    |
| DC_28_n8-n78                                                     | 28                | 0.5                    |
|                                                                  | n8                | 0.6                    |
|                                                                  | n78               | 0.3                    |
| DC_28_n40-n78                                                    | 28                | 0.5                    |
|                                                                  | n40               | 0.3 <sup>5</sup>       |
|                                                                  | n78               | 0.8 <sup>5</sup>       |
| DC_28-41_n77                                                     | 28                | 0.5                    |
|                                                                  | 41                | 0.3                    |
|                                                                  | n77               | 0.8                    |
| DC_28-41_n78                                                     | 28                | 0.5                    |
|                                                                  | 41                | 0.3                    |
|                                                                  | n78               | 0.8                    |
| DC_28-41_n79                                                     | 28                | 0.3                    |
|                                                                  | 41                | 0.3                    |
|                                                                  | n79               | 0.8                    |
| DC_28-42_n77                                                     | 28                | 0.5                    |
|                                                                  | 42                | 0.8                    |
|                                                                  | n77               | 0.8                    |
| DC_28-42_n78                                                     | 28                | 0.5                    |
|                                                                  | 42                | 0.8                    |
|                                                                  | n78               | 0.8                    |
| DC_28-42_n79                                                     | 28                | 0.5                    |
|                                                                  | 42                | 0.8                    |
| DC_28_SUL_n78-n83                                                | 28                | 0.5                    |
|                                                                  | n78               | 0.8                    |
|                                                                  | n83               | 0.5                    |
| DC_29-30_n2                                                      | 30                | 0.3                    |
|                                                                  | n2                | 0.5                    |
| DC_29-30-n66                                                     | 30                | 0.3                    |
|                                                                  | n66               | 0.5                    |
| DC_29-66_n2<br>DC_29-66-66_n2                                    | 66                | 0.5                    |
|                                                                  | n2                | 0.5                    |
| DC_30-66_n2                                                      | 30                | 0.3                    |
|                                                                  | 66                | 0.5                    |
|                                                                  | n2                | 0.5                    |
| DC_30-66_n5, DC_30-66-66_n5, DC_30-66-66-66_n5                   | 30                | 0.3                    |
|                                                                  | 66                | 0.5                    |
|                                                                  | n5                | 0.3                    |
| DC_30-66-n66                                                     | 30                | 0.3                    |
|                                                                  | 66                | 0.5                    |
|                                                                  | n66               | 0.5                    |
| DC_39_n40-n41                                                    | 39                | 0.3                    |
|                                                                  | n40               | 0.3                    |
|                                                                  | n41               | 0.3                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_39_n40-n79                  | 39                | 0.3                    |
|                                | n79               | 0.8                    |
| DC_39_n41-n79                  | 39                | 0.5                    |
|                                | n41               | 0.5                    |
|                                | n79               | 0.8                    |
| DC_41_n3-n77                   | 41                | $0.3^3/08^4$           |
|                                | n3                | 0.6                    |
|                                | n77               | 0.8                    |
| DC_41_n3-n78                   | 41                | $0.3^3/08^4$           |
|                                | n3                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_41_n28-n77                  | 41                | 0.3                    |
|                                | n28               | 0.5                    |
|                                | n77               | 0.8                    |
| DC_41_n28-n78                  | 41                | 0.3                    |
|                                | n28               | 0.5                    |
|                                | n78               | 0.8                    |
| DC_(n)41-n78                   | 41                | 0.3                    |
|                                | n41               | 0.3                    |
|                                | n78               | 0.8                    |
| DC_41-42_n77                   | 41                | 0.5                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_41-42_n78                   | 41                | 0.5                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_41-42_n79                   | 41                | 0.3                    |
|                                | 42                | 0.8                    |
| DC_42_n28-n77                  | 42                | 0.5                    |
|                                | n28               | 0.8                    |
|                                | n77               | 0.8                    |
| DC_46-66_n5                    | 66                | 0.3                    |
|                                | n5                | 0.3                    |
| DC_46-66_n25                   | 66                | 0.5                    |
|                                | n25               | 0.5                    |
| DC_48_(n)5                     | 5                 | 0.3                    |
|                                | 48                | 0.3                    |
|                                | n5                | 0.3                    |
| DC_48_(n)12                    | 12                | 0.3                    |
|                                | n12               | 0.3                    |
|                                | 48                | 0.3                    |
| DC_48-66_n12                   | 48                | 0.8                    |
|                                | 66                | 0.6                    |
|                                | n12               | 0.3                    |
| DC_48-66_n71                   | 48                | 0.8                    |
|                                | 66                | 0.6                    |
|                                | n71               | 0.3                    |
| DC_48-66_n5                    | 48                | 0.8                    |
|                                | 66                | 0.6                    |
|                                | n5                | 0.3                    |
| DC_66_n7-n78                   | 66                | 0.6                    |
|                                | n7                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_66_(n)12                    | 12                | 0.8                    |
|                                | n12               | 0.8                    |
|                                | 66                | 0.5                    |
| DC_66_n25-n41                  | 66                | 0.5                    |
|                                | n25               | 0.5                    |
|                                | n41               | $0.8^1$                |
|                                |                   | $1.3^2$                |
| DC_66_n25-n71                  | 66                | 0.5                    |
|                                | n25               | 0.5                    |
|                                | n71               | 0.3                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_66_n38-n78                  | 66                | 0.6                    |
|                                | n38               | 0.5                    |
|                                | n78               | 0.8                    |
| DC_66_n41-n71                  | 66                | 0.5                    |
|                                | n41               | 0.8 <sup>1</sup>       |
|                                |                   | 1.3 <sup>2</sup>       |
| DC_66_n66-n78                  | n71               | 0.6                    |
|                                | 66                | 0.6                    |
|                                | n66               | 0.6                    |
| DC_66_(n)71                    | n78               | 0.8                    |
|                                | 66                | 0.3                    |
|                                | 71                | 0.3                    |
| DC_66-71_n38                   | n71               | 0.3                    |
|                                | 66                | 0.5                    |
|                                | 71                | 0.5                    |
| DC_66-71_n66                   | n38               | 0.8                    |
|                                | 66                | 0.3                    |
|                                | 71                | 0.3                    |
| DC_66-71_n78                   | n66               | 0.3                    |
|                                | 66                | 0.6                    |
|                                | 71                | 0.6                    |
| DC_66_SUL_n78-n86              | n78               | 0.8                    |
|                                | 66                | 0.6                    |
|                                | n86               | 0.6                    |

NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 - 2690 MHz.  
NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 - 2545 MHz.  
NOTE 3: The requirement is applied for UE transmitting on the frequency range of 2515 – 2690 MHz.  
NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.  
NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one NR band and without simultaneous Rx/Tx.

#### 6.2B.4.2.3.3 $\Delta T_{IB,c}$ for EN-DC four bands

**Table 6.2B.4.2.3.3-1:  $\Delta T_{IB,c}$  due to EN-DC(four bands)**

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-3-5_n78                   | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 5                 | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-3-5_n79                   | 1                 | 0.3                    |
|                                | 3                 | 0.3                    |
|                                | 5                 | 0.3                    |
|                                |                   |                        |
| DC_1-3-7_n5                    | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | n5                | 0.3                    |
| DC_1-3-7_n7                    | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | n7                | 0.6                    |
| DC_1-3-7_n8                    | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | n8                | 0.3                    |
| DC_1-3-7_n28                   | 1                 | 0.6                    |

| Inter-band EN-DC configuration                  | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|-------------------------------------------------|-------------------|------------------------|
|                                                 | 3                 | 0.6                    |
|                                                 | 7                 | 0.6                    |
|                                                 | n28               | 0.6                    |
| DC_1-3-7_n40                                    | 1                 | 0.6                    |
|                                                 | 3                 | 0.6                    |
|                                                 | 7                 | 0.8                    |
|                                                 | n40               | 0.9                    |
| DC_1-3-7_n78<br>DC_1-3-7-7_n78<br>DC_1-3_n7-n78 | 1                 | 0.7                    |
|                                                 | 3                 | 0.7                    |
|                                                 | 7 or n7           | 0.7                    |
|                                                 | n78               | 0.8                    |
| DC_1-3-8_n28                                    | 1                 | 0.3                    |
|                                                 | 3                 | 0.3                    |
|                                                 | 8                 | 0.6                    |
|                                                 | n28               | 0.6                    |
| DC_1-3-8_n77                                    | 1                 | 0.6                    |
|                                                 | 3                 | 0.6                    |
|                                                 | 8                 | 0.6                    |
|                                                 | n77               | 0.8                    |
| DC_1-3-8_n78                                    | 1                 | 0.6                    |
|                                                 | 3                 | 0.6                    |
|                                                 | 8                 | 0.6                    |
|                                                 | n78               | 0.8                    |
| DC_1-3-8_n79                                    | 1                 | 0.3                    |
|                                                 | 3                 | 0.3                    |
|                                                 | 8                 | 0.3                    |
| DC_1-3-18_n77                                   | 1                 | 0.6                    |
|                                                 | 3                 | 0.6                    |
|                                                 | 18                | 0.3                    |
|                                                 | n77               | 0.8                    |
| DC_1-3-18_n78                                   | 1                 | 0.6                    |
|                                                 | 3                 | 0.6                    |
|                                                 | 18                | 0.3                    |
|                                                 | n78               | 0.8                    |
| DC_1-3-18_n79                                   | 1                 | 0.3                    |
|                                                 | 3                 | 0.3                    |
|                                                 | 18                | 0.3                    |
| DC_1-3-19_n78                                   | 1                 | 0.6                    |
|                                                 | 3                 | 0.6                    |
|                                                 | 19                | 0.3                    |
|                                                 | n78               | 0.8                    |
| DC_1-3-19_n79                                   | 1                 | 0.3                    |
|                                                 | 3                 | 0.3                    |
|                                                 | 19                | 0.3                    |
| DC_1-3-20_n8                                    | 1                 | 0.6                    |
|                                                 | 3                 | 0.6                    |
|                                                 | 20                | 0.6                    |
|                                                 | n8                | 0.6                    |
| DC_1-3-20_n28                                   | 1                 | 0.3                    |
|                                                 | 3                 | 0.3                    |
|                                                 | 20                | 0.6                    |
|                                                 | n28               | 0.6                    |
| DC_1-3-20_n38                                   | 1                 | 0.5                    |
|                                                 | 3                 | 0.5                    |
|                                                 | 20                | 0.5                    |
|                                                 | n38               | 0.5                    |
| DC_1-3-20_n41                                   | 1                 | 0.5                    |
|                                                 | 3                 | 0.5                    |
|                                                 | 20                | 0.3                    |
|                                                 | n41               | 0.8 <sup>4</sup>       |
|                                                 |                   | 1.3 <sup>5</sup>       |

| Inter-band EN-DC configuration  | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB)             |
|---------------------------------|-------------------|------------------------------------|
| DC_1-3-20_n78                   | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | 20                | 0.3                                |
|                                 | n78               | 0.8                                |
| DC_1-3-21_n77                   | 1                 | 0.6                                |
|                                 | 3                 | 0.8                                |
|                                 | 21                | 0.9                                |
|                                 | n77               | 0.8                                |
| DC_1-3-21_n78                   | 1                 | 0.6                                |
|                                 | 3                 | 0.8                                |
|                                 | 21                | 0.9                                |
|                                 | n78               | 0.8                                |
| DC_1-3-21_n79                   | 1                 | 0.3                                |
|                                 | 3                 | 0.8                                |
|                                 | 21                | 0.9                                |
| DC_1-3-28_n5                    | 1                 | 0.3                                |
|                                 | 3                 | 0.3                                |
|                                 | 28                | 0.6                                |
|                                 | n5                | 0.6                                |
| DC_1-3-28_n7                    | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | 28                | 0.6                                |
|                                 | n7                | 0.6                                |
| DC_1-3-28_n40                   | 1                 | 0.5                                |
|                                 | 3                 | 0.5                                |
|                                 | 28                | 0.6                                |
|                                 | n40               | 0.5                                |
| DC_1-3-28_n77                   | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | 28                | 0.6                                |
|                                 | n77               | 0.8                                |
| DC_1-3-28_n78<br>DC_1-3_n28-n78 | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | 28 or n28         | 0.6                                |
|                                 | n78               | 0.8                                |
| DC_1-3-28_n79                   | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | 28                | 0.6                                |
| DC_1-3_n28-n77                  | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | n28               | 0.6                                |
|                                 | n77               | 0.8                                |
| DC_1-3-32_n78                   | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | n78               | 0.8                                |
| DC_1-3_n38-n78                  | 1                 | 0.5                                |
|                                 | 3                 | 0.6                                |
|                                 | n38               | 0.6                                |
|                                 | n78               | 0.8                                |
| DC_1-3_n40-n78                  | 1                 | 0.5                                |
|                                 | 3                 | 0.6                                |
|                                 | n40               | 0.3 <sup>6</sup>                   |
|                                 | n78               | 0.8 <sup>6</sup>                   |
| DC_1-3-41_n28                   | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                 | n28               | 0.5                                |
| DC_1-3-41_n77                   | 1                 | 0.6                                |
|                                 | 3                 | 0.6                                |
|                                 | 41                | 0.5                                |
|                                 | n77               | 0.8                                |
| DC_1-3-41_n78                   | 1                 | 0.6                                |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB)             |
|--------------------------------|-------------------|------------------------------------|
| DC_1-3_n41-n78                 |                   |                                    |
|                                | 3                 | 0.6                                |
|                                | 41 or n41         | 0.5 <sup>4</sup> /0.8 <sup>5</sup> |
|                                | n78               | 0.8                                |
| DC_1-3-41_n79                  | 1                 | 0.5                                |
|                                | 3                 | 0.5                                |
|                                | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                |                   |                                    |
| DC_1-3-42_n77                  | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 42                | 0.8                                |
|                                | n77               | 0.8                                |
| DC_1-3-42_n78                  | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 42                | 0.8                                |
|                                | n78               | 0.8                                |
| DC_1-3-42_n79                  | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 42                | 0.8                                |
|                                |                   |                                    |
| DC_1-3_n77-n79                 | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | n77               | 0.8                                |
|                                |                   |                                    |
| DC_1-3_n78-n79                 | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | n78               | 0.8                                |
|                                |                   |                                    |
| DC_1-3_SUL_n78-n80             | 1                 | 0.6                                |
|                                | 3, n80            | 0.6                                |
|                                | n78               | 0.8                                |
|                                |                   |                                    |
| DC_1-5-7_n78<br>DC_1-5-7-7_n78 | 1                 | 0.6                                |
|                                | 5                 | 0.6                                |
|                                | 7                 | 0.6                                |
|                                | n78               | 0.8                                |
| DC_1-5-41_n79                  | 1                 | 0.5                                |
|                                | 5                 | 0.3                                |
|                                | 41                | 0.5                                |
|                                |                   |                                    |
| DC_1-7_n3-n78                  | 1                 | 0.5                                |
|                                | 7                 | 0.2                                |
|                                | n3                | 0.6                                |
|                                | n78               | 0.8                                |
| DC_1-7_n7-n78                  | 1                 | 0.6                                |
|                                | 7                 | 0.6                                |
|                                | n7                | 0.6                                |
|                                | n78               | 0.8                                |
| DC_1-7-8_n3                    | 1                 | 0.6                                |
|                                | 7                 | 0.6                                |
|                                | 8                 | 0.3                                |
|                                | n3                | 0.6                                |
| DC_1-7-8_n78                   | 1                 | 0.6                                |
|                                | 7                 | 0.6                                |
|                                | 8                 | 0.6                                |
|                                | n78               | 0.8                                |
| DC_1-7-20_n3                   | 1                 | 0.3                                |
|                                | 7                 | 0.5                                |
|                                | 20                | 0.3                                |
|                                | n3                | 0.5                                |
| DC_1-7-20_n8                   | 1                 | 0.6                                |
|                                | 7                 | 0.6                                |
|                                | 20                | 0.6                                |
|                                | n8                | 0.6                                |
| DC_1-7-20_n28                  | 1                 | 0.5                                |
|                                | 7                 | 0.6                                |
|                                | 20                | 0.6                                |
|                                | n28               | 0.6                                |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-7-20_n78                  | 1                 | 0.6                    |
|                                | 7                 | 0.7                    |
|                                | 20                | 0.4                    |
|                                | n78               | 0.8                    |
| DC_1-7-28_n5                   | 1                 | 0.3                    |
|                                | 7                 | 0.3                    |
|                                | 28                | 0.6                    |
|                                | n5                | 0.6                    |
| DC_1-7-28_n7                   | 1                 | 0.5                    |
|                                | 7                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n7                | 0.6                    |
| DC_1-7-28_n40                  | 1                 | 0.6                    |
|                                | 7                 | 0.8                    |
|                                | 28                | 0.6                    |
|                                | n40               | 0.9                    |
| DC_1-7-28_n78                  | 1                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-7_n28-n78                 | 1                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | n28               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-8_n3-n28                  | 1                 | 0.3                    |
|                                | 8                 | 0.6                    |
|                                | n3                | 0.3                    |
|                                | n28               | 0.6                    |
| DC_1-8-11_n77                  | 1                 | 0.6                    |
|                                | 8                 | 0.6                    |
|                                | 11                | 0.4                    |
|                                | n77               | 0.8                    |
| DC_1-8-11_n78                  | 1                 | 0.3                    |
|                                | 8                 | 0.6                    |
|                                | 11                | 0.4                    |
|                                | n78               | 0.8                    |
| DC_1-8-20_n78                  | 1                 | 0.3                    |
|                                | 8                 | 0.6                    |
|                                | 20                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-8_n28-n77                 | 1                 | 0.6                    |
|                                | 8                 | 0.6                    |
|                                | n28               | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1-8-42_n77                  | 1                 | 0.6                    |
|                                | 8                 | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-11-18_n77                 | 1                 | 0.6                    |
|                                | 11                | 0.4                    |
|                                | 18                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_1-11-18_n78                 | 1                 | 0.3                    |
|                                | 11                | 0.4                    |
|                                | 18                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-18_n3-n77                 | 1                 | 0.6                    |
|                                | 18                | 0.3                    |
|                                | n3                | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1-18_n3-n78                 | 1                 | 0.6                    |
|                                | 18                | 0.3                    |
|                                | n3                | 0.6                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-18-28_n77                 | n78               | 0.8                    |
|                                | 1                 | 0.3                    |
|                                | 18                | 0.5                    |
|                                | 28                | 0.5                    |
|                                | n77               | 0.8                    |
| DC_1-18-28_n78                 | 1                 | 0.3                    |
|                                | 18                | 0.5                    |
|                                | 28                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_1-18-28_n79                 | 1                 | 0.3                    |
|                                | 18                | 0.5                    |
|                                | 28                | 0.5                    |
| DC_1-18-41_n77                 | 1                 | 0.6                    |
|                                | 18                | 0.3                    |
|                                | 41                | 0.5                    |
|                                | n77               | 0.8                    |
| DC_1-18-41_n78                 | 1                 | 0.5                    |
|                                | 18                | 0.3                    |
|                                | 41                | 0.5                    |
| DC_1-18-42_n77                 | 1                 | 0.3                    |
|                                | 18                | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-18-42_n78                 | 1                 | 0.3                    |
|                                | 18                | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_1-18-42_n79                 | 1                 | 0.3                    |
|                                | 18                | 0.3                    |
|                                | 42                | 0.8                    |
| DC_1-19-42_n77                 | 1                 | 0.6                    |
|                                | 19                | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-19-42_n78                 | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_1-19-42_n79                 | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | 42                | 0.8                    |
| DC_1-19_n77-n79                | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_1-19_n78-n79                | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-20_n3-n38                 | 1                 | 0.5                    |
|                                | 20                | 0.3                    |
|                                | n3                | 0.3                    |
|                                | n38               | 0.5                    |
| DC_1-20_n3-n78                 | 1                 | 0.3                    |
|                                | 20                | 0.6                    |
|                                | n3                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-20_n28-n78                | 1                 | 0.3                    |
|                                | 20                | 0.6                    |
|                                | n28               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-20_(n)38                  | 1                 | 0.5                    |
|                                | 20                | 0.3                    |
|                                | 38                | 0.5                    |
|                                | n38               | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-20-38_n78                 | 1                 | 0.3                    |
|                                | 20                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-20_n41-n78                | 1                 | 0.5                    |
|                                | 20                | 0.3                    |
|                                | n41               | 0.5                    |
|                                | n78               | 0.8                    |
| DC_1-21-28_n77                 | 1                 | 0.6                    |
|                                | 21                | 0.4                    |
|                                | 28                | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1-21-28_n78                 | 1                 | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 28                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-21-28_n79                 | 1                 | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 28                | 0.6                    |
| DC_1-21-42_n77                 | 1                 | 0.6                    |
|                                | 21                | 0.4                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-21-42_n78                 | 1                 | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_1-21-42_n79                 | 1                 | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 42                | 0.8                    |
| DC_1-21_n77-n79                | 1                 | 0.3                    |
|                                | 21                | 0.3                    |
|                                | n77               | 0.8                    |
| DC_1-21_n78-n79                | 1                 | 0.3                    |
|                                | 21                | 0.3                    |
|                                | n78               | 0.8                    |
| DC_1-28_n3-n77                 | 1                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n3                | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1-28_n3-n78                 | 1                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n3                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-28_n7-n78                 | 1                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n7                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-28_n40-n78                | 1                 | 0.5                    |
|                                | 28                | 0.5                    |
|                                | n40               | 0.3 <sup>6</sup>       |
|                                | n78               | 0.8 <sup>6</sup>       |
| DC_1-28-42_n77                 | 1                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-28-42_n78                 | 1                 | 0.3                    |
|                                | 28                | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_1-28-42_n79                 | 1                 | 0.3                    |
|                                | 28                | 0.6                    |
|                                | 42                | 0.8                    |
| DC_1-41_n3-n77                 | 1                 | 0.6                    |

| Inter-band EN-DC configuration                                                                   | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------------------------------------------------------------------------|-------------------|------------------------|
|                                                                                                  | 41                | $0.3^4/0.8^5$          |
|                                                                                                  | n3                | 0.6                    |
|                                                                                                  | n77               | 0.8                    |
| DC_1-41_n3-n78                                                                                   | 1                 | 0.6                    |
|                                                                                                  | 41                | $0.3^4/0.8^5$          |
|                                                                                                  | n3                | 0.6                    |
| DC_1-41_n28-n77                                                                                  | n78               | 0.8                    |
|                                                                                                  | 1                 | 0.6                    |
|                                                                                                  | 41                | 0.5                    |
| DC_1-41_n28-n78                                                                                  | n28               | 0.5                    |
|                                                                                                  | n77               | 0.8                    |
|                                                                                                  | 1                 | 0.5                    |
| DC_1-41_n28-n78                                                                                  | 41                | 0.5                    |
|                                                                                                  | n28               | 0.5                    |
|                                                                                                  | n78               | 0.8                    |
| DC_1-41-42_n77                                                                                   | 1                 | 0.5                    |
|                                                                                                  | 41                | 0.5                    |
|                                                                                                  | 42                | 0.8                    |
| DC_1-41-42_n78                                                                                   | n77               | 0.8                    |
|                                                                                                  | 1                 | 0.5                    |
|                                                                                                  | 41                | 0.5                    |
| DC_1-41-42_n78                                                                                   | 42                | 0.8                    |
|                                                                                                  | n78               | 0.8                    |
|                                                                                                  | 1                 | 0.5                    |
| DC_1-41-42_n79                                                                                   | 41                | 0.5                    |
|                                                                                                  | 42                | 0.8                    |
|                                                                                                  | 1                 | 0.6                    |
| DC_1-42_n77-n79                                                                                  | 42                | 0.8                    |
|                                                                                                  | n77               | 0.8                    |
|                                                                                                  | 1                 | 0.3                    |
| DC_1-42_n78-n79                                                                                  | 42                | 0.8                    |
|                                                                                                  | n78               | 0.8                    |
|                                                                                                  | 1                 | 0.3                    |
| DC_2-5_(n)12                                                                                     | 2                 | 0.3                    |
|                                                                                                  | 5                 | 0.8                    |
|                                                                                                  | 12                | 0.4                    |
| DC_2-12_(n)5                                                                                     | n12               | 0.4                    |
|                                                                                                  | 5                 | 0.5                    |
|                                                                                                  | 12                | 0.3                    |
| DC_2-5-48_n12                                                                                    | n5                | 0.5                    |
|                                                                                                  | 2                 | 0.6                    |
|                                                                                                  | 5                 | 0.8                    |
| DC_2-5-48_n71                                                                                    | 48                | 0.8                    |
|                                                                                                  | n12               | 0.4                    |
|                                                                                                  | 2                 | 0.6                    |
| DC_2-5-66_n2                                                                                     | 5                 | 0.5                    |
|                                                                                                  | 48                | 0.8                    |
|                                                                                                  | n71               | 0.5                    |
| DC_2-5-66_n5                                                                                     | 2                 | 0.5                    |
|                                                                                                  | 5                 | 0.3                    |
|                                                                                                  | 66                | 0.5                    |
| DC_2-5-66_n12                                                                                    | n2                | 0.5                    |
|                                                                                                  | 2                 | 0.5                    |
|                                                                                                  | 5                 | 0.3                    |
| DC_2-5-66_n12                                                                                    | 66                | 0.5                    |
|                                                                                                  | n5                | 0.3                    |
|                                                                                                  | 2                 | 0.3                    |
| DC_2-5-66_n12                                                                                    | 5                 | 0.5                    |
|                                                                                                  | 66                | 0.5                    |
|                                                                                                  | n12               | 0.3                    |
| DC_2-5-66_n66<br>DC_2-5-5-66_n66<br>DC_2-5-66-66_n66<br>DC_2-2-5-66-66_n66<br>DC_2-5-5-66-66_n66 | 2                 | 0.5                    |

| Inter-band EN-DC configuration                                                                                   | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
|                                                                                                                  | 5                 | 0.3                    |
|                                                                                                                  | 66                | 0.5                    |
|                                                                                                                  | n66               | 0.5                    |
| DC_2-5-66_n71                                                                                                    | 2                 | 0.5                    |
|                                                                                                                  | 5                 | 0.5                    |
|                                                                                                                  | 66                | 0.5                    |
| DC_2-7_n38-n78<br>DC_2-7-7_n38-n78                                                                               | n71               | 0.5                    |
|                                                                                                                  | 2                 | 0.6                    |
|                                                                                                                  | n78               | 0.8                    |
| DC_2-7-13_n66<br>DC_2-7-7-13_n66                                                                                 | 2                 | 0.5                    |
|                                                                                                                  | 7                 | 0.5                    |
|                                                                                                                  | 13                | 0.3                    |
|                                                                                                                  | n66               | 0.5                    |
| DC_2-7-66_n38<br>DC_2-2-7-66_n38                                                                                 | 2                 | 0.5                    |
|                                                                                                                  | 66                | 0.5                    |
| DC_2-7-66_n66, DC_2-7-7-66_n66                                                                                   | 2                 | 0.5                    |
|                                                                                                                  | 7                 | 0.5                    |
|                                                                                                                  | 66                | 0.5                    |
|                                                                                                                  | n66               |                        |
| DC_2-7-66_n71                                                                                                    | 2                 | 0.5                    |
|                                                                                                                  | 7                 | 0.5                    |
|                                                                                                                  | 66                | 0.5                    |
|                                                                                                                  | n71               | 0.3                    |
| DC_2-7-66_n78<br>DC_2-7-7-66_n78<br>DC_2-7-66-66_n78<br>DC_2-7-7-66-66_n78<br>DC_2-7_n66-n78<br>DC_2-7-7_n66-n78 | 2                 | 0.6                    |
|                                                                                                                  | 7                 | 0.5                    |
|                                                                                                                  | 66                | 0.6                    |
|                                                                                                                  | n78               | 0.8                    |
|                                                                                                                  |                   |                        |
| DC_2-12-30_n2                                                                                                    | 2                 | 0.5                    |
|                                                                                                                  | 12                | 0.3                    |
|                                                                                                                  | 30                | 0.3                    |
|                                                                                                                  | n2                | 0.5                    |
| DC_2-12-30_n66                                                                                                   | 2                 | 0.5                    |
|                                                                                                                  | 12                | 0.8                    |
|                                                                                                                  | 30                | 0.3                    |
|                                                                                                                  | n66               | 0.5                    |
| DC_2-12-48_n5                                                                                                    | 2                 | 0.6                    |
|                                                                                                                  | 12                | 0.4                    |
|                                                                                                                  | 48                | 0.8                    |
|                                                                                                                  | n5                | 0.8                    |
| DC_2-12-66_n5                                                                                                    | 2                 | 0.5                    |
|                                                                                                                  | 12                | 0.8                    |
|                                                                                                                  | 66                | 0.5                    |
|                                                                                                                  | n5                | 0.8                    |
| DC_2-12-66_n2                                                                                                    | 2                 | 0.5                    |
|                                                                                                                  | 12                | 0.3                    |
|                                                                                                                  | 66                | 0.5                    |
|                                                                                                                  | n2                | 0.5                    |
| DC_2-12-66_n66                                                                                                   | 2                 | 0.5                    |
|                                                                                                                  | 12                | 0.8                    |
|                                                                                                                  | 66                | 0.5                    |
|                                                                                                                  | n66               | 0.5                    |
| DC_2-13-66_n2                                                                                                    | 2                 | 0.5                    |
|                                                                                                                  | 13                | 0.3                    |
|                                                                                                                  | 66                | 0.5                    |
|                                                                                                                  | n2                | 0.5                    |

| Inter-band EN-DC configuration     | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|------------------------------------|-------------------|------------------------|
| DC_2-13-66_n5                      | 2                 | 0.5                    |
|                                    | 13                | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n5                | 0.3                    |
| DC_2-13-66_n48                     | 2                 | 0.6                    |
|                                    | 13                | 0.3                    |
|                                    | 66                | 0.6                    |
|                                    | n48               | 0.8                    |
| DC_2-13-66_n66                     | 2                 | 0.5                    |
|                                    | 13                | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n66               |                        |
| DC_2-14-66_n2<br>DC_2-14-66-66_n2  | 2                 | 0.5                    |
|                                    | 14                | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n2                | 0.5                    |
| DC_2-14-66_n66<br>DC_2-2-14-66_n66 | 2                 | 0.5                    |
|                                    | 14                | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n66               | 0.5                    |
| DC_2-29-30_n2                      | 2                 | 0.5                    |
|                                    | 30                | 0.3                    |
|                                    | n2                | 0.5                    |
| DC_2-29-66_n2<br>DC_2-29-66-66_n2  | 2                 | 0.5                    |
|                                    | 66                | 0.5                    |
|                                    | n2                | 0.5                    |
| DC_2-29-66_n66                     | 2                 | 0.5                    |
|                                    | 66                | 0.5                    |
|                                    | n66               | 0.5                    |
| DC_2-30-66_n2<br>DC_2-30-66-66_n2  | 2                 | 0.5                    |
|                                    | 30                | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n2                | 0.5                    |
| DC_2-30-66_n5                      | 2                 | 0.5                    |
|                                    | 30                | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n5                | 0.3                    |
| DC_2-30-66_n66                     | 2                 | 0.5                    |
|                                    | 30                | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n66               | 0.5                    |
| DC_2-46_n41-n66                    | 2                 | 0.5                    |
|                                    | n41               | 0.5                    |
|                                    | n66               | 0.5                    |
| DC_2-46_n41-n71                    | 2                 | 0.5                    |
|                                    | n41               | 0.5                    |
|                                    | n71               | 0.6                    |
| DC_2-46-48_n5                      | 2                 | 0.6                    |
|                                    | 48                | 0.8                    |
|                                    | n5                | 0.3                    |
| DC_2-46-48_n66                     | 2                 | 0.6                    |
|                                    | 48                | 0.8                    |
|                                    | n66               | 0.6                    |
| DC_2-46-66_n41                     | 2                 | 0.5                    |
|                                    | 66                | 0.5                    |
|                                    | n41               | 0.8 <sup>1</sup>       |
| DC_2-46-66_n71                     |                   | 1.3 <sup>2</sup>       |
|                                    | 66                | 0.3                    |
|                                    | n71               | 0.3                    |
| DC_2-46_n66_n71                    | 2                 | 0.5                    |

| Inter-band EN-DC configuration     | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB)             |
|------------------------------------|-------------------|------------------------------------|
| DC_2-48_(n)5                       | n66               | 0.5                                |
|                                    | n71               | 0.3                                |
|                                    | 2                 | 0.6                                |
|                                    | 5                 | 0.3                                |
|                                    | 48                | 0.8                                |
| DC_2-48-66_n5                      | n5                | 0.3                                |
|                                    | 2                 | 0.6                                |
|                                    | 48                | 0.8                                |
|                                    | 66                | 0.6                                |
| DC_2-48-66_n12                     | 2                 | 0.6                                |
|                                    | 48                | 0.8                                |
|                                    | 66                | 0.6                                |
|                                    | n12               | 0.3                                |
| DC_2-48-66_n71                     | 2                 | 0.6                                |
|                                    | 48                | 0.8                                |
|                                    | 66                | 0.6                                |
|                                    | n71               | 0.3                                |
| DC_2-66_(n)5                       | 2                 | 0.5                                |
|                                    | 5                 | 0.3                                |
|                                    | 66                | 0.5                                |
|                                    | n5                | 0.3                                |
| DC_2-66_n38-n78                    | 2                 | 0.6                                |
|                                    | 66                | 0.6                                |
|                                    | n38               | 0.9                                |
|                                    | n78               | 0.8                                |
| DC_2-66_n41-n71                    | 2                 | 0.5                                |
|                                    | 66                | 0.5                                |
|                                    | n41               | 0.8 <sup>1</sup>                   |
|                                    |                   | 1.3 <sup>2</sup>                   |
| DC_2-66-71_n38<br>DC_2-2-66-71_n38 | n71               | 0.8                                |
|                                    | 2                 | 0.5                                |
|                                    | 66                | 0.5                                |
|                                    | 71                | 0.3                                |
| DC_2-66-71_n66                     | n38               | 0.5                                |
|                                    | 2                 | 0.5                                |
|                                    | 66                | 0.5                                |
|                                    | 71                | 0.3                                |
| DC_2-66_n66-n78                    | n66               | 0.5                                |
|                                    | 2                 | 0.6                                |
|                                    | 66                | 0.6                                |
|                                    | n66               | 0.6                                |
| DC_2-66_(n)71                      | n78               | 0.8                                |
|                                    | 2                 | 0.5                                |
|                                    | 66                | 0.5                                |
|                                    | 71                | 0.3                                |
| DC_2-66-71_n78<br>DC_2-2-66-71_n78 | n71               |                                    |
|                                    | 2                 | 0.5                                |
|                                    | 66                | 0.5                                |
|                                    | 71                | 0.3                                |
| DC_3-5-7_n78, DC_3-5-7-7_n78       | n78               | 0.5                                |
|                                    | 3                 | 0.6                                |
|                                    | 5                 | 0.6                                |
|                                    | 7                 | 0.6                                |
| DC_3-5-41_n79                      | n78               | 0.8                                |
|                                    | 3                 | 0.5                                |
|                                    | 5                 | 0.3 <sup>3</sup>                   |
|                                    | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
| DC_3-7_n1-n78                      | 3                 | 0.7                                |
|                                    | 7                 | 0.7                                |
|                                    | n1                | 0.7                                |
|                                    | n78               | 0.8                                |

| Inter-band EN-DC configuration                                       | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|----------------------------------------------------------------------|-------------------|------------------------|
| DC_3-7_n7-n78                                                        | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | n7                | 0.6                    |
|                                                                      | n78               | 0.8                    |
| DC_3-7-8_n1<br>DC_3-3-7-8_n1<br>DC_3-7-7-8_n1<br>DC_3-3-7-7-8_n1     | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | 8                 | 0.6                    |
|                                                                      | n1                | 0.6                    |
| DC_3-7-8_n77                                                         | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | 8                 | 0.6                    |
|                                                                      | n77               | 0.8                    |
| DC_3-7-8_n78<br>DC_3-3-7-8_n78<br>DC_3-7-7-8_n78<br>DC_3-3-7-7-8_n78 | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | 8                 | 0.6                    |
|                                                                      | n78               | 0.8                    |
| DC_3-7-20_n1                                                         | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | 20                | 0.3                    |
|                                                                      | n1                | 0.6                    |
| DC_3-7-20_n8                                                         | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | 20                | 0.6                    |
|                                                                      | n8                | 0.6                    |
| DC_3-7-20_n28                                                        | 3                 | 0.5                    |
|                                                                      | 7                 | 0.5                    |
|                                                                      | 20                | 0.6                    |
|                                                                      | n28               | 0.5                    |
| DC_3-7-20_n78                                                        | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | 20                | 0.3                    |
|                                                                      | n78               | 0.8                    |
| DC_3-7-28_n5                                                         | 3                 | 0.5                    |
|                                                                      | 7                 | 0.5                    |
|                                                                      | 28                | 0.4                    |
|                                                                      | n5                | 0.4                    |
| DC_3-7-28_n7                                                         | 3                 | 0.5                    |
|                                                                      | 7                 | 0.5                    |
|                                                                      | 28                | 0.3                    |
|                                                                      | n7                | 0.5                    |
| DC_3-7-28_n40                                                        | 3                 | 0.6                    |
|                                                                      | 7                 | 0.8                    |
|                                                                      | 28                | 0.3                    |
|                                                                      | n40               | 0.9                    |
| DC_3-7-28_n78                                                        | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | 28                | 0.6                    |
|                                                                      | n78               | 0.8                    |
| DC_3-7_n28-n78                                                       | 3                 | 0.6                    |
|                                                                      | 7                 | 0.6                    |
|                                                                      | n28               | 0.6                    |
|                                                                      | n78               | 0.8                    |
| DC_3-7-40_n1                                                         | 3                 | 0.6                    |
|                                                                      | 7                 | 0.8                    |
|                                                                      | 40                | 0.9                    |
|                                                                      | n1                | 0.6                    |
| DC_3-7_SUL_n78-n80                                                   | 7                 | 0.6                    |
|                                                                      | 3, n80            | 0.6                    |

| Inter-band EN-DC configuration   | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|----------------------------------|-------------------|------------------------|
| DC_3-8_n1-n78<br>DC_3-3-8_n1-n78 | n78               | 0.8                    |
|                                  | 3                 | 0.6                    |
|                                  | 8                 | 0.6                    |
|                                  | n1                | 0.6                    |
|                                  | n78               | 0.8                    |
| DC_3-8-20_n78                    | 3                 | 0.6                    |
|                                  | 8                 | 0.6                    |
|                                  | 20                | 0.6                    |
|                                  | n78               | 0.8                    |
| DC_3-8_n28-n77                   | 3                 | 0.6                    |
|                                  | 8                 | 0.6                    |
|                                  | n28               | 0.5                    |
|                                  | n77               | 0.8                    |
| DC_3-8-42_n77                    | 3                 | 0.6                    |
|                                  | 8                 | 0.6                    |
|                                  | 42                | 0.8                    |
|                                  | n77               | 0.8                    |
| DC_3-8_SUL_n78-n80               | 3, n80            | 0.6                    |
|                                  | 8                 | 0.6                    |
|                                  | n78               | 0.8                    |
| DC_3-18-42_n77                   | 3                 | 0.3                    |
|                                  | 18                | 0.3                    |
|                                  | 42                | 0.8                    |
|                                  | n77               | 0.8                    |
| DC_3-18-42_n78                   | 3                 | 0.3                    |
|                                  | 18                | 0.3                    |
|                                  | 42                | 0.8                    |
|                                  | n78               | 0.8                    |
| DC_3-18-42_n79                   | 3                 | 0.6                    |
|                                  | 18                | 0.3                    |
|                                  | 42                | 0.8                    |
| DC_3-19-21_n77                   | 3                 | 0.8                    |
|                                  | 19                | 0.3                    |
|                                  | 21                | 0.9                    |
|                                  | n77               | 0.8                    |
| DC_3-19-21_n78                   | 3                 | 0.8                    |
|                                  | 19                | 0.3                    |
|                                  | 21                | 0.9                    |
|                                  | n78               | 0.8                    |
| DC_3-19-21_n79                   | 3                 | 0.8                    |
|                                  | 19                | 0.3                    |
|                                  | 21                | 0.9                    |
|                                  | n77               | 0.8                    |
| DC_3-19-42_n77                   | 3                 | 0.6                    |
|                                  | 19                | 0.3                    |
|                                  | 42                | 0.8                    |
|                                  | n77               | 0.8                    |
| DC_3-19-42_n78                   | 3                 | 0.6                    |
|                                  | 19                | 0.3                    |
|                                  | 42                | 0.8                    |
|                                  | n78               | 0.8                    |
| DC_3-19-42_n79                   | 3                 | 0.6                    |
|                                  | 19                | 0.3                    |
|                                  | 42                | 0.8                    |
| DC_3-19_n77-n79                  | 3                 | 0.6                    |
|                                  | 19                | 0.3                    |
|                                  | n77               | 0.8                    |
| DC_3-19_n78-n79                  | 3                 | 0.6                    |
|                                  | 19                | 0.3                    |
|                                  | n78               | 0.8                    |
| DC_3-20_n1-n7                    | 3                 | 0.6                    |
|                                  | 20                | 0.3                    |
|                                  | n1                | 0.6                    |

| Inter-band EN-DC configuration     | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB)             |
|------------------------------------|-------------------|------------------------------------|
| DC_3-20_n1-n28                     | n7                | 0.6                                |
|                                    | 3                 | 0.3                                |
|                                    | 20                | 0.3                                |
|                                    | n1                | 0.6                                |
|                                    | n28               | 0.6                                |
| DC_3-20_n7-n28                     | 3                 | 0.5                                |
|                                    | 20                | 0.5                                |
|                                    | n7                | 0.5                                |
|                                    | n28               | 0.5                                |
| DC_3-20_n28-n78                    | 3                 | 0.6                                |
|                                    | 20                | 0.6                                |
|                                    | n28               | 0.6                                |
|                                    | n78               | 0.8                                |
| DC_3-20-38_n78<br>DC_3-20_n38-n78  | 3                 | 0.6                                |
|                                    | 20                | 0.6                                |
|                                    | 38 or n38         | 0.5                                |
|                                    | n78               | 0.8                                |
| DC_3-20_n41-n78                    | 3                 | 0.5                                |
|                                    | 20                | 0.3                                |
|                                    | n41               | 0.5                                |
|                                    | n78               | 0.8                                |
| DC_3_20_SUL_n78-n80                | 3, n80            | 0.5                                |
|                                    | 20                | 0.3                                |
|                                    | n78               | 0.8                                |
| DC_3-21-42_n77                     | 3                 | 0.8                                |
|                                    | 21                | 0.9                                |
|                                    | 42                | 0.8                                |
|                                    | n77               | 0.8                                |
| DC_3-21-42_n78                     | 3                 | 0.8                                |
|                                    | 21                | 0.9                                |
|                                    | 42                | 0.8                                |
|                                    | n78               | 0.8                                |
| DC_3-21-42_n79                     | 3                 | 0.8                                |
|                                    | 21                | 0.9                                |
|                                    | 42                | 0.8                                |
| DC_3-21_n77-n79                    | 3                 | 0.8                                |
|                                    | 21                | 0.9                                |
|                                    | n77               | 0.8                                |
| DC_3-21_n78-n79                    | 3                 | 0.8                                |
|                                    | 21                | 0.9                                |
|                                    | n78               | 0.8                                |
| DC_3-28_n7-n78<br>DC_3-3-28_n7-n78 | 3                 | 1                                  |
|                                    | 28                | 0.5                                |
|                                    | n7                | 0.8                                |
|                                    | n78               | 0.8                                |
| DC_3-28_n40-n78                    | 3                 | 0.6                                |
|                                    | 28                | 0.5                                |
|                                    | n40               | 0.3 <sup>6</sup>                   |
|                                    | n78               | 0.8 <sup>6</sup>                   |
| DC_3-28-41_n78                     | 3                 | 1                                  |
|                                    | 28                | 0.5                                |
|                                    | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                    | n78               | 0.8                                |
| DC_3-28-42_n77                     | 3                 | 0.6                                |
|                                    | 28                | 0.5                                |
|                                    | 42                | 0.8                                |
|                                    | n77               | 0.8                                |
| DC_3-28-42_n78                     | 3                 | 0.6                                |
|                                    | 28                | 0.5                                |
|                                    | 42                | 0.8                                |
|                                    | n78               | 0.8                                |

| Inter-band EN-DC configuration   | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB)             |
|----------------------------------|-------------------|------------------------------------|
| DC_3-28-42_n79                   | 3                 | 0.6                                |
|                                  | 28                | 0.5                                |
|                                  | 42                | 0.8                                |
| DC_3-41_n28-n77                  | 3                 | 0.6                                |
|                                  | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                  | n28               | 0.5                                |
|                                  | n77               | 0.8                                |
| DC_3-41_n28-n78                  | 3                 | 1.0                                |
|                                  | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                  | n28               | 0.5                                |
|                                  | n78               | 0.8                                |
| DC_3-41-42_n77                   | 3                 | 1                                  |
|                                  | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                  | 42                | 0.8                                |
|                                  | n77               | 0.8                                |
| DC_3-41-42_n78                   | 3                 | 1                                  |
|                                  | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                  | 42                | 0.8                                |
|                                  | n78               | 0.8                                |
| DC_3-41-42_n79                   | 3                 | 1                                  |
|                                  | 41                | 0.3 <sup>4</sup> /0.8 <sup>5</sup> |
|                                  | 42                | 0.8                                |
| DC_3-42_n77-n79                  | 3                 | 0.6                                |
|                                  | 42                | 0.8                                |
|                                  | n77               | 0.8                                |
| DC_3-42_n78-n79                  | 3                 | 0.6                                |
|                                  | 42                | 0.8                                |
|                                  | n78               | 0.8                                |
| DC_5-48_(n)12                    | 5                 | 0.8                                |
|                                  | 12                | 0.4                                |
|                                  | 48                | 0.3                                |
|                                  | n12               | 0.8                                |
| DC_5-48-66_n12                   | 5                 | 0.8                                |
|                                  | 48                | 0.8                                |
|                                  | 66                | 0.6                                |
|                                  | n12               | 0.4                                |
| DC_5-48-66_n71                   | 5                 | 0.5                                |
|                                  | 48                | 0.8                                |
|                                  | 66                | 0.6                                |
|                                  | n71               | 0.5                                |
| DC_5-66_(n)12                    | 5                 | 0.3                                |
|                                  | 12                | 0.8                                |
|                                  | 66                | 0.8                                |
|                                  | n12               | 0.8                                |
| DC_7-8_n1-n78<br>DC_7-7-8_n1-n78 | 7                 | 0.6                                |
|                                  | 8                 | 0.6                                |
|                                  | n1                | 0.6                                |
|                                  | n78               | 0.8                                |
| DC_7-13-66_n66                   | 7                 | 0.5                                |
|                                  | 13                | 0.3                                |
|                                  | 66                | 0.5                                |
|                                  | n66               |                                    |
| DC_7-20_n3-n78                   | 7                 | 0.5                                |
|                                  | 20                | 0.6                                |
|                                  | n3                | 0.5                                |
|                                  | n78               | 0.8                                |
| DC_7-20_n28-n78                  | 7                 | 0.3                                |
|                                  | 20                | 0.6                                |
|                                  | n28               | 0.6                                |
|                                  | n78               | 0.8                                |
| DC_7-28_n3-n78                   | 7                 | 0.8                                |
|                                  | 28                | 0.5                                |

| Inter-band EN-DC configuration       | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------------|-------------------|------------------------|
| DC_7-28_n7-n78                       | n3                | 1                      |
|                                      | n78               | 0.8                    |
|                                      | 7                 | 0.3                    |
|                                      | 28                | 0.3                    |
|                                      | n7                | 0.3                    |
| DC_7-66_n66-n78<br>DC_7-7-66_n66-n78 | n78               | 0.8                    |
|                                      | 7                 | 0.5                    |
|                                      | 66                | 0.6                    |
|                                      | n66               | 0.6                    |
|                                      | n78               | 0.8                    |
| DC_12-30-66_n2                       | 12                | 0.8                    |
|                                      | 30                | 0.3                    |
|                                      | 66                | 0.5                    |
|                                      | n2                | 0.5                    |
|                                      | 12                | 0.8                    |
| DC_12-30-66_n66                      | 30                | 0.3                    |
|                                      | 66                | 0.5                    |
|                                      | n66               | 0.5                    |
|                                      | 12                | 0.8                    |
|                                      | 30                | 0.3                    |
| DC_12-48_(n)5                        | 5                 | 0.8                    |
|                                      | 12                | 0.4                    |
|                                      | 48                | 0.3                    |
|                                      | n5                | 0.8                    |
|                                      | 12                | 0.8                    |
| DC_12-48-66_n5                       | 48                | 0.8                    |
|                                      | 66                | 0.8                    |
|                                      | n5                | 0.3                    |
|                                      | 12                | 0.8                    |
|                                      | 48                | 0.8                    |
| DC_12-66_(n)5                        | 5                 | 0.3                    |
|                                      | 12                | 0.8                    |
|                                      | 66                | 0.8                    |
|                                      | n5                | 0.3                    |
|                                      | 12                | 0.8                    |
| DC_18-41_n3-n77                      | 18                | 0.3                    |
|                                      | 41                | $0.3^4/0.8^5$          |
|                                      | n3                | 0.6                    |
|                                      | n77               | 0.8                    |
|                                      | 18                | 0.3                    |
| DC_18-41_n3-n78                      | 41                | $0.3^4/0.8^5$          |
|                                      | n3                | 0.6                    |
|                                      | n78               | 0.8                    |
|                                      | 18                | 0.3                    |
|                                      | 41                | $0.3^4/0.8^5$          |
| DC_19-21-42_n77                      | 19                | 0.3                    |
|                                      | 21                | 0.4                    |
|                                      | 42                | 0.8                    |
|                                      | n77               | 0.8                    |
|                                      | 19                | 0.3                    |
| DC_19-21-42_n78                      | 21                | 0.4                    |
|                                      | 42                | 0.8                    |
|                                      | n78               | 0.8                    |
|                                      | 19                | 0.3                    |
|                                      | 21                | 0.4                    |
| DC_19-21-42_n79                      | 42                | 0.8                    |
|                                      | 19                | 0.3                    |
|                                      | 21                | 0.4                    |
|                                      | 42                | 0.8                    |
|                                      | 19                | 0.3                    |
| DC_19-21_n77-n79                     | 21                | 0.4                    |
|                                      | n77               | 0.8                    |
|                                      | 19                | 0.3                    |
|                                      | 21                | 0.4                    |
|                                      | n78               | 0.8                    |
| DC_19-21_n78-n79                     | 19                | 0.3                    |
|                                      | 21                | 0.4                    |
|                                      | n78               | 0.8                    |
|                                      | 19                | 0.3                    |
|                                      | 21                | 0.4                    |
| DC_19-42_n77-n79                     | 42                | 0.8                    |
|                                      | n77               | 0.8                    |
|                                      | 19                | 0.3                    |
|                                      | 42                | 0.8                    |
|                                      | n78               | 0.8                    |
| DC_19-42_n78-n79                     | 19                | 0.3                    |
|                                      | 42                | 0.8                    |
|                                      | n78               | 0.8                    |
|                                      | 19                | 0.3                    |
|                                      | 42                | 0.8                    |
| DC_21-28-42_n77                      | 21                | 0.4                    |

| Inter-band EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 28                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n77               | 0.8                    |
| DC_21-28-42_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 21                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 28                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n78               | 0.8                    |
| DC_21-28-42_n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 21                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 28                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 42                | 0.8                    |
| DC_21-42_n77-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 21                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n77               | 0.8                    |
| DC_21-42_n78-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 21                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n78               | 0.8                    |
| DC_28-41-42_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 28                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 41                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n78               | 0.8                    |
| DC_29-30-66_n2<br>DC_29-30-66-66_n2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 30                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 66                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n2                | 0.5                    |
| DC_29-30-66_n66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 30                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 66                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n66               | 0.5                    |
| DC_46-66_n25-n41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 66                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n25               | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n41               | 0.4 <sup>1</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   | 0.9 <sup>2</sup>       |
| DC_46-66_n25-n71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 66                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n25               | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n71               | 0.3                    |
| DC_46-66_n41-n71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 66                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n41               | 0.4 <sup>1</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   | 0.9 <sup>2</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n71               | 0.6                    |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 - 2690 MHz.<br>NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 - 2545 MHz.<br>NOTE 3: The values in the table reflect what can be achieved with the present state of the art technology. They shall be reconsidered when the state of the art technology progresses.<br>NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2515 – 2690 MHz.<br>NOTE 5: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.<br>NOTE 6: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx.<br>NOTE 7: Void.<br>NOTE 8: Void. |                   |                        |

## 6.2B.4.2.3.4

 $\Delta T_{IB,c}$  for EN-DC five bandsTable 6.2B.4.2.3.4-1:  $\Delta T_{IB,c}$  due to EN-DC (five bands)

| Inter-band EN-DC configuration      | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|-------------------------------------|-------------------|------------------------|
| DC_1-3-5-7_n78,<br>DC_1-3-5-7-7_n78 | 1                 | 0.6                    |
|                                     | 3                 | 0.6                    |
|                                     | 5                 | 0.6                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
|                                | 7                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-3-5-41_n79                | 1                 | 0.5                    |
|                                | 3                 | 0.5                    |
|                                | 5                 | 0.3                    |
|                                | 41                | 0.5 <sup>3</sup>       |
|                                |                   | 0.8 <sup>4</sup>       |
| DC_1-3-7_n7-n78                | 1                 | 0.7                    |
|                                | 3                 | 0.7                    |
|                                | 7                 | 0.7                    |
|                                | n7                | 0.7                    |
|                                | n78               | 0.8                    |
| DC_1-3-7-8_n78                 | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 8                 | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-3-7-20_n8                 | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 20                | 0.6                    |
|                                | n8                | 0.6                    |
| DC_1-3-7-20_n28                | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 20                | 0.6                    |
|                                | n28               | 0.6                    |
| DC_1-3-7-20_n78                | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 20                | 0.6                    |
|                                | n78               | 0.6                    |
| DC_1-3-7-28_n5                 | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n5                | 0.6                    |
| DC_1-3-7-28_n7                 | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n7                | 0.6                    |
| DC_1-3-7-28_n40                | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 7                 | 0.8                    |
|                                | 28                | 0.6                    |
|                                | n40               | 0.9                    |
| DC_1-3-7-28_n78                | 1                 | 0.7                    |
|                                | 3                 | 0.7                    |
|                                | 7                 | 0.7                    |
|                                | 28                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-3-7_n28-n78               | 1                 | 0.7                    |
|                                | 3                 | 0.7                    |
|                                | 7                 | 0.7                    |
|                                | n28               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-3-8-42_n77                | 1                 | 0.6                    |
|                                | 3                 | 0.6                    |
|                                | 8                 | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-3-18-42_n77               | 1                 | 0.6                    |

| Inter-band EN-DC configuration        | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|---------------------------------------|-------------------|------------------------|
|                                       | 3                 | 0.6                    |
|                                       | 18                | 0.3                    |
|                                       | 42                | 0.8                    |
|                                       | n77               | 0.8                    |
| DC_1-3-18-42_n78                      | 1                 | 0.6                    |
|                                       | 3                 | 0.6                    |
|                                       | 18                | 0.3                    |
|                                       | 42                | 0.8                    |
|                                       | n78               | 0.8                    |
| DC_1-3-18-42_n79                      | 1                 | 0.6                    |
|                                       | 3                 | 0.6                    |
|                                       | 18                | 0.3                    |
|                                       | 42                | 0.8                    |
| DC_1-3-19-21_n77                      | 1                 | 0.6                    |
|                                       | 3                 | 0.8                    |
|                                       | 19                | 0.3                    |
|                                       | 21                | 0.9                    |
|                                       | n77               | 0.8                    |
| DC_1-3-19-21_n78                      | 1                 | 0.6                    |
|                                       | 3                 | 0.8                    |
|                                       | 19                | 0.3                    |
|                                       | 21                | 0.9                    |
|                                       | n78               | 0.8                    |
| DC_1-3-19-21_n79                      | 1                 | 0.3                    |
|                                       | 3                 | 0.8                    |
|                                       | 19                | 0.3                    |
|                                       | 21                | 0.9                    |
| DC_1-3-19-42_n77                      | 1                 | 0.6                    |
|                                       | 3                 | 0.6                    |
|                                       | 19                | 0.3                    |
|                                       | 42                | 0.8                    |
|                                       | n77               | 0.8                    |
| DC_1-3-19-42_n78                      | 1                 | 0.6                    |
|                                       | 3                 | 0.6                    |
|                                       | 19                | 0.3                    |
|                                       | 42                | 0.8                    |
|                                       | n78               | 0.8                    |
| DC_1-3-19-42_n79                      | 1                 | 0.6                    |
|                                       | 3                 | 0.6                    |
|                                       | 19                | 0.3                    |
|                                       | 42                | 0.8                    |
| DC_1-3-20_n28-n78                     | 1                 | 0.6                    |
|                                       | 3                 | 0.6                    |
|                                       | 20                | 0.6                    |
|                                       | n28               | 0.6                    |
|                                       | n78               | 0.8                    |
| DC_1-3-20-38_n78<br>DC_1-3-20_n38-n78 | 1                 | 0.3                    |
|                                       | 3                 | 0.6                    |
|                                       | 20                | 0.6                    |
|                                       | 38 or n38         | 0.5                    |
|                                       | n78               | 0.8                    |
| DC_1-3-20_n41-n78                     | 1                 | 0.5                    |
|                                       | 3                 | 0.5                    |
|                                       | 20                | 0.3                    |
|                                       | n41               | 0.5                    |
|                                       | n78               | 0.8                    |
| DC_1-3-21-42_n77                      | 1                 | 0.6                    |
|                                       | 3                 | 0.8                    |
|                                       | 21                | 0.9                    |
|                                       | 42                | 0.8                    |
|                                       | n77               | 0.6                    |
| DC_1-3-21-42_n78                      | 1                 | 0.6                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB)             |
|--------------------------------|-------------------|------------------------------------|
|                                | 3                 | 0.8                                |
|                                | 21                | 0.9                                |
|                                | 42                | 0.8                                |
|                                | n78               | 0.6                                |
| DC_1-3-21-42_n79               | 1                 | 0.6                                |
|                                | 3                 | 0.8                                |
|                                | 21                | 0.9                                |
|                                | 42                | 0.8                                |
| DC_1-3-21_n77-n79              | 1                 | 0.6                                |
|                                | 3                 | 0.8                                |
|                                | 21                | 0.9                                |
|                                | n77               | 0.8                                |
| DC_1-3-21_n78-n79              | 1                 | 0.6                                |
|                                | 3                 | 0.8                                |
|                                | 21                | 0.9                                |
|                                | n78               | 0.8                                |
| DC_1-3-28_n7-n78               | 1                 | 0.7                                |
|                                | 3                 | 0.7                                |
|                                | 28                | 0.6                                |
|                                | n7                | 0.7                                |
|                                | n78               | 0.8                                |
| DC_1-3-28_n40-n78              | 1                 | 0.5                                |
|                                | 3                 | 0.6                                |
|                                | 28                | 0.5                                |
|                                | n40               | 0.3 <sup>5</sup>                   |
|                                | n78               | 0.8 <sup>5</sup>                   |
| DC_1-3-28-42_n77               | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 28                | 0.6                                |
|                                | 42                | 0.8                                |
|                                | n77               | 0.8                                |
| DC_1-3-28-42_n78               | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 28                | 0.6                                |
|                                | 42                | 0.8                                |
|                                | n78               | 0.8                                |
| DC_1-3-28-42_n79               | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 28                | 0.6                                |
|                                | 42                | 0.8                                |
|                                | n77               | 0.8                                |
| DC_1-3-41_n28-n77              | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 41                | 0.3 <sup>3</sup> /0.8 <sup>4</sup> |
|                                | n28               | 0.5                                |
|                                | n77               | 0.8                                |
| DC_1-3-41_n28-n78              | 1                 | 0.5                                |
|                                | 3                 | 0.6                                |
|                                | 41                | 0.3 <sup>3</sup> /0.8 <sup>4</sup> |
|                                | n28               | 0.5                                |
|                                | n78               | 0.8                                |
| DC_1-3-41-42_n77               | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 41                | 0.5                                |
|                                | 42                | 0.8                                |
|                                | n77               | 0.8                                |
| DC_1-3-41-42_n78               | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 41                | 0.5                                |
|                                | 42                | 0.8                                |
|                                | n78               | 0.8                                |
| DC_1-3-41-42_n79               | 1                 | 0.6                                |
|                                | 3                 | 0.6                                |
|                                | 41                | 0.5                                |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-7-20_n3-n78               | 42                | 0.8                    |
|                                | 1                 | 0.3                    |
|                                | 7                 | 0.5                    |
|                                | 20                | 0.6                    |
|                                | n3                | 0.5                    |
|                                | n78               | 0.8                    |
| DC_1-7-20_n28-n78              | 1                 | 0.6                    |
|                                | 7                 | 0.7                    |
|                                | 20                | 0.6                    |
|                                | n28               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-7-28_n7-n78               | 1                 | 0.6                    |
|                                | 7                 | 0.6                    |
|                                | 28                | 0.6                    |
|                                | n7                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-18-41_n3-n77              | 1                 | 0.6                    |
|                                | 18                | 0.3                    |
|                                | 41                | $0.3^3/0.8^4$          |
|                                | n3                | 0.6                    |
|                                | n77               | 0.8                    |
| DC_1-18-41_n3-n78              | 1                 | 0.6                    |
|                                | 18                | 0.3                    |
|                                | 41                | $0.3^3/0.8^4$          |
|                                | n3                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-19-21-42_n77              | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-19-21-42_n78              | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_1-19-21-42_n79              | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 42                | 0.8                    |
| DC_1-19-42_n77-n79             | 1                 | 0.6                    |
|                                | 19                | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-19-42_n78-n79             | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |
| DC_1-20-38_n3-n78              | 1                 | 0.5                    |
|                                | 20                | 0.6                    |
|                                | 38                | 0.5                    |
|                                | n3                | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-21-28-42_n77              | 1                 | 0.6                    |
|                                | 21                | 0.4                    |
|                                | 28                | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n77               | 0.8                    |
| DC_1-21-28-42_n78              | 1                 | 0.3                    |
|                                | 21                | 0.4                    |
|                                | 28                | 0.6                    |
|                                | 42                | 0.8                    |
|                                | n78               | 0.8                    |

| Inter-band EN-DC configuration                                                   | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|----------------------------------------------------------------------------------|-------------------|------------------------|
| DC_1-21-28-42_n79                                                                | 1                 | 0.3                    |
|                                                                                  | 21                | 0.4                    |
|                                                                                  | 28                | 0.6                    |
|                                                                                  | 42                | 0.8                    |
| DC_1-21-42_n77-n79                                                               | 1                 | 0.6                    |
|                                                                                  | 21                | 0.4                    |
|                                                                                  | 42                | 0.8                    |
|                                                                                  | n77               | 0.8                    |
| DC_1-21-42_n78-n79                                                               | 1                 | 0.3                    |
|                                                                                  | 21                | 0.4                    |
|                                                                                  | 42                | 0.8                    |
|                                                                                  | n78               | 0.8                    |
| DC_2-7-13-66_n66                                                                 | 2                 | 0.5                    |
|                                                                                  | 7                 | 0.5                    |
|                                                                                  | 13                | 0.3                    |
|                                                                                  | 66                | 0.5                    |
|                                                                                  | n66               | 0.5                    |
| DC_2-7-66_n66-n78<br>DC_2-7-7-66_n66-n78                                         | 2                 | 0.6                    |
|                                                                                  | 7                 | 0.5                    |
|                                                                                  | 66                | 0.6                    |
|                                                                                  | n66               | 0.6                    |
|                                                                                  | n78               | 0.8                    |
| DC_2-12-30-66_n2                                                                 | 2                 | 0.5                    |
|                                                                                  | 12                | 0.8                    |
|                                                                                  | 30                | 0.3                    |
|                                                                                  | 66                | 0.5                    |
|                                                                                  | n2                | 0.5                    |
| DC_2-12-30-66_n66                                                                | 2                 | 0.5                    |
|                                                                                  | 12                | 0.8                    |
|                                                                                  | 30                | 0.3                    |
|                                                                                  | 66                | 0.5                    |
|                                                                                  | n66               | 0.5                    |
| DC_2-29-30-66_n2                                                                 | 2                 | 0.5                    |
|                                                                                  | 30                | 0.3                    |
|                                                                                  | 66                | 0.5                    |
|                                                                                  | n2                | 0.5                    |
| DC_2-46-66_n41-n71                                                               | 2                 | 0.5                    |
|                                                                                  | 66                | 0.5                    |
|                                                                                  | n41               | 0.4 <sup>1</sup>       |
|                                                                                  |                   | 0.9 <sup>2</sup>       |
| DC_2-46-66_n41-n71                                                               | n71               | 0.6                    |
|                                                                                  | 3                 | 0.6                    |
|                                                                                  | 7                 | 0.6                    |
|                                                                                  | 8                 | 0.6                    |
|                                                                                  | n1                | 0.6                    |
| DC_3-7-8_n1-n78<br>DC_3-3-7-8_n1-n78<br>DC_3-7-7-8_n1-n78<br>DC_3-3-7-7-8_n1-n78 | n78               | 0.8                    |
|                                                                                  | 3                 | 0.6                    |
|                                                                                  | 7                 | 0.6                    |
|                                                                                  | 20                | 0.6                    |
|                                                                                  | n28               | 0.6                    |
| DC_3-7-20_n28-n78                                                                | n78               | 0.8                    |
|                                                                                  | 3                 | 0.6                    |
|                                                                                  | 7                 | 0.6                    |
|                                                                                  | 28                | 0.6                    |
|                                                                                  | n7                | 0.6                    |
| DC_3-7-28_n7-n78                                                                 | n78               | 0.8                    |
|                                                                                  | 3                 | 0.6                    |
|                                                                                  | 7                 | 0.6                    |
|                                                                                  | 28                | 0.6                    |
|                                                                                  | n7                | 0.6                    |
| DC_3-19-21-42_n77                                                                | n78               | 0.8                    |
|                                                                                  | 3                 | 0.8                    |
|                                                                                  | 19                | 0.3                    |
|                                                                                  | 21                | 0.9                    |
| DC_3-19-21-42_n77                                                                | 42                | 0.8                    |
|                                                                                  |                   |                        |

| Inter-band EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
| DC_3-19-21-42_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | n77               | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3                 | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 19                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 21                | 0.9                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n78               | 0.8                    |
| DC_3-19-21-42_n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                 | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 19                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 21                | 0.9                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 42                | 0.8                    |
| DC_3-28-41-42_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                 | 1                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 28                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 41                | 0.3 <sup>3</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | 0.8 <sup>4</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n78               | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 3                 | 1                      |
| DC_19-21-42_n77-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 21                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n77               | 0.8                    |
| DC_19-21-42_n78-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 21                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 42                | 0.8                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n78               | 0.8                    |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 – 2690 MHz.<br>NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 – 2545 MHz.<br>NOTE 3: The requirement is applied for UE transmitting on the frequency range of 2515 – 2690 MHz.<br>NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.<br>NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx |                   |                        |

#### 6.2B.4.2.3.5 $\Delta T_{IB,c}$ for EN-DC six bands

**Table 6.2B.4.2.3.5-1:  $\Delta T_{IB,c}$  due to EN-DC (six bands)**

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta T_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-3-7-20_n28-n78            | 1                 | 0.7                    |
|                                | 3                 | 0.7                    |
|                                | 7                 | 0.7                    |
|                                | 20                | 0.6                    |
|                                | n28               | 0.6                    |
|                                | n78               | 0.8                    |
| DC_1-3-7-28_n7-n78             | 1                 | 0.7                    |
|                                | 3                 | 0.7                    |
|                                | 7                 | 0.7                    |
|                                | 28                | 0.6                    |
|                                | n7                | 0.7                    |
|                                | n78               | 0.8                    |

#### 6.2B.4.2.3a Inter-band NE-DC within FR1

Unless  $\Delta T_{IB,c}$  is specified in this clause, the value of  $\Delta T_{IB,c}$  for the correspondingly specified EN-DC configuration in clause 6.2B.4.2.3 is applicable.

#### 6.2B.4.2.4 Inter-band EN-DC including FR2

##### 6.2B.4.2.4.1 $\Delta T_{IB,c}$ for EN-DC two bands

Unless otherwise stated,  $\Delta T_{IB,c}$  for E-UTRA and FR2 NR bands of inter-band EN-DC combinations defined in table 5.5B.5.1-1 is set to zero.

**Table 6.2B.4.2.4.1-1: Void**

##### 6.2B.4.2.4.2 $\Delta T_{IB,c}$ for EN-DC three bands

Unless otherwise stated,  $\Delta T_{IB,c}$  for FR2 NR bands is set to zero, and  $\Delta T_{IB,c}$  for constituent E-UTRA bands for inter-band EN-DC defined in table 5.5B.5.2-1 is the same as those for the corresponding E-UTRA CA configuration specified in TS 36.101 [4], without the FR2 NR bands.

**Table 6.2B.4.2.4.2-1: Void**

##### 6.2B.4.2.4.3 $\Delta T_{IB,c}$ for EN-DC four bands

Unless otherwise stated,  $\Delta T_{IB,c}$  for FR2 NR bands is set to zero, and  $\Delta T_{IB,c}$  for constituent E-UTRA bands for inter-band EN-DC defined in table 5.5B.5.3-1 is the same as those for the corresponding E-UTRA CA configuration specified in TS 36.101 [4], without the FR2 NR bands.

**Table 6.2B.4.2.4.3-1: Void**

##### 6.2B.4.2.4.4 $\Delta T_{IB,c}$ for EN-DC five bands

Unless otherwise stated,  $\Delta T_{IB,c}$  for FR2 NR bands is set to zero, and  $\Delta T_{IB,c}$  for constituent E-UTRA bands for inter-band EN-DC defined in table 5.5B.5.4-1 is the same as those for the corresponding E-UTRA CA configuration specified in TS 36.101 [4], without the FR2 NR bands.

**Table 6.2B.4.2.4.4-1: Void**

##### 6.2B.4.2.4.5 Void

#### 6.2B.4.2.5 Inter-band EN-DC including both FR1 and FR2

##### 6.2B.4.2.5.1 $\Delta T_{IB,c}$ for EN-DC three bands

Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.6.2-1,  $\Delta T_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta T_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 6.2B.4.2.3.

**Table 6.2B.4.2.5.1-1: Void**

##### 6.2B.4.2.5.2 $\Delta T_{IB,c}$ for EN-DC four bands

Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.6.3-1,  $\Delta T_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta T_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 6.2B.4.2.3.

##### 6.2B.4.2.5.3 $\Delta T_{IB,c}$ for EN-DC five bands

Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.6.4-1,  $\Delta T_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta T_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 6.2B.4.2.3.

#### 6.2B.4.2.5.4 $\Delta T_{IB,c}$ for EN-DC six bands

Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.6.5-1,  $\Delta T_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta T_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 6.2B.4.2.3.

## 6.2B.5 Configured output power for NR-DC

### 6.2B.5.1 Configured output power level

#### 6.2B.5.1.1 Inter-band NR-DC between FR1 and FR2

For both synchronous and non-synchronous inter-band NR-DC [12] with MCG in FR1 and SCG in FR2 combined with one uplink serving cell per CG, the UE is allowed to set its configured maximum output power  $P_{CMAX,c(i),i}$  for serving cell  $c(i)$  of CG  $i$ ,  $i = 1,2$  as specified in clause 6.2.4 of TS 38.101-1 [2] and clause 6.2.4 TS 38.101-2 [3] independently.

## 6.2E Transmitter power for V2X in FR1

### 6.2E.1 UE maximum output power for V2X

#### 6.2E.1.1 UE maximum output power for Intra-band contiguous V2X

For intra-band contiguous V2X operating UE, the allowed UE maximum output power shall be applied in Table 6.2.2-1 [4] for E-UTRA SL transmission or applied in Table 6.2.1-1 [2] for NR SL transmission, respectively.

**Table 6.2E.1.1-1: Maximum output power for V2X combination (continuous sub-blocks)**

| V2X configuration                                                                                                                                                                                                                                                                     | Power class 2 (dBm) | Tolerance (dB) | Power class 3 (dBm) | Tolerance (dB)     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------|---------------------|--------------------|
| V2X_(n)47AA                                                                                                                                                                                                                                                                           |                     |                | 23                  | +2/-3 <sup>1</sup> |
| NOTE 1: If all transmitted resource blocks over all component carriers are confined within $F_{UL\_low}$ and $F_{UL\_low} + 4$ MHz or/and $F_{UL\_high} - 4$ MHz and $F_{UL\_high}$ , the maximum output power requirement is relaxed by reducing the lower tolerance limit by 1.5 dB |                     |                |                     |                    |
| NOTE 2: Power Class 3 is the default power class unless otherwise stated.                                                                                                                                                                                                             |                     |                |                     |                    |
| NOTE 3: Only single switched UL is supported                                                                                                                                                                                                                                          |                     |                |                     |                    |

#### 6.2E.1.2 UE maximum output power for Intra-band non-contiguous V2X

For intra-band non-contiguous V2X operating UE, the allowed UE maximum output power shall be applied in Table 6.2.2-1 [4] for E-UTRA SL transmission or applied in Table 6.2.1-1 [2] for NR SL transmission, respectively.

**Table 6.2E.1.2-1: Maximum output power for V2X combination (non-contiguous sub-blocks)**

| V2X configuration                                                                                                                                                                                                                                                                     | Power class 2 (dBm) | Tolerance (dB) | Power class 3 (dBm) | Tolerance (dB)     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------|---------------------|--------------------|
| V2X_47A_n47A                                                                                                                                                                                                                                                                          |                     |                | 23                  | +2/-3 <sup>1</sup> |
| NOTE 1: If all transmitted resource blocks over all component carriers are confined within $F_{UL\_low}$ and $F_{UL\_low} + 4$ MHz or/and $F_{UL\_high} - 4$ MHz and $F_{UL\_high}$ , the maximum output power requirement is relaxed by reducing the lower tolerance limit by 1.5 dB |                     |                |                     |                    |
| NOTE 2: Power Class 3 is the default power class unless otherwise stated.                                                                                                                                                                                                             |                     |                |                     |                    |
| NOTE 3: Only single switched UL is supported                                                                                                                                                                                                                                          |                     |                |                     |                    |

#### 6.2E.1.3 UE maximum output power for Inter-band V2X

For the NR V2X inter-band con-current operation, the maximum output power is specified in Table 6.2E.1.3-1 for each operating band. The period of measurement shall be at least one sub frame (1ms).

Table 6.2E.1.3-1: Con-current V2X UE Power Class

| V2X con-current operating band Configuration | NR or E-UTRA band | Class 1 (dBm) | Tolerance (dB) | Class 2 (dBm) | Tolerance (dB) | Class 3 (dBm) | Tolerance (dB) | Class 4 (dBm) | Tolerance (dB) |
|----------------------------------------------|-------------------|---------------|----------------|---------------|----------------|---------------|----------------|---------------|----------------|
| V2X_20A_n38A                                 | 20                |               |                |               |                | 23            | $\pm 2^4$      |               |                |
|                                              | n38               |               |                |               |                | 23            | $\pm 2$        |               |                |
| V2X_n71A_47A                                 | n71               |               |                |               |                | 23            | $+2/-2.5$      |               |                |
|                                              | 47                |               |                | 26            | $+2/-3$        | 23            | $+2/-3$        |               |                |

NOTE 1: For the con-current band combinations, the simultaneous transmission and reception of sidelink and Uu interfaces can be supported while operation is agnostic of the service used on each interface.

NOTE 2:  $P_{PowerClass}$  is the maximum output power specified without taking into account the tolerance for each operation band.

NOTE 3: For inter-band con-current operation, the aggregation power apply to the total transmitted power over all component carriers (per UE).

NOTE 4: <sup>4</sup> refers to the transmission bandwidths (Figure 5.6-1) confined within  $F_{UL\_low}$  and  $F_{UL\_low} + 4$  MHz or  $F_{UL\_high} - 4$  MHz and  $F_{UL\_high}$ , the maximum output power requirement is relaxed by reducing the lower tolerance limit by 1.5 dB

## 6.2E.2 UE maximum output power reduction for V2X

### 6.2E.2.1 UE maximum output power reduction for Intra-band V2X

For intra-band V2X operating UE, maximum output power reduction specified in clause 6.2.3G [4] and in clause 6.2E.2 [2] apply, respectively.

### 6.2E.2.2 UE maximum output power reduction for Inter-band V2X

For the inter-band con-current NR V2X operation, the allowed maximum power reduction (MPR) for the maximum output power shall be applied per each component carrier. The MPR requirements in subclause 6.2.3 of TS 36.101 [4] apply for E-UTRA Uu operation in licensed band, and the MPR requirements in subclause 6.2E.2 of TS 38.101-1 [2] apply for NR sidelink operation. The MPR requirements in subclause 6.2.3G of TS 36.101 [4] apply for E-UTRA V2X operation, and the MPR requirements in subclause 6.2.2 of TS 38.101-1 [2] apply for NR Uu operation.

## 6.2E.3 UE additional maximum output power reduction for V2X

### 6.2E.3.1 UE additional maximum output power reduction for Intra-band V2X

For intra-band V2X operating UE, additional maximum output power reduction specified in clause 6.2.4G [4] and in clause 6.2C.3 [2] apply, respectively.

### 6.2E.3.2 UE additional maximum output power reduction for Inter-band V2X

For the inter-band con-current NR V2X operation, the allowed additional maximum power reduction (A-MPR) for the maximum output power shall be applied per each component carrier. The A-MPR requirements in subclause 6.2.3 of TS 36.101 [4] apply for E-UTRA Uu operation in licensed band, and the A-MPR requirements in in subclause 6.2C.3 of TS 38.101-1 [2] apply for NR sidelink operation in Band n47.

## 6.2E.4 Configured output power for V2X

### 6.2E.4.1 UE configured output power for Intra-band V2X

For intra-band V2X operating UE, each UE configured output power specified in clause 6.2.5G [4] and in clause 6.2E.4 [2] apply, respectively.

### 6.2E.4.2 UE configured output power for Inter-band V2X

When a UE is configured for simultaneous NR V2X sidelink and NR uplink transmissions for inter-band con-current operation, the UE is allowed to set its configured maximum output power  $P_{CMAX,c,Uu}$  and  $P_{CMAX,c,V2X}$  for the configured E-

UTRA or NR uplink carrier and the configured NR V2X SL or E-UTRA V2X SL carrier, respectively, and its total configured maximum output power  $P_{\text{CMAX},c}$ . The  $\Delta T_{\text{IB},\text{V2X}}$  of  $P_{\text{CMAX},c,Uu}$  is specified in Table 6.2E.4.2-1.

The configured maximum output power  $P_{\text{CMAX},c,Uu}(p)$  in subframe  $p$  for the configured E-UTRA or NR uplink carrier shall be set within the bounds:

$$P_{\text{CMAX}_L,c,Uu}(p) \leq P_{\text{CMAX},c,Uu}(p) \leq P_{\text{CMAX}_H,c,Uu}(p)$$

where  $P_{\text{CMAX}_L,c,Uu}$  and  $P_{\text{CMAX}_H,c,Uu}$  are the limits for a serving cell  $c$  as specified in subclause 6.2.5 TS 36.101 [4] or 6.2.4 TS 38.101-1 [2].

The configured maximum output power  $P_{\text{CMAX},c,\text{V2X}}(q)$  in slot  $q$  for the configured NR or E-UTRA V2X SL carrier shall be set within the bounds:

$$P_{\text{CMAX},c,\text{V2X}}(q) \leq P_{\text{CMAX}_H,c,\text{V2X}}(q)$$

where  $P_{\text{CMAX}_H,c,\text{V2X}}$  is the limit as specified in subclause 6.2E.4 of TS 38.101-1 [2] or 6.2.5G of TS 36.101 [5].

The total UE configured maximum output power  $P_{\text{CMAX}}(p,q)$  in a subframe  $p$  of E-UTRA uplink carrier and a slot  $q$  of NR V2X sidelink that overlap in time shall be set within the following bounds for synchronous and asynchronous operation unless stated otherwise:

$$P_{\text{CMAX}_L}(p,q) \leq P_{\text{CMAX}}(p,q) \leq P_{\text{CMAX}_H}(p,q)$$

with

$$P_{\text{CMAX}_L}(p,q) = P_{\text{CMAX}_L,c,Uu}(p)$$

$$P_{\text{CMAX}_H}(p,q) = 10 \log_{10} [p_{\text{CMAX}_H,c,Uu}(p) + p_{\text{CMAX}_H,c,\text{V2X}}(q)]$$

where  $p_{\text{CMAX}_H,c,\text{V2X}}$  and  $p_{\text{CMAX}_H,c,Uu}$  are the limits  $P_{\text{CMAX}_H,c,\text{V2X}}(q)$  and  $P_{\text{CMAX}_H,c,Uu}(p)$  expressed in linear scale.

The measured total maximum output power  $P_{\text{UMAX}}$  over both the E-UTRA uplink and NR V2X carriers is

$$P_{\text{UMAX}} = 10 \log_{10} [p_{\text{UMAX},c,Uu} + p_{\text{UMAX},c,\text{V2X}}],$$

where  $p_{\text{UMAX},c,Uu}$  denotes the measured output power of serving cell  $c$  for the configured E-UTRA uplink carrier or NR uplink carrier, and  $p_{\text{UMAX},c,\text{V2X}}$  denotes the measured output power for the configured NR V2X SL carrier or E-UTRA V2X SL carrier expressed in linear scale.

When a UE is configured for synchronous V2X sidelink and uplink transmissions,

$$P_{\text{CMAX}_L}(p,q) - T_{\text{LOW}}(P_{\text{CMAX}_L}(p,q)) \leq P_{\text{UMAX}} \leq P_{\text{CMAX}_H}(p,q) + T_{\text{HIGH}}(P_{\text{CMAX}_H}(p,q))$$

where  $P_{\text{CMAX}_L}(p,q)$  and  $P_{\text{CMAX}_H}(p,q)$  are the limits for the pair  $(p,q)$  and with the tolerances  $T_{\text{LOW}}(P_{\text{CMAX}})$  and  $T_{\text{HIGH}}(P_{\text{CMAX}})$  for applicable values of  $P_{\text{CMAX}}$  specified in Table 6.2E.4-1.  $P_{\text{CMAX}_L}$  may be modified for any overlapping portion of slots  $(p,q)$  and  $(p+1,q+1)$ .

**Table 6.2E.4.2-1:  $\Delta T_{\text{IB},\text{V2X}}$  for inter-band con-current V2X operation (two bands)**

| V2X con-current operating band Configuration                                                                                                                                                                  | Operating Band | $\Delta T_{\text{IB},\text{V2X}}$ [dB] |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------------------------------|
| V2X_20A_n38A                                                                                                                                                                                                  | 20             | 0.0 <sup>1</sup>                       |
| Note 1: The $\Delta T_{\text{IB},\text{V2X}}$ is applied on top of $\Delta T_{\text{IB},c}$ of DC_20A_n38A UE that is considered harmonic trap filter to reduce 3 <sup>rd</sup> harmonic impact from Band 20. |                |                                        |

## 6.3 Output power dynamics

Output power dynamics for EN-DC operations in FR1 and FR2 as specified in TS 38.101-1 [2] and TS 38.101-2 [3], respectively. E-UTRA as specified in TS 36.101 [4]. For intra-band contiguous EN-DC operation in FR1, minimum output power requirements specified in clause 6.3.1 of TS 38.101-1 [2] and clause 6.3.2 of TS 36.101 [4] shall only apply when the power of all NR and E-UTRA carriers are set to minimum value. Similarly, OFF power requirements specified in clause 6.3.2 of TS 38.101-1 [2] and clause 6.3.3 of TS 36.101 [4] shall only apply when the power of all NR and E-UTRA carriers are OFF. The OFF power condition in transmit ON/OFF time mask requirements specified in

clause 6.3.3 of TS 38.101-1 [2] and clause 6.3.4 of TS 36.101 [4] is applicable only when all NR and E-UTRA carriers are OFF. If both E-UTRA and NR transition between ON and OFF states simultaneously, the longer transient time shall apply to both. If either E-UTRA or NR is OFF and the other carrier transitions from OFF to ON, then the transient time associated with that carrier applies.

## 6.3A Output power dynamics for CA

For inter-band NR CA between FR1 and FR2, output power dynamics as specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for FR1 and FR2 respectively.

## 6.3B Output power dynamics for DC

### 6.3B.0 General

The E-UTRA and NR switching time mask defines the observation period between E-UTRA subframe and NR slot/mini-slot boundary. Both E-UTRA subframe and NR slot/mini-slot have ON power transmissions. The ON power is defined as the mean power over the symbol duration excluding any transient period. For E-UTRA subframe or NR slot/mini-slot having OFF power transmission, the general time mask for E-UTRA or NR shall apply.

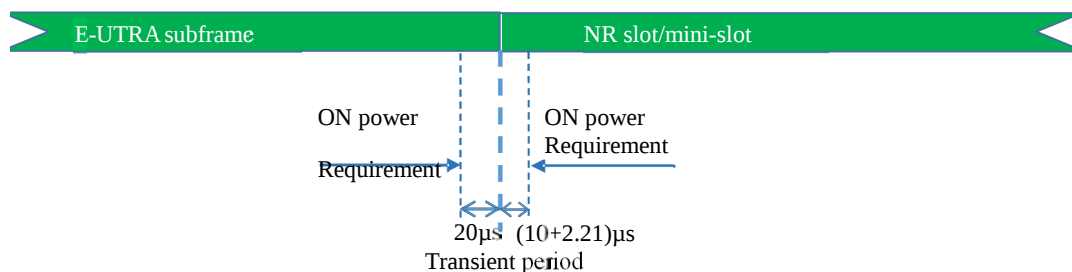
For inter-band EN-DC, output power dynamics requirement for E-UTRA single carrier and CA operation specified in clauses 6.3 and 6.3A of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 6.3 and 6.3A of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.3, 6.3A and 6.3D of TS 38.101-2 [3] apply.

### 6.3B.1 Output power dynamics for EN-DC with UL sharing from UE perspective

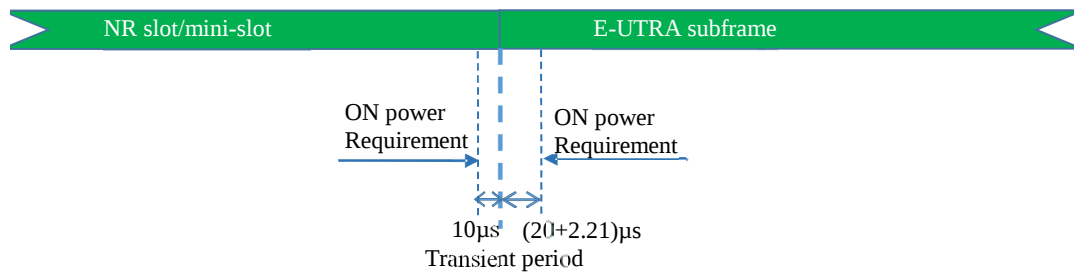
#### 6.3B.1.1 E-UTRA and NR switching time mask for TDM based UL sharing from UE perspective

The E-UTRA and NR switching time mask is applicable for non-simultaneous transmissions between E-UTRA and NR in TDM based UL sharing from the UE perspective in the same channel, which is shared by E-UTRA and NR. The requirement applies on the condition that UE is capable of handling the uplink transmission timing difference between E-UTRA and NR which is less than or equal to  $[2.21]\mu\text{s}$ .

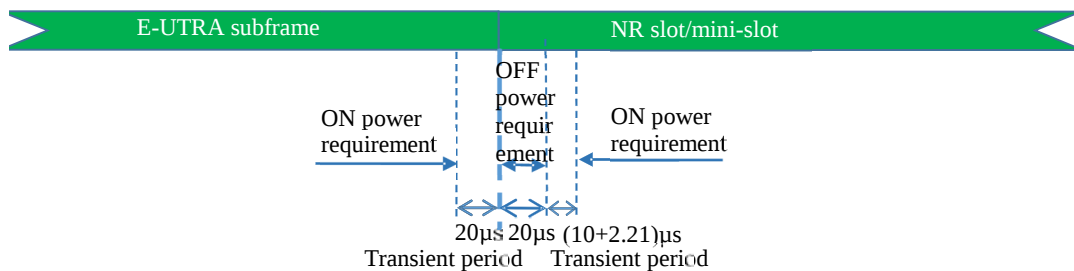
For UEs reporting E-UTRA and NR switching time capability of type 1 with switching time  $< 0.5\text{ us}$  for TDM based UL sharing from UE perspective within FR1 time masks in Figure 6.3B.1.1-1 and Figure 6.3B.1.1-2 shall apply. For UEs reporting E-UTRA and NR switching time capability of type 2 with switching time  $< 20\text{ us}$  for TDM based UL sharing from UE perspective within FR1, time masks in Figure 6.3B.1.1-3 and Figure 6.3B.1.1-4 shall apply. The additional time for the transient period on the succeeding E-UTRA subframe or NR slot is caused by the uplink transmission timing difference, for which the maximum value is  $[2.21]\mu\text{s}$ .



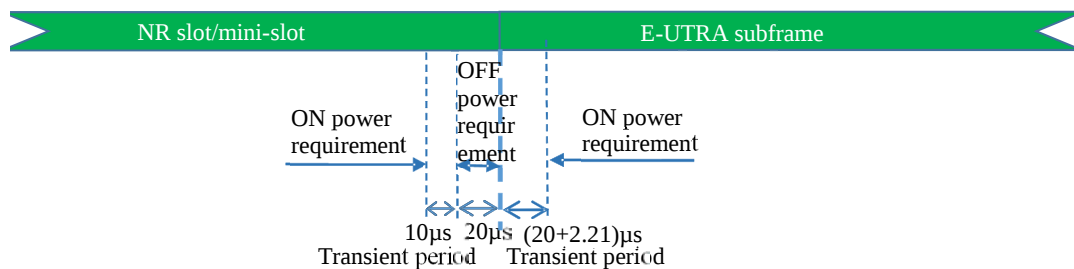
**Figure 6.3B.1.1-1: E-UTRA to NR switching time mask for type 1 for TDM based UL sharing from UE perspective within FR1**



**Figure 6.3B.1.1-2: NR to E-UTRA switching time mask for type 1 for TDM based UL sharing from UE perspective within FR1**



**Figure 6.3B.1.1-3: E-UTRA to NR switching time mask for type 2 for TDM based UL sharing from UE perspective within FR1**



**Figure 6.3B.1.1-4: NR to E-UTRA switching time mask for type 2 for TDM based UL sharing from UE perspective within FR1**

### 6.3B.1a (Void)

## 6.3B.2 Output power dynamics for intra-band EN-DC without dual PA capability

For intra-band contiguous and intra-band non-contiguous EN-DC configurations without dual PA capability, maximum UL switching time is defined as 120 µs and DL reception interruption is allowed during UL switching. Time masks in Figure 6.3B.2-1 and Figure 6.3B.2-2 shall apply.

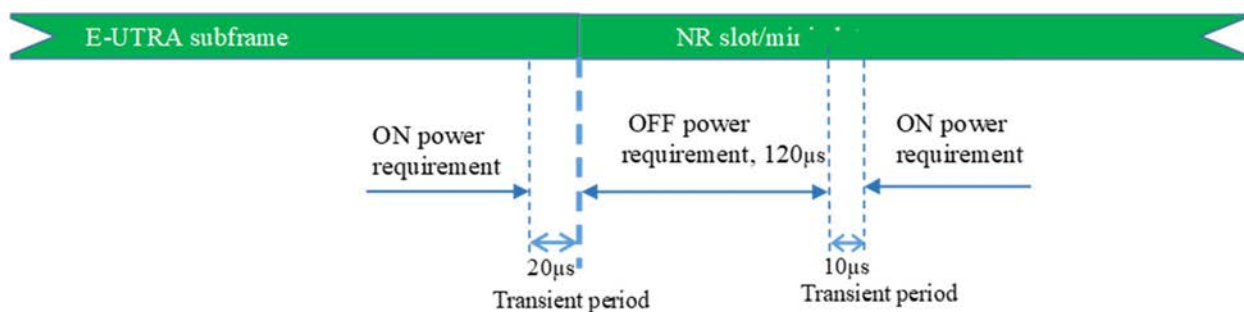


Figure 6.3B.2-1: E-UTRA to NR switching time mask for intra-band EN-DC without dual PA capability when single UL is allowed

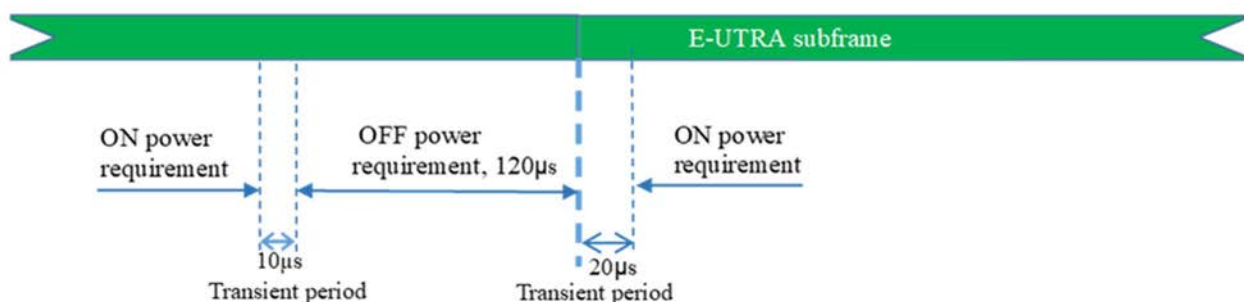


Figure 6.3B.2-2: NR to E-UTRA switching time mask for intra-band EN-DC without dual PA capability when single UL is allowed

### 6.3B.3 Output power dynamics for intra-band EN-DC with dual PA capability

For both intra-band contiguous and non-contiguous EN-DC with dual PA capability, time masks in Figure 6.3B.3-1 and Figure 6.3B.3-2 shall apply.

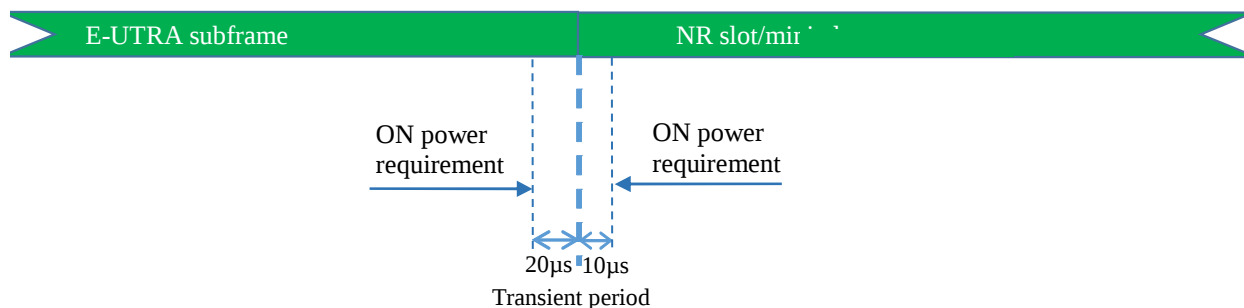


Figure 6.3B.3-1: E-UTRA to NR switching time mask for intra-band EN-DC with dual PA capability

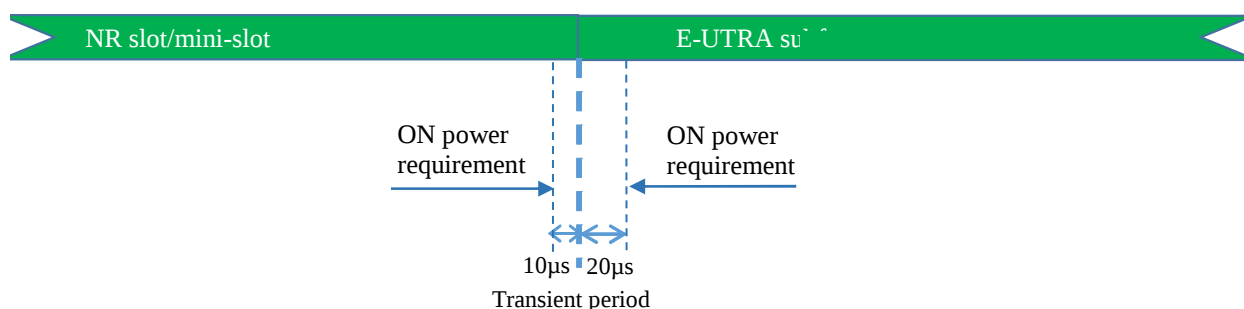


Figure 6.3B.3-2: NR to E-UTRA switching time mask for intra-band EN-DC with dual PA capability

## 6.3B.4 Output power dynamics for switching between two uplink carriers

### 6.3B.4.1 E-UTRA and NR switching time mask between two uplink carriers

In addition to the requirements in 6.3B.0 and the maximum output power requirement specified in Table 6.2B.1.3-1 with inter-band EN-DC (two bands), the switching time mask specified in this sub-clause is applicable for an uplink band pair of a inter-band EN-DC configuration without SUL band when the capability *uplinkTxSwitchingPeriod* is present, and is only applicable for uplink switching mechanisms specified in sub-clause 6.1.6 of TS 38.214 [14], where E-UTRA UL carrier 1 is capable of one transmit antenna connector and NR UL carrier 2 is capable of two transmit antenna connectors, and the two uplink carriers are in different bands with different carrier frequencies. The UE shall support the switch between single layer transmission with one antenna port and two-layer transmission with two antenna ports on the two uplink carriers following the scheduling commands and rank adaptation, i.e., both single layer and two-layer transmission with 2 antenna ports, and single layer transmission with 1 antenna port shall be supported on NR UL carrier 2 as specified in [38.306].

The switching periods described in Figure 6.3B.4.1-1 are only located in NR carrier, and the length of uplink switching period  $X$  is less than the value indicated by UE capability *uplinkTxSwitchingPeriod*.

When switching from one carrier to another, if there is no uplink transmission scheduled or configured on the switch-from carrier for at least the duration of the switching period ( $X \mu\text{s}$ ) before the point in time the UE is scheduled or configured to start the transmission on the switch-to carrier, the switching period is fully contained in the time period between the end of the transmission on the switch-from carrier and the start of the transmission on the switch-to carrier. In addition, the RRC signalling *uplinkTxSwitchingPeriodLocation* is ignored by the UE and does not take effect in this case.

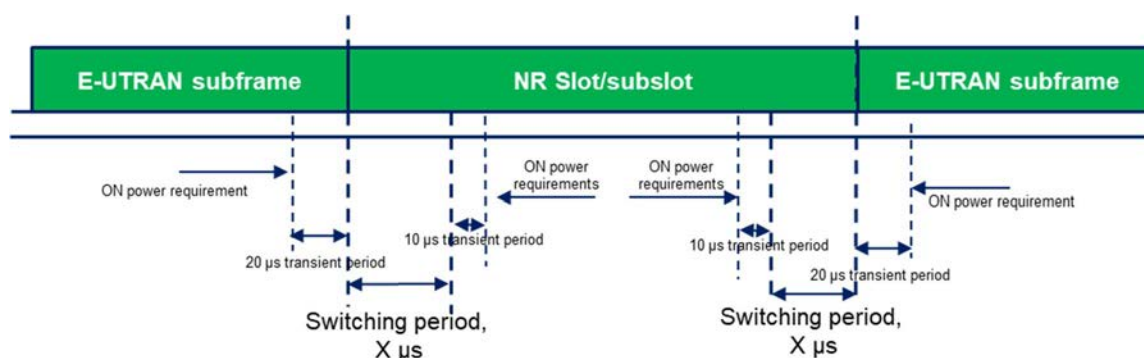


Figure 6.3B.4.1-1: Time mask for switching between E-UTRA UL carrier and NR UL carrier, where the switching period is located in NR carrier

The following applies for the uplink switching cases specified in clause 6.1.6.1 of [14] with *uplinkTxSwitchingOption* set to either *switchedUL* or *dualUL* when the configuration of the location of the switching period by *uplinkTxSwitchingPeriodLocation* is ignored by the UE:

- if an uplink switching is triggered for an uplink transmission starting at  $T_0$  based on higher layer configuration(s) or DCI(s) received before  $T_0 - T_{offset}$  as specified in [14] and the UE is not configured or scheduled with uplink transmissions for a duration of at least the uplink switching gap indicated by *uplinkTxSwitchingPeriod* on any of the carriers before  $T_0$ , transient periods of 10  $\mu$ s are located at the end of the last symbol(s) configured or scheduled on the carriers before  $T_0$  and at the start of the first symbol(s) configured or scheduled or configured at  $T_0$ .

The requirements apply for the case of co-located and synchronized network deployment with the max receiving timing difference of 3 $\mu$ s between the two carriers.

The time mask is applicable to uplink transmissions when configured with *switchedUL* or *dualUL*.

### 6.3B.5 Output power dynamics for inter-band EN-DC

The switching time mask defined in this clause is applicable for a UE indicating support of IE *singleUL-Transmission* for the specific inter-band EN-DC combination for which only single switched UL is supported. The maximum UL switching time is defined as 120  $\mu$ s. Time masks in Figure 6.3B.5-1 and Figure 6.3B.5-2 shall apply.

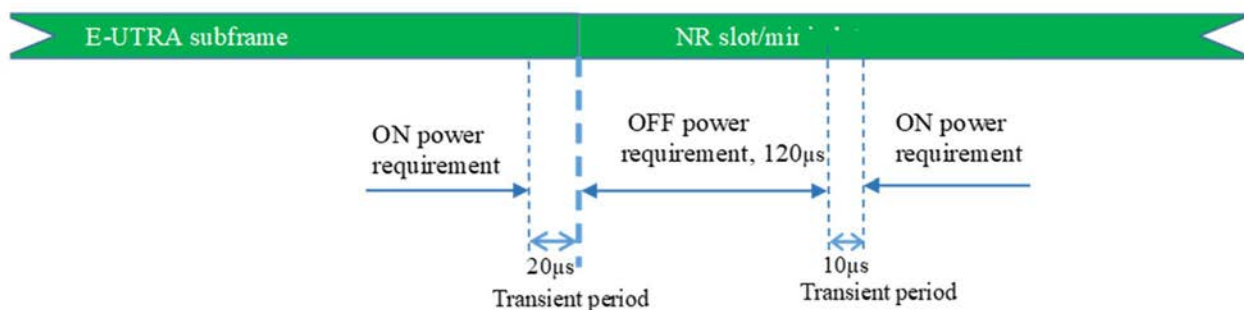


Figure 6.3B.5-1: E-UTRA to NR switching time mask for inter-band EN-DC when only single switched UL is supported

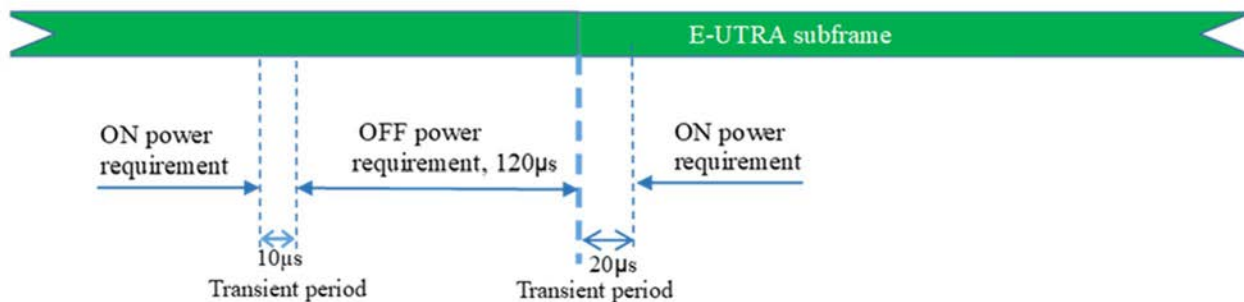


Figure 6.3B.5-2: NR to E-UTRA switching time mask for inter-band EN-DC when only single switched UL is supported

## 6.3E Output power dynamics for V2X

### 6.3E.1 General

The E-UTRA SL and NR SL switching time mask defines the observation period between E-UTRA subframe and NR slot/mini-slot boundary. Both E-UTRA subframe and NR slot/mini-slot have ON power transmissions. The ON power is defined as the mean power over the symbol duration excluding any transient period. For E-UTRA subframe or NR slot/mini-slot having OFF power transmission, the general time mask for E-UTRA or NR shall apply.

## 6.3E.2 Output power dynamics for intra-band V2X operation

For intra-band V2X operation bands specified in subclause 5.3E.1 and 5.3E.2, the SL switching time masks in Figure 6.3E.2-1 shall apply.

The switching time shall be located on the RAT of lower priority when NR SL and LTE SL have different priorities based on priority information specified in TS 38.213. It is up to UE implementation when NR SL and LTE SL have the same priority based on priority information specified in TS 38.213.

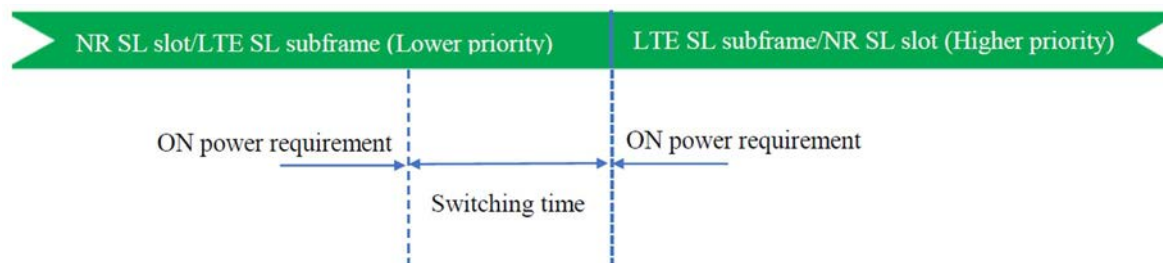


Figure 6.3E.2-1: Time mask for switching between NR SL and E-UTRA SL

## 6.3E.3 Output power dynamics for inter-band V2X con-current operation

For inter-band con-current NR V2X operation, the output power dynamics requirement shall be applied per each component carrier. The output dynamic requirements specified in clause 6.3 of TS 36.101 [4] apply for E-UTRA UL transmission and the requirements specified in clause 6.3E of TS 38.101-1 [2] apply for NR SL transmission. The output dynamic requirements specified in clause 6.3.2G, 6.3.3G, 6.3.4G of TS 36.101 [4] apply for E-UTRA SL transmission and the requirements specified in clause 6.3 of TS 38.101-1 [2] apply for NR UL transmission.

## 6.4 Void

### 6.4A Transmit signal quality for CA

#### 6.4A.1 Frequency error for CA

For inter-band NR CA between FR1 and FR2, frequency error as specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for FR1 and FR2 respectively.

#### 6.4A.2 Transmit modulation quality for CA

For inter-band NR CA between FR1 and FR2, transmit modulation quality as specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for FR1 and FR2 respectively.

### 6.4B Transmit signal quality for DC

#### 6.4B.1 Frequency error for DC

##### 6.4B.1.1 Frequency error for Intra-band contiguous EN-DC

For intra-band contiguous EN-DC, the requirement shall apply on each component carrier as defined in clause 6.5.1 in TS 36.101 [4] and in clause 6.4.1 in TS 38.101-1 [2], respectively.

### 6.4B.1.2 Frequency error for Intra-band non-contiguous EN-DC

For intra-band non-contiguous EN-DC, the requirement shall apply on each component carrier as defined in clause 6.5.1 in TS 36.101 [4] and in clause 6.4.1 in TS 38.101-1 [2], respectively.

### 6.4B.1.3 Frequency error for inter-band EN-DC within FR1

For inter-band EN-DC with uplink assigned to one E-UTRA band and one NR band, the requirements shall apply on each component carrier as defined in clause 6.5.1 in TS 36.101 [4] and in clause 6.4.1 in TS 38.101-1 [2], respectively, with all component carriers active. If multiple component carriers are assigned to one E-UTRA band, the requirements in clauses 6.5.1A in TS 36.101 [4] apply for those component carriers.

### 6.4B.1.3a Frequency error for inter-band NE-DC within FR1

For inter-band NE-DC with uplink assigned to one E-UTRA band and one NR band, the requirements shall apply on each component carrier as defined in clause 6.5.1 in TS 36.101 [4] and in clause 6.4.1 in TS 38.101-1 [2], respectively, with all component carriers active. If multiple component carriers are assigned to one E-UTRA band, the requirements in clauses 6.5.1A in TS 36.101 [4] apply for those component carriers, and if multiple component carriers are assigned to one NR band, the requirements in clauses 6.4A.1 in TS 38.101-1 [2] apply for those component carriers.

### 6.4B.1.4 Frequency error for inter-band EN-DC including FR2

Frequency error requirement for E-UTRA single carrier and CA operation specified in clauses 6.5.1 and 6.5.1A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.4.1, 6.4A.1 and 6.4D.1 of TS 38.101-2 [3] apply.

### 6.4B.1.5 Frequency error for inter-band EN-DC including both FR1 and FR2

Frequency error requirement for E-UTRA single carrier and CA operation specified in clauses 6.5.1 and 6.5.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 6.4.1 and 6.4A.1 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.4.1, 6.4A.1 and 6.4D.1 of TS 38.101-2 [3] apply.

## 6.4B.2 Transmit modulation quality for DC

### 6.4B.2.1 Transmit modulation quality for Intra-band contiguous EN-DC

#### 6.4B.2.1.1 Error Vector Magnitude

For the intra-band contiguous EN-DC with one component carrier per CG the EVM requirement applies with PRB allocation in one of the CG and the other CG unallocated.

The EVM requirements for each CG are according to clause 6.5.2 of TS 36.101 [4] for the MCG and 6.4.2 of TS 38.101-1 [2] for the SCG with EN-DC configured.

#### 6.4B.2.1.2 Carrier leakage

The carrier leakage requirements for each CG are according to clause 6.5.2 of TS 36.101 [4] for the MCG and 6.4.2 of TS 38.101-1 [2] for the SCG with EN-DC configured.

#### 6.4B.2.1.3 In-band emissions

For the MCG the in-band emission requirements in Table 6.5.2A.3.1-1 and 6.5.2A.3.1-2 in TS 36.101 [4] apply within the aggregated transmission bandwidth configuration of the EN-DC bandwidth with the carriers of both CGs active and one single contiguous PRB allocation of bandwidth  $L_{CRB}$  within the MCG at the edge of the said aggregated transmission bandwidth configuration.

For the SCG the in-band emission requirements in Table 6.4.2.3-1 in TS 38.101-1 [2] apply within the aggregated transmission bandwidth configuration of the EN-DC bandwidth with the carriers of both CGs active and one single contiguous PRB allocation of bandwidth  $L_{CRB}$  within the SCG at the edge of the aggregated transmission bandwidth configuration.

## 6.4B.2.2 Transmit modulation quality for Intra-band non-contiguous EN-DC

### 6.4B.2.2.1 Error Vector Magnitude

For the intra-band non-contiguous EN-DC with one component carrier per CG the EVM requirement applies with PRB allocation in one of the CG and the other CG unallocated.

The EVM requirements for each CG are according to clause 6.5.2 of TS 36.101 [4] for the MCG and 6.4.2 of TS 38.101-1 [2] for the SCG with EN-DC configured.

### 6.4B.2.2.2 Carrier leakage

The carrier leakage requirements for each CG are according to clause 6.5.2 of TS 36.101 [4] for the MCG and 6.4.2 of TS 38.101-1 [2] for the SCG with EN-DC configured and PRB allocation only in the CG being measured.

### 6.4B.2.2.3 In-band emissions

For the MCG the in-band emission requirements in Table 6.5.2A.3.1-1 and 6.5.2A.3.1-2 in TS 36.101 [4] apply within the transmission bandwidth configuration of the MCG with the carriers of both CGs active and one single contiguous PRB allocation of bandwidth  $L_{CRB}$  within the MCG at the edge of the transmission bandwidth configuration.

For the SCG the in-band emission requirements in Table 6.4.2.3-1 in TS 38.101-1 [2] apply within the transmission bandwidth configuration of the SCG with the carriers of both CGs active and one single contiguous PRB allocation of bandwidth  $L_{CRB}$  within the SCG at the edge of the transmission bandwidth configuration.

## 6.4B.2.3 Transmit modulation quality for Inter-band EN-DC within FR1

For inter-band EN-DC with uplink assigned to one E-UTRA band and one NR band, the requirements shall apply on each component carrier as defined in clause 6.5.2 in TS 36.101 [4] and in clause 6.4.2 in TS 38.101-1 [2], respectively, with all component carriers active, applies with PRB allocation in one of the CG and the other CG unallocated. If multiple component carriers are assigned to one E-UTRA band, the requirements in subclauses 6.5.2A in TS 36.101 [4] apply for those component carriers.

### 6.4B.2.3a Transmit modulation quality for Inter-band NE-DC within FR1

For inter-band NE-DC with uplink assigned to one E-UTRA band and one NR band, the requirements shall apply on each component carrier as defined in clause 6.5.2 in TS 36.101 [4] and in clause 6.4.2 in TS 38.101-1 [2], respectively, with all component carriers active, applies with PRB allocation in one of the CG and the other CG unallocated. If multiple component carriers are assigned to one E-UTRA band, the requirements in clauses 6.5.2A in TS 36.101 [4] apply for those component carriers, and if multiple component carriers are assigned to one NR band, the requirements in clauses 6.4A.2 in TS 38.101-1 [2] apply for those component carriers.

## 6.4B.2.4 Transmit modulation quality for Inter-band EN-DC including FR2

Transmit modulation quality requirement for E-UTRA single carrier and CA operation specified in clauses 6.5.2 and 6.5.2A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.4.2, 6.4A.2 and 6.4D.2 of TS 38.101-2 [3] apply.

## 6.4B.2.5 Transmit modulation quality for inter-band EN-DC including both FR1 and FR2

Transmit modulation quality requirement for E-UTRA single carrier and CA operation specified in clauses 6.5.2 and 6.5.2A of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 6.4.2 and 6.4A.2 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.4.2, 6.4A.2 and 6.4D.2 of TS 38.101-2 [3] apply.

## 6.4E Transmit signal quality for V2X operation in FR1

### 6.4E.1 Frequency error for V2X

For intra-band V2X operating UE, the requirement shall apply on each component carrier as defined in clause 6.5.1G in TS 36.101 [4] and in clause 6.4E.1 in TS 38.101-1 [2], respectively.

For the inter-band con-current NR V2X operation, the frequency error shall be applied per each component carrier. The requirements specified in subclause 6.5.1 of TS 36.101 [4] shall apply for the E-UTRA uplink in licensed band and the requirements specified in subclause 6.4E.1 of TS 38.101-1 [2] shall apply for the NR sidelink. The requirements specified in subclause 6.5.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink and the requirements specified in subclause 6.4.1 of TS 38.101-1 [2] shall apply for the NR Uu.

### 6.4E.2 Transmit modulation quality for V2X

#### 6.4E.2.1 Transmit modulation quality for Intra-band V2X

##### 6.4E.2.2.1 Error Vector Magnitude

For intra-band V2X operating UE, the requirement shall apply on each SL transmission as defined in clause 6.5.2G.1 in TS 36.101 [4] and in clause 6.4E.2.1 in TS 38.101-1 [2], respectively.

For the inter-band con-current NR V2X operation, the error vector magnitude shall be applied per each component carrier. The requirements specified in subclause 6.5.2 of TS 36.101 [4] shall apply for the E-UTRA uplink in licensed band and the requirements specified in subclause 6.4E.2.1 of TS 38.101-1 [2] shall apply for the NR sidelink. The requirements specified in subclause 6.5.2G.1 of TS 36.101 [4] shall apply for the E-UTRA sidelink and the requirements specified in subclause 6.4.2.1 of TS 38.101-1 [2] shall apply for the NR Uu.

##### 6.4E.2.2.2 Carrier leakage

For intra-band V2X operating UE, the requirement shall apply on each SL transmission as defined in clause 6.5.2G.2 in TS 36.101 [4] and in clause 6.4E.2.2 in TS 38.101-1 [2], respectively.

##### 6.4E.2.2.3 In-band emissions

For intra-band V2X operating UE, the requirement shall apply on each SL transmission as defined in clause 6.5.2G.3 in TS 36.101 [4] and in clause 6.4E.2.3 in TS 38.101-1 [2], respectively.

#### 6.4E.2.2 Transmit modulation quality for Inter-band V2X

For inter-band V2X with transmission assigned to one E-UTRA band and one NR band, the requirements shall apply on each component carrier as defined in clause 6.5.2 in TS 36.101 [4] and in clause 6.4.2 in TS 38.101-1 [2], respectively, with all component carriers active. If multiple component carriers are assigned to one E-UTRA band, the requirements in clauses 6.5.2A in TS 36.101 [4] apply for those component carriers.

## 6.5 Void

### 6.5A Output RF spectrum emissions for CA

#### 6.5A.1 Occupied bandwidth for CA

For inter-band NR CA between FR1 and FR2, occupied bandwidth specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for each frequency range respectively.

## 6.5A.2 Out-of-band emissions for CA

For inter-band NR CA between FR1 and FR2, out-of-band emissions specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for each frequency range respectively.

## 6.5A.3 Spurious emissions for CA

### 6.5A.3.1 Inter-band CA between FR1 and FR2

Unless otherwise stated, for inter-band CA between FR1 and FR2, spurious emission and UE co-existence requirements specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for each component carrier respectively.

**Table 6.5A.3.1-1: Void**

## 6.5A.4 Transmit intermodulation for CA

For inter-band NR CA between FR1 and FR2, transmit intermodulation specified in TS 38.101-1 [2] apply for each component carrier for NR FR1.

## 6.5B Output RF spectrum emissions for DC

### 6.5B.1 Occupied bandwidth for EN-DC

#### 6.5B.1.1 Intra-band contiguous EN-DC

For intra-band contiguous EN-DC the occupied bandwidth is a measure of the bandwidth containing 99% of the total integrated power of the transmitted spectrum. The OBW shall be less than the aggregated channel bandwidth for EN-DC, denoted as ENBW in clause 5.3B.

#### 6.5B.1.2 Intra-band non-contiguous EN-DC

For intra-band non-contiguous EN-DC, occupied bandwidth requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.1 and 6.6.1A of TS 36.101 [4] and for NR single carrier specified in clause 6.5.1 of TS 38.101-1 [2] apply.

#### 6.5B.1.3 Inter-band EN-DC within FR1

Occupied bandwidth requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.1 and 6.6.1A of TS 36.101 [4] and for NR single carrier specified in clause 6.5.1 of TS 38.101-1 [2] apply.

#### 6.5B.1.4 Inter-band EN-DC including FR2

Occupied bandwidth requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.1 and 6.6.1A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.1, 6.5A.1 and 6.5D.1 of TS 38.101-2 [3] apply.

#### 6.5B.1.5 Inter-band EN-DC including both FR1 and FR2

Occupied bandwidth requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.1 and 6.6.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 6.5.1 and 6.5A.1 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.1, 6.5A.1 and 6.5D.1 of TS 38.101-2 [3] apply.

## 6.5B.2 Out-of-band emissions for DC

### 6.5B.2.1 Intra-band contiguous EN-DC

The out of band emissions are unwanted emissions immediately outside the EN-DC aggregated channel bandwidth resulting from the modulation process and non-linearity in the transmitter but excluding spurious emissions. This out of band emission limit is specified in terms of a spectrum emission mask and an adjacent channel leakage power ratio.

Unless otherwise stated, the OOB limits specified for the DC combination in this clause supercede any OOB requirements specified for each sub-block in the respective TS [4] and TS 38.101-1 [2].

The requirements apply to the sum of transmissions across all antenna connectors.

#### 6.5B.2.1.1 Spectrum emissions mask

The spectrum emission mask of the UE applies to frequencies ( $\Delta f_{\text{OoB}}$ ) starting from the  $\pm$  edge of the EN-DC aggregated channel bandwidth. For frequencies offset greater than  $\Delta f_{\text{OoB}}$  as specified in Table 6.5B.2.1.1-1 the spurious requirements in clause 6.5B.3 are applicable.

The general spectrum emission for intra-band contiguous EN-DC is specified in Table 6.5B.2.1.1-1.

The power of any UE emission shall not exceed the levels specified in Table 6.5B.2.1.1-1 for the specified EN-DC aggregated channel bandwidth.

**Table 6.5B.2.1.1-1: General spectrum emission mask for intra-band contiguous EN-DC**

| $\Delta f_{\text{OoB}}$<br>(MHz)                                                        | Spectrum emission limit (dBm)                                    | Measurement<br>bandwidth |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------------------|
| $\pm 0 - 1$                                                                             | $\text{Max}(\text{Round}(10 \cdot \log(0.15/\text{ENBW})), -24)$ | 30 kHz                   |
| $\pm 1 - 5$                                                                             | -10                                                              | 1 MHz                    |
| $\pm 5 - \text{ENBW}$                                                                   | -13                                                              | 1 MHz                    |
| $\pm \text{ENBW} - (\text{ENBW} + 5)$                                                   | -25                                                              | 1 MHz                    |
| NOTE: ENBW refers to the aggregated channel bandwidth in MHz as defined in clause 5.3B. |                                                                  |                          |

#### 6.5B.2.1.2 Additional spectrum emissions mask

##### 6.5B.2.1.2.1 Requirements for network signalled value "NS\_35"

When NS\_35 is indicated in the MCG and NS\_35 is indicated in the SCG, the requirements in Table 6.5B.2.1.2.1-1 apply in the frequency ranges immediately adjacent and outside the aggregated sub-blocks of the EN-DC configuration for DC\_(n)71AA.

**Table 6.5B.2.1.2.1-1: Additional requirements**

| $\Delta f_{\text{OoB}}$<br>(MHz)                                                                                                                                                                                       | Frequency offset of measurement filter<br>centre frequency, $f_{\text{offset}}$        | Minimum<br>requirement<br>(dBm) | Measurement<br>bandwidth |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------|--------------------------|
| $0 \text{ MHz} \leq \Delta f < 0.1 \text{ MHz}$                                                                                                                                                                        | $0.015 \text{ MHz} \leq f_{\text{offset}} < 0.085 \text{ MHz}$                         | -13                             | 30 kHz                   |
| $0.1 \text{ MHz} \leq \Delta f < \text{ENBW}$                                                                                                                                                                          | $0.15 \text{ MHz} \leq f_{\text{offset}} < \text{ENBW} - 0.05 \text{ MHz}$             | -13                             | 100 kHz                  |
| $\text{ENBW} \leq \Delta f < \text{ENBW} + 5 \text{ MHz}$                                                                                                                                                              | $\text{ENBW} + 0.5 \text{ MHz} \leq f_{\text{offset}} < \text{ENBW} + 4.5 \text{ MHz}$ | -25                             | 1 MHz                    |
| NOTE 1: ENBW is the aggregated bandwidth of an E-UTRA sub-block and an adjacent NR sub-block; there is no frequency separation between the said sub-blocks. The sub-block bandwidths include any internal guard bands. |                                                                                        |                                 |                          |

##### 6.5B.2.1.2.2 Requirements for network signalled value "NS\_04"

Additional spectrum emission requirements are signalled by the network to indicate that the UE shall meet an additional requirement for a specific deployment scenario as part of the cell handover/broadcast message.

The Band 41/n41 SEM transition point from -13 dBm/MHz to -25 dBm/MHz is based on the emission bandwidth. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. Since the 26 dB emission bandwidth is implementation dependent, the transmission bandwidths occupied by RBs is used for the SEM. The emission bandwidth for E-UTRA carriers is document in TS 36.101 [4], and the emission bandwidth for NR carriers is documented in TS 38.101-1 [2]. The total emission bandwidth for contiguous intra-band EN-DC is the sum of the emission bandwidth for each CC plus the guard band between contiguous CCs.

When "NS\_04" is indicated in the cell, the power of any UE emission shall not exceed the levels specified in Table 6.5B.2.1.2.2-1.

**Table 6.5B.2.1.2.2-1: DC\_(n)41 SEM with NS\_04**

|                                                                                                                               | Spectrum emission limit (dBm) / measurement bandwidth<br>for each ENBW |           |           |           |             |                          |
|-------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-----------|-----------|-----------|-------------|--------------------------|
| $\Delta f_{\text{OoB}}$<br>MHz                                                                                                | 15<br>MHz                                                              | 20<br>MHz | 40<br>MHz | 50<br>MHz | > 50<br>MHz | Measurement<br>bandwidth |
| $\pm 0 - 1$                                                                                                                   | -10                                                                    | -10       | -10       |           |             | 2 % ENBW                 |
|                                                                                                                               |                                                                        |           |           | -10       |             | 1 MHz                    |
| $\pm 1 - 5$                                                                                                                   | -10                                                                    |           |           |           |             | 1 MHz                    |
| $\pm 5 - X$                                                                                                                   | -13                                                                    |           |           |           |             |                          |
| $\pm X - (\text{ENBW} + 5 \text{ MHz})$                                                                                       | -25                                                                    |           |           |           |             |                          |
| NOTE: X is defined as the sum of the emission bandwidth of the component carriers plus the guard band between contiguous CCs. |                                                                        |           |           |           |             |                          |

### 6.5B.2.1.3 Adjacent channel leakage ratio

For EN-DC operation with an E-UTRA sub-block immediately adjacent to an NR sub-block, the ACLR is defined as the ratio of the filtered mean power centred on the aggregated sub-block bandwidth ENBW to the filtered mean power centred on an adjacent bandwidth of the same size ENBW at nominal channel spacing. The UE shall meet the ACLR minimum requirement EN-DC<sub>ACLR</sub> specified in Table 6.5B.2.1.3-1 with ENBW the sum of the sub-block bandwidths.

The assigned channel power and adjacent channel power are measured with rectangular filters with measurement bandwidths specified in 6.5B.2.1.3-1.

**Table 6.5B.2.1.3-1: ACLR for intra-band EN-DC (contiguous sub-blocks)**

| Parameter                                                                                         | Unit | Value              |
|---------------------------------------------------------------------------------------------------|------|--------------------|
| EN-DC <sub>ACLR</sub> for PC3                                                                     | dBc  | 30                 |
| EN-DC <sub>ACLR</sub> for PC2                                                                     | dBc  | 31                 |
| EN-DC <sub>ACLR</sub> for PC1.5                                                                   | dBc  | 31                 |
| Measurement bandwidth of EN-DC channel                                                            |      | 1.00*ENBW          |
| Measurement bandwidth of adjacent channel                                                         |      | 0.95*ENBW          |
| Frequency offset of adjacent channel                                                              |      | ENBW<br>/<br>-ENBW |
| NOTE 1: ENBW is the aggregated bandwidth in MHz as defined in clause 5.3B.                        |      |                    |
| NOTE 2: The frequency offset is that in between the centre frequencies of the measurement filters |      |                    |

### 6.5B.2.2 Intra-band non-contiguous EN-DC

#### 6.5B.2.2.1 Spectrum emissions mask

The spectral emission mask for intra-band non-contiguous EN-DC is a composite of the emission mask for each CC with the level set to the maximum value from each mask for each frequency outside of the transmission bandwidth of either carrier. A composite spectrum emission mask is a combination of individual CC spectrum emissions masks. Where two masks overlap the most relaxed limit is used. Composite spectrum emission mask applies to frequencies up to  $\pm \Delta f_{\text{OoB}}$  starting from the edges of the sub-blocks. If for some frequency an individual CC spectrum emission mask overlaps with the bandwidth of another CC then the emission mask does not apply for that frequency.

### 6.5B.2.2.2 Additional spectrum emissions mask

When additional spectrum emission mask or masks apply, the additional SEM(s) shall be used to calculate the composite SEM described in 6.5B.2.2.1.

### 6.5B.2.2.3 Adjacent channel leakage ratio

For intra-band non-contiguous EN-DC, the EN-DC Adjacent Channel Leakage power Ratio (EN-DC<sub>ACLR</sub>) is the ratio of the sum of the filtered mean powers centred on the assigned E-UTRA and NR sub-block frequencies to the filtered mean power centred on an adjacent channel frequency at nominal channel spacing. In case the sub-block gap bandwidth  $W_{\text{gap}}$  is smaller than a E-UTRA or NR sub-block bandwidth, no EN-DC<sub>ACLR</sub> requirement is set for the corresponding sub-block for the gap. The assigned EN-DC sub-block power and adjacent channel power are measured with rectangular filters with measurement bandwidths specified in TS 36.101 [4] for the E-UTRA sub-block, and TS 38.101-1 [2] for the NR sub-block. If the measured adjacent channel power is greater than  $-50\text{dBm}$  then the EN-DC<sub>ACLR</sub> shall be higher than the value specified in for E-UTRA<sub>ACLR</sub> and NR<sub>ACLR</sub>.

### 6.5B.2.3 Inter-band EN-DC within FR1

Unless otherwise stated, the OOB requirements specified in clause 6.6.2.1 of TS 36.101 [4], sub-clause 6.6.2 of TS 36.101 [4] and clause 6.5.2 of TS 38.101-1 [2] apply for each component carrier.

#### 6.5B.2.3a (Void)

### 6.5B.2.4 Inter-band EN-DC including FR2

Unless otherwise stated, out-of-band emissions requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.2 of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.2, 6.5A.2 and 6.5D.2 of TS 38.101-2 [3] apply.

### 6.5B.2.5 Inter-band EN-DC including both FR1 and FR2

Unless otherwise stated, out-of-band emissions requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.2 of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 6.5.2 and 6.5A.2 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.2, 6.5A.2 and 6.5D.2 of TS 38.101-2 [3] apply.

## 6.5B.3 Spurious emissions for DC

### 6.5B.3.1 Intra-band contiguous EN-DC

#### 6.5B.3.1.1 General spurious emissions

The general spurious emissions requirements specified in clause 6.6.3.1 of TS 36.101 [4] and clause 6.5.3.1 of TS 38.101-1 [2] apply beyond any frequencies for which the out-of-band emissions requirements in clause 6.5B.2.1 apply.

#### 6.5B.3.1.2 Spurious emission band UE co-existence

The requirements in Table 6.5B.3.1.2-1 apply on each component carrier with all component carriers are active.

**Table 6.5B.3.1.2-1: Requirements for intra-band contiguous EN-DC**

| EN-DC Configuration | Spurious emission                                    |                       |   |                      |                     |           |      |
|---------------------|------------------------------------------------------|-----------------------|---|----------------------|---------------------|-----------|------|
|                     | Protected band                                       | Frequency range (MHz) |   |                      | Maximum Level (dBm) | MBW (MHz) | NOTE |
| DC_(n)71            | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 30, 48, 66 | F <sub>DL_low</sub>   | - | F <sub>DL_high</sub> | -50                 | 1         |      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                               |                     |   |                      |     |     |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---|----------------------|-----|-----|---|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | E-UTRA Band 2, 25, 41, 70,<br>NR Band n77                                                                                                                                     | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -50 | 1   | 2 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | E-UTRA Band 29                                                                                                                                                                | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -38 | 1   | 3 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | E-UTRA Band 71                                                                                                                                                                | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -50 | 1   | 3 |
| DC_(n)41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | E-UTRA Band 1, 2, 3, 4, 5, 8, 10, 11,<br>12, 13, 14, 17, 18, 19, 21, 24, 25, 26,<br>27, 28, 29, 30, 34, 39, 42, 44, 45, 48,<br>50, 51, 66, 70, 71, 73, 74<br>NR Band n77, n78 | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -50 | 1   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Frequency range                                                                                                                                                               | 1884.5              | - | 1915.7               | -41 | 0.3 | 4 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | NR Band n79                                                                                                                                                                   | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -50 | 1   | 2 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | E-UTRA Band 40                                                                                                                                                                | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -40 | 1   |   |
| NOTE 1: F <sub>DL_low</sub> and F <sub>DL_high</sub> refer to each frequency band specified in Table 5.5-1 in 3GPP TS 36.101 [4] or in Table 5.2-1 in 3GPP TS 38.101-1 [2].                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                               |                     |   |                      |     |     |   |
| NOTE 2: As exceptions, measurements with a level up to the applicable requirements defined in Table 6.6.3.1-2 in 3GPP TS 36.101 [4] and Table 6.5.3.1-2 in 3GPP TS 38.101-1 [2] are permitted for each assigned carrier used in the measurement due to 2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> or 5 <sup>th</sup> harmonic spurious emissions. Due to spreading of the harmonic emission the exception is also allowed for the first 1 MHz frequency range immediately outside the harmonic emission on both sides of the harmonic emission. This results in an overall exception interval centred at the harmonic emission of (2 MHz + N x L <sub>CRB</sub> x 180 kHz), where N is 2, 3, 4, 5 for the 2 <sup>nd</sup> , 3 <sup>rd</sup> , 4 <sup>th</sup> or 5 <sup>th</sup> harmonic respectively. The exception is allowed if the measurement bandwidth (MBW) totally or partially overlaps the overall exception interval |                                                                                                                                                                               |                     |   |                      |     |     |   |
| NOTE 3: These requirements also apply for the frequency ranges that are less than F <sub>OOB</sub> (MHz) in Table 6.6.3.1-1, Table 6.6.3.1A-1 in 3GPP TS 36.101 [4] or in Table 6.5.3.1-1 in 3GPP TS 38.101-1 [2] from the edge of the channel bandwidth.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                               |                     |   |                      |     |     |   |
| NOTE4: Applicable when co-existence with PHS system operating in 1884.5 - 1915.7 MHz.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                               |                     |   |                      |     |     |   |

NOTE: To simplify the above Table, E-UTRA band numbers are listed for bands which are specified only for E-UTRA operation or both E-UTRA and NR operation. NR band numbers are listed for bands which are specified only for NR operation.

### 6.5B.3.2 Intra-band non-contiguous EN-DC

#### 6.5B.3.2.1 General spurious emissions

The general spurious emissions requirements specified in clause 6.6.3.1 of TS 36.101 [4] and clause 6.5.3.1 of TS 38.101-1 [2] apply beyond any frequencies for which the out-of-band emissions requirements in clause 6.5B.2.2 apply. If for some frequency an individual CC spurious emission requirement overlaps with the general spectrum emission mask or the bandwidth of another CC then it does not apply.

#### 6.5B.3.2.2 Spurious emission band UE co-existence

The requirements in Table 6.5B.3.2.2-1 apply with all component carriers are active.

**Table 6.5B.3.2.2-1: Requirements for intra-band non-contiguous EN-DC**

| EN-DC Configuration | Spurious emission                                                                                                                                              |                       |   |                      |           |      |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---|----------------------|-----------|------|
|                     | Protected band                                                                                                                                                 | Frequency range (MHz) |   | Maximum Level (dBm)  | MBW (MHz) | NOTE |
| DC_3_n3             | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 33, 34, 38, 39, 40, 41, 43, 44, 45, 50, 51, 65, 67, 68, 69, 72, 73, 74, 75, 76.<br>NR Band n79 | F <sub>DL_low</sub>   | - | F <sub>DL_high</sub> | -50       | 1    |
|                     | E-UTRA Band 3                                                                                                                                                  | F <sub>DL_low</sub>   | - | F <sub>DL_high</sub> | -50       | 1    |
|                     | E-UTRA Band 22, 42, 52,<br>NR Band n77, n78                                                                                                                    | F <sub>DL_low</sub>   | - | F <sub>DL_high</sub> | -50       | 1    |
|                     | Frequency range                                                                                                                                                | 1884.5                | - | 1915.7               | -41       | 0.3  |
| DC_41_n41           | E-UTRA Band 1, 2, 3, 4, 5, 8, 10, 11, 12, 13, 14, 17, 18, 19, 21, 24, 25, 26, 27, 28, 29, 34,                                                                  | F <sub>DL_low</sub>   | - | F <sub>DL_high</sub> | -50       | 1    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                            |                     |   |                      |     |     |   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------------|---|----------------------|-----|-----|---|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 39, 42, 44, 45, 48, 50, 51, 66, 70, 71, 73, 74<br>NR Band n77, n78 and n79 |                     |   |                      |     |     |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Frequency range                                                            | 1884.5              | - | 1915.7               | -41 | 0.3 | 5 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | E-UTRA Band 30                                                             | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -40 | 1   |   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | E-UTRA Band 40                                                             | F <sub>DL_low</sub> | - | F <sub>DL_high</sub> | -40 | 1   |   |
| <p>NOTE 1: F<sub>DL_low</sub> and F<sub>DL_high</sub> refer to each frequency band specified in Table 5.5-1 in 3GPP TS 36.101 [4] or in Table 5.2-1 in 3GPP TS 38.101-1 [2].</p> <p>NOTE 2: As exceptions, measurements with a level up to the applicable requirements defined in Table 6.6.3.1-2 in 3GPP TS 36.101 [4] and Table 6.5.3.1-2 in 3GPP TS 38.101-1 [2] are permitted for each assigned carrier used in the measurement due to 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> or 5<sup>th</sup> harmonic spurious emissions. Due to spreading of the harmonic emission the exception is also allowed for the first 1 MHz frequency range immediately outside the harmonic emission on both sides of the harmonic emission. This results in an overall exception interval centred at the harmonic emission of (2MHz + N x L<sub>CRB</sub> x 180kHz), where N is 2, 3, 4, 5 for the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> or 5<sup>th</sup> harmonic respectively. The exception is allowed if the measurement bandwidth (MBW) totally or partially overlaps the overall exception interval</p> <p>NOTE 3: These requirements also apply for the frequency ranges that are less than F<sub>OOB</sub> (MHz) in Table 6.6.3.1-1 and Table 6.6.3.1A-1 from the edge of the channel bandwidth.</p> <p>NOTE 4: Void.</p> <p>NOTE 5: Applicable when co-existence with PHS system operating in 1884.5 - 1915.7 MHz.</p> |                                                                            |                     |   |                      |     |     |   |

NOTE: To simplify the above Table, E-UTRA band numbers are listed for bands which are specified only for E-UTRA operation or both E-UTRA and NR operation. NR band numbers are listed for bands which are specified only for NR operation.

### 6.5B.3.3 Inter-band EN-DC within FR1

#### 6.5B.3.3.1 General spurious emissions

The general spurious emissions requirements specified in clause 6.6.3.1 of TS 36.101 [4], clause 6.5.3.1 of TS 38.101-1 [2] and TS 38.101-2 [3] apply for each component carrier. For the case of inter-band EN-DC with a single carrier per cell group, the general spurious emissions requirements also apply with both downlink carrier and both uplink carriers active. Limits on configured maximum output power for the uplink according to clause 6.2B.4 apply. If for some frequency a spurious emission requirement of an individual component carrier overlaps with the spectrum emission mask or channel bandwidth of another component carrier then it does not apply.

NOTE: The general spurious emission requirements with both uplink carriers active are allowed to be verified for only a single inter-band EN-DC configuration per NR band. Furthermore, the requirements are allowed to be verified by measuring spurious emissions at the specific frequencies where second and third order intermodulation products generated by the two transmitted carriers can occur.

**Table 6.5B.3.3.1-1: (Void)**

### 6.5B.3.3.2 Spurious emission band UE co-existence

This clause specifies additional the requirements for uplink EN-DC coexistence with protected bands with the single CC uplink assigned to E-UTRA and NR bands for the specified uplink carrier aggregation configurations in Table 6.5B.3.3.2-1. The intersection of the requirements for the individual bands specified in clause 6.5.3.2 of [2] and clause 6.6.3.2 of [4] shall also apply for the specified uplink EN-DC configurations. Intersection of a requirement means that both UL constituent bands have the same protected band requirement specified and if one or both protected bands have note(s) associated those note(s) also apply.

The requirements in Table 6.5B.3.3.2-1 and the intersection of the requirements for the individual bands specified in clause 6.5.3.2 of [2] and clause 6.6.3.2 of [4] apply on each component carrier with all component carriers are active.

NOTE: For inter-band EN-DC with uplink assigned to one LTE band and one NR band the requirements in Table 6.5B.3.3.2-1 could be verified by measuring spurious emissions at the specific frequencies where second and third order intermodulation products generated by the two transmitted carriers can occur; in that case, the requirements for remaining applicable frequencies in Table 6.5B.3.3.2-1 and in 6.5.3.2 of [2] and clause 6.6.3.2 of [4] would be considered to be verified by the measurements verifying the uplink single carrier UE to UE co-existence requirements.

Table 6.5B.3.3.2-1: Requirements

| EN-DC Configuration                     | Spurious emission |                       |   |        |                     |           | NOTE     |
|-----------------------------------------|-------------------|-----------------------|---|--------|---------------------|-----------|----------|
|                                         | Protected band    | Frequency range (MHz) |   |        | Maximum Level (dBm) | MBW (MHz) |          |
| DC_1_n20                                | Frequency range   | 758                   | - | 788    | -50                 | 1         |          |
| DC_1_n28                                | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17    |
|                                         | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14       |
|                                         | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5        |
|                                         | Frequency range   | 773                   | - | 803    | -50                 | 1         |          |
|                                         | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5        |
| DC_1_n40                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n5                                 | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n8                                 | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n20                                | Frequency range   | 758                   | - | 788    | -50                 | 1         |          |
| DC_3_n28                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 13       |
|                                         | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14       |
|                                         | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5        |
|                                         | Frequency range   | 773                   | - | 803    | -50                 | 1         |          |
|                                         | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9     |
| DC_3_n34                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n40                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n41,<br>DC_3_n80_ULSUP-<br>TDM_n41 | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n50                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       |          |
| DC_3_n77<br>DC_3_n80_ULSUP-<br>TDM_n77  | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n78<br>DC_3_n80_ULSUP-<br>TDM_n78  | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_3_n79<br>DC_3_n80_ULSUP-<br>TDM_n79  | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_5_n2                                 | Frequency range   | 859                   | - | 869    | -27                 | 1         |          |
| DC_5_n7                                 | Frequency range   | 859                   | - | 869    | -27                 | 1         |          |
| DC_5_n40                                | Frequency range   | 859                   | - | 869    | -27                 | 1         |          |
|                                         | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_5_n48                                | Frequency range   | 859                   | - | 869    | -27                 | 1         |          |
| DC_5_n66                                | Frequency range   | 859                   | - | 869    | -27                 | 1         |          |
| DC_5_n78                                | Frequency range   | 859                   | - | 869    | -27                 | 1         |          |
| DC_5_n79                                | Frequency range   | 859                   | - | 869    | -27                 | 1         |          |
| DC_7_n28                                | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5        |
|                                         | Frequency range   | 773                   | - | 803    | -50                 | 1         |          |
| DC_8_n1                                 | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12    |
|                                         | Frequency range   | 1880                  |   | 1895   | -40                 | 1         | 5, 16    |
| DC_8_n3                                 | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12    |
|                                         | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 12    |
| DC_8_n20                                | Frequency range   | 758                   | - | 788    | -50                 | 1         |          |
| DC_8_n28                                | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17    |
|                                         | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14       |
|                                         | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5        |
|                                         | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5        |
|                                         | Frequency range   | 773                   | - | 803    | -50                 | 1         |          |
|                                         | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12    |
|                                         | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9, 12 |
|                                         | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 12    |
| DC_8_n34                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 12    |
|                                         | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12    |
| DC_8_n40                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3        |
| DC_8_n41,<br>DC_8_n81_ULSUP-<br>TDM_n41 | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12    |

| EN-DC Configuration                    | Spurious emission |                       |   |        |                     |           |         |
|----------------------------------------|-------------------|-----------------------|---|--------|---------------------|-----------|---------|
|                                        | Protected band    | Frequency range (MHz) |   |        | Maximum Level (dBm) | MBW (MHz) | NOTE    |
|                                        | Frequency range   | 1884.5                |   | 1915.7 | -41                 | 0.3       | 3       |
| DC_8_n77                               | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12   |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 12   |
| DC_8_n78<br>DC_8_n81_ULSUP-<br>TDM_n78 | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12   |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 12   |
| DC_8_n79<br>DC_8_n81_ULSUP-<br>TDM_n79 | Frequency range   | 860                   | - | 890    | -40                 | 1         | 5, 12   |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
| DC_8_n80                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
| DC_11_n3                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |         |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
|                                        | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |         |
|                                        | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |         |
| DC_11_n28                              | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14      |
|                                        | Frequency range   | 773                   | - | 803    | -50                 | 1         |         |
|                                        | Frequency range   | 945                   | - | 960    | -50                 | 1         |         |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9    |
|                                        | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |         |
|                                        | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |         |
| DC_11_n77                              | Frequency range   | 945                   | - | 960    | -50                 | 1         |         |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
|                                        | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |         |
|                                        | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |         |
| DC_11_n78                              | Frequency range   | 945                   | - | 960    | -50                 | 1         |         |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
|                                        | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |         |
|                                        | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |         |
| DC_11_n79                              | Frequency range   | 945                   | - | 960    | -50                 | 1         |         |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
|                                        | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |         |
|                                        | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |         |
| DC_12_n78                              | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
| DC_13_n2                               | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
| DC_13_n5                               | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
| DC_13_n7                               | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 2570                  | - | 2575   | +1.6                | 5         | 5, 6, 7 |
|                                        | Frequency range   | 2575                  | - | 2595   | -15.5               | 5         | 5, 6, 7 |
|                                        | Frequency range   | 2595                  | - | 2620   | -40                 | 1         | 5, 6    |
| DC_13_n48                              | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
| DC_13_n66                              | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 803    | -35                 | 0.00625   | 5       |
| DC_13_n71                              | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
| DC_13_n78                              | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
| DC_14_n2                               | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
|                                        |                   |                       |   |        |                     |           |         |
| DC_14_n66                              | Frequency range   | 769                   | - | 775    | -35                 | 0.00625   | 5       |
|                                        | Frequency range   | 799                   | - | 805    | -35                 | 0.00625   | 5       |
|                                        |                   |                       |   |        |                     |           |         |
| DC_18_n3                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |         |
|                                        | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3       |
|                                        | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |         |

| EN-DC Configuration                           | Spurious emission |                       |   |        |                     |           | NOTE  |
|-----------------------------------------------|-------------------|-----------------------|---|--------|---------------------|-----------|-------|
|                                               | Protected band    | Frequency range (MHz) |   |        | Maximum Level (dBm) | MBW (MHz) |       |
| DC_18_n77                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_18_n78                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_18_n79                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_19_n77                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_19_n78                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_19_n79                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_20_n1                                      | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
| DC_20_n3                                      | Frequency range   | 758                   | - | 788    | -50                 | 1         |       |
| DC_20_n41                                     | Frequency range   | 758                   | - | 788    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 19 |
| DC_20_n50                                     | Frequency range   | 758                   | - | 788    | -50                 | 1         |       |
| DC_20_n51                                     | Frequency range   | 758                   | - | 788    | -50                 | 1         |       |
| DC_20A_91A_ULSUP-TDM,<br>DC_20A_92A_ULSUP-TDM | Frequency range   | 758                   | - | 788    | -50                 | 1         |       |
| DC_21_n77                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_21_n78                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_21_n79                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         |       |
| DC_26_n41                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 703                   | - | 799    | -50                 | 1         |       |
|                                               | Frequency range   | 799                   | - | 803    | -40                 | 1         | 5     |
| DC_26_n77                                     | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 703                   | - | 799    | -50                 | 1         |       |
|                                               | Frequency range   | 799                   | - | 803    | -40                 | 1         | 5     |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         | 2     |
| DC_26_n78                                     | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
|                                               | Frequency range   | 703                   | - | 799    | -50                 | 1         |       |
|                                               | Frequency range   | 799                   | - | 803    | -40                 | 1         | 5     |
|                                               | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                               | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                               | Frequency range   | 2545                  | - | 2575   | -50                 | 1         | 2     |

| EN-DC Configuration                      | Spurious emission |                       |   |        |                     |           |       |
|------------------------------------------|-------------------|-----------------------|---|--------|---------------------|-----------|-------|
|                                          | Protected band    | Frequency range (MHz) |   |        | Maximum Level (dBm) | MBW (MHz) | NOTE  |
| DC_26_n79                                | Frequency range   | 703                   | - | 799    | -50                 | 1         |       |
|                                          | Frequency range   | 799                   | - | 803    | -40                 | 1         | 5     |
|                                          | Frequency range   | 945                   | - | 960    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
|                                          | Frequency range   | 2545                  | - | 2575   | -50                 | 1         | 2     |
|                                          | Frequency range   | 2595                  | - | 2645   | -50                 | 1         |       |
| DC_28_n3                                 | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14    |
|                                          | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
| DC_28_n5                                 | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
|                                          | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17 |
|                                          | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14    |
|                                          | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5     |
|                                          | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
| DC_28_n7                                 | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
| DC_28_n8                                 | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17 |
|                                          | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14    |
|                                          | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5     |
|                                          | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
| DC_28_n40                                | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| DC_28_n41                                | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17 |
|                                          | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14    |
|                                          | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5     |
|                                          | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
| DC_28_n50                                | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17 |
|                                          | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14    |
|                                          | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5     |
|                                          | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
| DC_28_n51                                | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17 |
|                                          | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14    |
|                                          | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5     |
|                                          | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
| DC_28_n77                                | Frequency range   | 758                   | - | 773    | -32                 | 1         |       |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
| DC_28_n78<br>DC_28_n83_ULSUP-<br>TDM_n78 | Frequency range   | 758                   | - | 773    | -32                 | 1         |       |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
| DC_28_n79                                | Frequency range   | 758                   | - | 773    | -32                 | 1         |       |
|                                          | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                          | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
| DC_38_n78                                | N/A               |                       |   |        |                     |           |       |
| DC_40_n1                                 | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| DC_40_n41                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| DC_40_n77                                | N/A               |                       |   |        |                     |           |       |
| DC_40_n78                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| DC_40_n79                                | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| DC_41_n3                                 | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |

| EN-DC Configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Spurious emission |                       |   |        |                     |           |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------|---|--------|---------------------|-----------|-------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Protected band    | Frequency range (MHz) |   |        | Maximum Level (dBm) | MBW (MHz) | NOTE  |
| DC_41_n28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Frequency range   | 470                   | - | 694    | -42                 | 8         | 5, 17 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Frequency range   | 470                   | - | 710    | -26.2               | 6         | 14    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Frequency range   | 662                   | - | 694    | -26.2               | 6         | 5     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Frequency range   | 758                   | - | 773    | -32                 | 1         | 5     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Frequency range   | 773                   | - | 803    | -50                 | 1         |       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3, 9  |
| DC_41_n77                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Frequency range   | 1884.5                |   | 1915.7 | -41                 | 0.3       | 3     |
| DC_41_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| DC_41_n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| DC_42_n77                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N/A               |                       |   |        |                     |           |       |
| DC_42_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N/A               |                       |   |        |                     |           |       |
| DC_42_n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | N/A               |                       |   |        |                     |           |       |
| DC_48_n5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Frequency range   | 1884.5                | - | 1915.7 | -41                 | 0.3       | 3     |
| <p>NOTE 1: Void</p> <p>NOTE 2: Void</p> <p>NOTE 3: Applicable when co-existence with PHS system operating in 1884.5 - 1915.7 MHz</p> <p>NOTE 4: Void</p> <p>NOTE 5: These requirements also apply for the frequency ranges that are less than <math>F_{\text{OoB}}</math> (MHz) in Table 6.6.3.1-1, Table 6.6.3.1A-1 in 3GPP TS 36.101 [4] or in Table 6.5.3.1-1 in 3GPP TS 38.101-1 [2] from the edge of the channel bandwidth.</p> <p>NOTE 6: Void</p> <p>NOTE 7: Void</p> <p>NOTE 8: Void</p> <p>NOTE 9: Applicable when the assigned E-UTRA or NR carrier is confined within 718 MHz and 748 MHz and when the channel bandwidth used is 5 or 10 MHz.</p> <p>NOTE 10: Void</p> <p>NOTE 11: Void</p> <p>NOTE 12: This requirement is applicable only for the following cases: A: for carriers of 5 MHz channel bandwidth when carrier centre frequency (<math>F_c</math>) is within the range <math>902.5 \text{ MHz} \leq F_c &lt; 907.5 \text{ MHz}</math> with an uplink transmission bandwidth less than or equal to 20 RB; B: for carriers of 5 MHz channel bandwidth when carrier centre frequency (<math>F_c</math>) is within the range <math>907.5 \text{ MHz} \leq F_c \leq 912.5 \text{ MHz}</math> without any restriction on uplink transmission bandwidth; C: for carriers of 10 MHz channel bandwidth when carrier centre frequency (<math>F_c</math>) is <math>F_c = 910 \text{ MHz}</math> with an uplink transmission bandwidth less than or equal to 32 RB with <math>\text{RB}_{\text{start}} &gt; 3</math>.</p> <p>NOTE 13: Void</p> <p>NOTE 14: This requirement is applicable for 5 and 10 MHz E-UTRA or NR channel bandwidth allocated within 718-728MHz. For carriers of 10 MHz bandwidth, this requirement applies for an uplink transmission bandwidth less than or equal to 30 RB with <math>\text{RB}_{\text{start}} &gt; 1</math> and <math>\text{RB}_{\text{start}} &lt; 48</math>.</p> <p>NOTE 15: Void</p> <p>NOTE 16: This requirement is applicable for any channel bandwidths within the range 1920 - 1980 MHz with the following restriction: for carriers of 15 MHz bandwidth when carrier centre frequency is within the range 1927.5 - 1929.5 MHz and for carriers of 20 MHz bandwidth when carrier centre frequency is within the range 1930 - 1938 MHz the requirement is applicable only for an uplink transmission bandwidth less than or equal to 54 RB.</p> <p>NOTE 17: This requirement is applicable in the case of a 10 MHz E-UTRA or NR carrier confined within 703 MHz and 733 MHz, otherwise the requirement of -25 dBm with a measurement bandwidth of 8 MHz applies.</p> <p>NOTE 18: Void</p> <p>NOTE 19: Void</p> <p>NOTE 20: Void.</p> <p>NOTE 21: Void</p> <p>NOTE 22: Void</p> |                   |                       |   |        |                     |           |       |

### 6.5B.3.3a Inter-band NE-DC within FR1

#### 6.5B.3.3a.1 (Void)

#### 6.5B.3.3a.2 Spurious emission band UE co-existence

This clause specifies the requirements for the specified NE-DC configurations that do not have a corresponding defined EN-DC, for coexistence with protected bands. For the NE-DC configurations that have a corresponding specified EN-DC configuration, the requirements in Table 6.5B.3.3.2-1 apply on each component carrier with all component carriers are active.

### 6.5B.3.4 Inter-band EN-DC including FR2

#### 6.5B.3.4.0 General spurious emission

General spurious requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.3.1 and 6.6.3.1A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.3, 6.5A.3 and 6.5D.3 of TS 38.101-2 [3] apply.

#### 6.5B.3.4.1 Spurious emission band UE co-existence

This clause specifies the requirements for the specified EN-DC, for coexistence with protected bands. Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.5.1-1, no requirements for FR2 NR bands to protect E-UTRA and FR1 NR bands are applied to the constituent FR2 NR bands. Spurious emission band UE co-existence requirements specified in TS 36.101 [4] are applied to the constituent E-UTRA bands for the EN-DC configuration.

Spurious emission band UE co-existence requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.3.2 and 6.6.3.2A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.3.1, 6.5A.3.1 and 6.5D.3.1 of TS 38.101-2 [3] apply.

**Table 6.5B.3.4.1-1: Void**

### 6.5B.3.5 Inter-band EN-DC including both FR1 and FR2

#### 6.5B.3.5.0 General spurious emission

General spurious requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.3.1 and 6.6.3.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 6.5.3.1 and 6.5A.3.1 of TS 38.101-1 [2] and clause 6.5.3, 6.5A.3 and 6.5D.3 of TS 38.101-2 [3] apply.

#### 6.5B.3.5.1 Spurious emission band UE co-existence

This clause specifies the requirements for the specified EN-DC, for coexistence with protected bands. Unless otherwise stated, for inter-band EN-DC configurations defined in clause 5.5B.6, no requirements for FR2 NR bands to protect E-UTRA and FR1 NR bands are applied to the constituent FR2 NR bands. Spurious emission band UE co-existence requirements for constituent E-UTRA and FR1 NR bands for the inter-band EN-DC are the same as those for the corresponding EN-DC configuration without the FR2 bands specified in 6.5B.3.2.2.

Spurious emission band UE co-existence requirement for E-UTRA single carrier and CA operation specified in clauses 6.6.3.2 and 6.6.3.2A of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 6.5.3.2 and 6.5A.3.2 of TS 38.101-1 [2] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.3.1, 6.5A.3.1 and 6.5D.3.1 of TS 38.101-2 [3] apply.

**Table 6.5B.3.5.1-1: Void**

## 6.5B.4 Additional spurious emissions

### 6.5B.4.1 General

These requirements are specified in terms of an additional spectrum emission requirement. Additional spurious emission requirements are signalled by the network to indicate that the UE shall meet an additional requirement for a specific deployment scenario as part of the cell handover/broadcast message.

**NOTE:** For measurement conditions at the edge of each frequency range, the lowest frequency of the measurement position in each frequency range should be set at the lowest boundary of the frequency range plus MBW/2. The highest frequency of the measurement position in each frequency range should be set at the highest boundary of the frequency range minus MBW/2. MBW denotes the measurement bandwidth defined for the protected band.

#### 6.5B.4.1.1 Void

### 6.5B.4.2 Intra-band contiguous EN-DC

#### 6.5B.4.2.1 Minimum requirement (network signalled value "NS\_04")

When "NS 04" is indicated in the cell, the power of any UE emission shall not exceed the levels specified in Table 6.5B.4.1.1-1. This requirement also applies for the frequency ranges that are less than  $F_{\text{OOB}}$  (MHz) in Table 6.6.3.1-1 from the edge of the channel bandwidth.

**Table 6.5B.4.1.1-1: Additional requirements**

| Frequency band (MHz)   | Channel bandwidth / Spectrum emission limit (dBm) | Measurement bandwidth                                                                   |
|------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------|
| $2495 \leq f < 2496$   | -13                                               | 1 % of Channel BW for contiguous BW up to 100 MHz,<br>1 MHz for contiguous BW > 100 MHz |
| $2490.5 \leq f < 2495$ | -13                                               | 1 MHz                                                                                   |
| $0 < f < 2490.5$       | -25                                               | 1 MHz                                                                                   |

### 6.5B.4.3 Intra-band non-contiguous EN-DC

#### 6.5B.4.3.1 Minimum requirement (network signalled value "NS\_04")

When "NS 04" is indicated in the cell, the power of any UE emission shall not exceed the levels specified in Table 6.5B.4.1.1-1. This requirement also applies for the frequency ranges that are less than  $F_{\text{OOB}}$  (MHz) in Table 6.6.3.1-1 from the edge of the channel bandwidth.

**Table 6.5B.4.1.1-1: Additional requirements**

| Frequency band (MHz)   | Channel bandwidth / Spectrum emission limit (dBm) | Measurement bandwidth                                                                   |
|------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------|
| $2495 \leq f < 2496$   | -13                                               | 1 % of Channel BW for contiguous BW up to 100 MHz,<br>1 MHz for contiguous BW > 100 MHz |
| $2490.5 \leq f < 2495$ | -13                                               | 1 MHz                                                                                   |
| $0 < f < 2490.5$       | -25                                               | 1 MHz                                                                                   |

#### 6.5B.4.4 Inter-band EN-DC within FR1

The additional spurious emissions requirements specified for E-UTRA in clause 6.6.3.3 and 6.6.3.3A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.3.3, 6.5A.3.3 and 6.5D.3 of TS 38.101-1 [2] apply for each component carrier.

#### 6.5B.4.4a Inter-band NE-DC within FR1

The additional spurious emissions requirements specified for E-UTRA in clause 6.6.3.3 and 6.6.3.3A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.3.3, 6.5A.3.3 and 6.5D.3 of TS 38.101-1 [2] apply for each component carrier.

#### 6.5B.4.5 Inter-band EN-DC including FR2

The additional spurious emissions requirements specified for E-UTRA in clause 6.6.3.3 and 6.6.3.3A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.3.3, 6.5A.3.3 and 6.5D.3 of TS 38.101-2 [3] apply for each component carrier.

#### 6.5B.4.6 Inter-band EN-DC including both FR1 and FR2

The additional spurious emissions requirements specified for E-UTRA in clause 6.6.3.3 and 6.6.3.3A of TS 36.101 [4] and for NR single carrier, CA operation and UL-MIMO specified in clause 6.5.3.3, 6.5A.3.3 and 6.5D.3 of TS 38.101-2 [3] and in clause 6.5.3.3, 6.5A.3.3 and 6.5D.3 of TS 38.101-1 [2] apply for each component carrier.

### 6.5B.5 Transmit intermodulation for DC

#### 6.5B.5.1 Intra-band contiguous EN-DC

Unless otherwise stated, no transmit intermodulation requirements are applied for intra band contiguous EN DC.

#### 6.5B.5.2 Intra-band non-contiguous EN-DC

Unless otherwise stated, no transmit intermodulation requirements are applied for intra band non contiguous EN DC.

#### 6.5B.5.3 Inter-band EN-DC within FR1

The transmit intermodulation requirement specified in clauses 6.7.1 of TS 36.101 [4] and clauses 6.5.4 and 6.5A.4 of TS 38.101-1 [2] apply for each component carrier in E-UTRA bands and NR bands, respectively.

#### 6.5B.5.3a (Void)

#### 6.5B.5.4 Inter-band EN-DC including FR2

Transmit intermodulation requirements specified in clause 6.7.1 and 6.7.1A of TS 36.101 [4] apply for each component carrier in E-UTRA bands.

#### 6.5B.5.5 Inter-band EN-DC including both FR1 and FR2

Transmit intermodulation requirement specified in clauses 6.7.1 and 6.7.1A of TS 36.101 [4] and clauses 6.5.4 and 6.5A.4 of TS 38.101-1 [2] apply for each component carrier in E-UTRA bands and NR bands, respectively.

## 6.5E Output RF spectrum emissions for V2X operation in FR1

### 6.5E.1 Occupied bandwidth

#### 6.5E.1.1 Intra-band V2X

For intra-band V2X, the occupied bandwidth specified in clause 6.6.1G in TS 36.101 [4] and specified in clause 6.5E.1 in TS 38.101-1 [2] apply for each frequency range respectively.

#### 6.5E.1.2 inter-band V2X con-current operation

For the inter-band con-current NR V2X operation, the occupied bandwidth shall be applied per each component carrier. The requirements specified in subclause 6.6.1 of TS 36.101 [4] shall apply for the E-UTRA uplink in licensed band and the requirements specified in subclause 6.5E.1 of TS 38.101-1 [2] shall apply for the NR sidelink. The requirements specified in subclause 6.6.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink and the requirements specified in subclause 6.5.1 of TS 38.101-1 [2] shall apply for the NR Uu.

### 6.5E.2 Out-of-band emissions

#### 6.5E.2.1 Intra-band V2X

For intra-band V2X, out-of-band emissions specified in clause 6.6.2G in TS 36.101 [4] and specified in clause 6.5E.2 in TS 38.101-1 [2] apply for each frequency range respectively.

#### 6.5E.2.2 Inter-band V2X con-current operation

For the inter-band con-current NR V2X operation, the general SEM/additional SEM requirements and ACLR shall be applied per each component carrier. The general SEM/additional SEM requirements and ACLR specified in subclause 6.6.2 of TS 36.101 [4] shall apply for the E-UTRA uplink in licensed band and the general SEM/additional SEM and ACLR requirements specified in subclause 6.5E.2 of TS 38.101-1 [2] shall apply for the NR sidelink. The requirements specified in subclause 6.6.2G of TS 36.101 [4] shall apply for the E-UTRA sidelink and the requirements specified in subclause 6.5.1 of TS 38.101-1 [2] shall apply for the NR Uu.

### 6.5E.3 Spurious emissions

#### 6.5E.3.1 Intra-band V2X

##### 6.5E.3.1.1 General spurious emissions

For intra-band V2X, the general spurious emissions requirements specified in clause 6.6.3.1 of TS 36.101 [4] and clause 6.5E.3.1 of TS 38.101-1 [2] apply for each frequency range respectively.

##### 6.5E.3.1.2 Spurious emission band UE co-existence

For intra-band V2X, the spurious emissions band UE co-existence requirements specified in clause 6.6.3.2 of TS 36.101 [4] and clause 6.5E.3.2 of TS 38.101-1 [2] apply for each frequency range respectively.

#### 6.5E.3.2 Inter-band V2X con-current operation

##### 6.5E.3.2.1 General spurious emissions

For inter-band V2X, the general spurious emissions requirements shall be applied per each component carrier. The requirements specified in clause 6.6.3.1 of TS 36.101 [4] shall apply for the E-UTRA uplink in licensed band and the requirements specified in clause 6.5E.3.1 of TS 38.101-1 [2] shall apply for the NR sidelink. The requirements specified in subclause 6.6.3G of TS 36.101 [4] shall apply for the E-UTRA sidelink and the requirements specified in subclause 6.5.3.1 of TS 38.101-1 [2] shall apply for the NR Uu.

### 6.5E.3.2.2 Spurious emission band UE co-existence

This clause specifies the additional requirements for inter-band con-current V2X operation with the single CC uplink assigned to E-UTRA or NR band for coexistence with protected bands for the specified simultaneous transmission of the inter-band con-current V2X configurations in Table 6.5E.3.2.2-1. The intersection of the requirements for the individual bands specified in clause 6.5.3.2 shall also apply for the specified simultaneous transmission of the inter-band con-current V2X. Intersection of a requirement means that both UL or sidelink transmission constituent bands have the same protected band requirement specified and if one or both protected bands have note(s) associated those note(s) also apply.

For the inter-band con-current NR V2X operation, the UE-coexistence requirements in Table 6.5E.3.2.2-1 shall apply.

NOTE: For inter-band con-current V2X operation with uplink assigned to E-UTRA/NR band and sidelink transmission assigned to E-UTRA/NR V2X operating band, the requirements in Table 6.5E.3.2.2-1 could be verified by measuring spurious emissions at the specific frequencies where second and third order intermodulation products generated by the two transmitted carriers can occur; in that case, the requirements for remaining applicable frequencies in Table 6.5E.3.2.2-1 and in clause 6.5.3.2 would be considered to be verified by the measurements verifying the one uplink inter-band con-current UE to UE co-existence requirements.

**Table 6.5E.3.2.2-1: Requirements for inter-band con-current V2X operation**

| V2X con-<br>current<br>operating<br>band<br>cofiguration                                                                                                           | Spurious emission |                          |   |      |                           |              |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------|---|------|---------------------------|--------------|------|
|                                                                                                                                                                    | Protected band    | Frequency range<br>(MHz) |   |      | Maximum<br>Level<br>(dBm) | MBW<br>(MHz) | NOTE |
|                                                                                                                                                                    |                   |                          |   |      |                           |              |      |
|                                                                                                                                                                    |                   |                          |   |      |                           |              |      |
|                                                                                                                                                                    |                   |                          |   |      |                           |              |      |
|                                                                                                                                                                    |                   |                          |   |      |                           |              |      |
| V2X_n71_47                                                                                                                                                         |                   |                          |   |      |                           |              |      |
|                                                                                                                                                                    |                   |                          |   |      |                           |              |      |
|                                                                                                                                                                    |                   |                          |   |      |                           |              |      |
|                                                                                                                                                                    |                   |                          |   |      |                           |              |      |
|                                                                                                                                                                    | Frequency range   | 5925                     | - | 5950 | -30                       | 1            | 3, 4 |
|                                                                                                                                                                    | Frequency range   | 5815                     | - | 5855 | -30                       | 1            | 3    |
| NOTE 1: Void.                                                                                                                                                      |                   |                          |   |      |                           |              |      |
| NOTE 2: Void.                                                                                                                                                      |                   |                          |   |      |                           |              |      |
| NOTE 3: Applicable when NS_33 is configured by the pre-configured radio parameters for power class 3 V2X UE.                                                       |                   |                          |   |      |                           |              |      |
| NOTE 4: In the frequency range x-5950MHz, SE requirement of -30dBm/MHz should be applied; where x = max (5925, fc + 15), where fc is the channel centre frequency. |                   |                          |   |      |                           |              |      |

## 6.5E.4 Transmit intermodulation

### 6.5E.4.1 Intra-band V2X

For intra-band V2X, transmit intermodulation requirements specified in clause 6.7.1G of TS 36.101 [4] and clause 6.5E.4 of TS 38.101-1 [2] apply for each frequency range respectively.

### 6.5E.4.2 Inter-band V2X con-current operation

For the inter-band con-current NR V2X operation, the transmit intermodulation requirements shall be applied per each component carrier. The requirements specified in subclause 6.7.1 of TS 36.101 [4] shall apply for the E-UTRA uplink

in licensed band and the requirements specified in subclause 6.5E.4 of TS 38.101-1 [2] shall apply for the NR sidelink. The requirements specified in subclause 6.7.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink and the requirements specified in subclause 6.5.4 of TS 38.101-1 [2] shall apply for the NR Uu.

## 6.6B Beam correspondence for DC

### 6.6B.1 Void

### 6.6B.2 Void

### 6.6B.3 Void

### 6.6B.4 Inter-band EN-DC including FR2

Beam correspondence requirement specified in clause 6.6 and 6.6A of TS 38.101-2 [3] apply for NR FR2 bands.

### 6.6B.5 Inter-band EN-DC including both FR1 and FR2

Beam correspondence requirement specified in clause 6.6 and 6.6A of TS 38.101-2 [3] apply for NR FR2 bands.

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## 7 Receiver characteristics

### 7.1 General

Unless otherwise stated the receiver characteristics are specified at the antenna connector(s) of the UE for the bands operating on frequency range 1 and over the air of the UE for the bands operating on frequency range 2. The requirements for frequency range 1 and frequency range 2 can be verified separately. For the carrier in frequency range 1, requirements can be verified with NR FR2 link disabled. For the carrier in frequency range 2, requirements can be verified in OTA mode with E-UTRA or NR FR1 connecting to the network by OTA without calibration.

The requirements defined in this clause are the extra requirements compared with the single carrier requirements defined in TS 38.101-1 [2] and TS 38.101-2 [3].

Unless otherwise stated, the UL and DL reference measurement channels are the same with the configurations specified in TS 38.101-1 [2] and TS 38.101-2 [3].

Unless otherwise stated, requirements for NR receiver written in TS 38.101-1 [2] and TS 38.101-2 [3] apply and are assumed anchor agnostic. Requirements are verified under conditions where anchor resources do not interfere NR operation.

For intra-band EN-DC, the output power is configured as follows:

- One E-UTRA uplink carrier with the output power set to 29 dB below  $P_{\text{CMAX}_L}$  and the NR band whose downlink is being tested has its uplink carrier output power set to 4 dB below  $P_{\text{CMAX}_{L,f,c}}$ .
- One NR uplink carrier with the output power set to 29 dB below  $P_{\text{CMAX}_{L,f,c}}$  and the E-UTRA band whose downlink is being tested has its uplink carrier output power set to 4 dB below  $P_{\text{CMAX}_{L,c}}$ .

For the additional requirements for intra-band non-contiguous EN-DC of two sub-blocks, an in-gap test refers to the case when the interfering signal is located at a negative offset with respect to the assigned lowest channel frequency of the highest sub-block and located at a positive offset with respect to the assigned highest channel frequency of the lowest sub-block.

For the additional requirements for intra-band non-contiguous EN-DC of two sub-blocks, an out-of-gap test refers to the case when the interfering signal(s) is (are) located at a positive offset with respect to the assigned channel frequency of

the highest carrier frequency or located at a negative offset with respect to the assigned channel frequency of the lowest carrier frequency.

For the additional requirements for intra-band non-contiguous EN-DC of two sub-blocks with channel bandwidth larger than or equal to 5 MHz, the existing adjacent channel selectivity requirements, in-band blocking requirements (for each case), and narrow band blocking requirements apply for in-gap tests only if the corresponding interferer frequency offsets with respect to the two measured carriers satisfy the following condition in relation to the sub-block gap size  $W_{\text{gap}}$  for at least one of the E-UTRA or NR sub-blocks, so that the interferer frequency position does not change the nature of the core requirement tested:

$$W_{\text{gap}} \geq 2 \cdot |F_{\text{Interferer (offset)}}| - BW_{\text{Channel}}$$

For the E-UTRA sub-block, the  $F_{\text{Interferer (offset)}}$ , for a sub-block with a single component carrier is the interferer frequency offset with respect to carrier as specified in clause 7.5.1, clause 7.6.1 and clause 7.6.3 for the respective requirement in TS 36.101 [4] and  $BW_{\text{Channel}}$ .  $F_{\text{Interferer (offset)}}$  for the E-UTRA sub-block with two or more contiguous component carriers is the interference frequency offset with respect to the carrier adjacent to the gap is specified in clause 7.5.1A, 7.6.1A and 7.6.3A in TS 36.101 [4].

For the NR sub-block, the  $F_{\text{Interferer (offset)}}$ , for a sub-block with a single component carrier is the interferer frequency offset with respect to carrier as specified in clause 7.5.1, clause 7.6.1 and clause 7.6.3 for the respective requirement in TS 38.101-1 [2] and  $BW_{\text{Channel}}$ .

The interferer frequency offsets for adjacent channel selectivity, each in-band blocking case and narrow-band blocking shall be tested separately with a single in-gap interferer at a time.

For sub-clauses with suffix A or B: the minimum requirements for band combinations including Band n41 also apply for the corresponding band combinations with Band n90 replacing Band n41 but with otherwise identical parameters. For brevity the said band combinations with Band n90 are not listed in the tables below but are covered by this specification.

Unless otherwise stated, for the FR1 requirements in this clause,

- the UE shall be verified with four Rx antenna ports and skip two Rx antenna ports requirements in operating bands where the UE is equipped with four Rx antenna ports unless it is not mandated and the UE does not support four Rx ports for these bands in a band combination, in which case, the UE shall be verified with two Rx antenna ports.
- the UE shall be verified with eight antenna ports and skip both two and four Rx antenna ports requirements in operating bands where the UE is equipped with eight Rx antenna ports unless UE is not supporting 8Rx ports for band(s) in a band combination in which case those band(s) shall be verified with four Rx antenna ports in that band combination, otherwise, the UE shall be verified with two Rx antenna ports.

For UE indicating capability `interBandMRDC-WithOverlapDL-Bands-r16`, it shall be verified with two Rx antenna ports requirements.

The requirements for EN-DC applies for NE-DC unless otherwise specified.

## 7.2 Void

## 7.3 Void

## 7.3A Reference sensitivity for CA

### 7.3A.1 General

For NR CA operation, NR single carrier and CA operation of REFSENS requirements defined in TS 38.101-1 [2] and TS 38.101-2 [3] apply to all downlink bands part of NR CA configurations listed in Table 5.2A.1-1 unless sensitivity degradation is allowed as defined in clause 7.3A.

A UE which supports inter-band NR CA configuration is allowed to apply each sensitivity degradation for FR1 specified in clause 7.3A.2 TS 38.101-1 [2] and for FR2 specified in clause 7.3A.2 of TS 38.101-2 [3] independently.

## 7.3A.2 Reference sensitivity power level for CA

### 7.3A.3 $\Delta R_{IB,c}$ for CA

For the UE which supports inter-band NR CA configuration, the minimum requirement for reference sensitivity in clause 7.3.2, 7.3A.2 in TS 38.101-1 [2] and clause 7.3.2, 7.3A.2 in TS 38.101-2 [3] shall be increased by the amount given in  $\Delta R_{IB,c}$  in Tables below. Unless otherwise stated,  $\Delta R_{IB,c}$  is set to zero.

In case the UE supports more than one of band combinations for CA, SUL or DC, and an operating band belongs to more than one band combinations then

- When the operating band frequency range is  $\leq 1$ GHz, the applicable additional  $\Delta R_{IB,c}$  shall be the average value for all band combinations defined in clause 7.3A, 7.3B, 7.3C in TS 38.101-1 [2] and 7.3A, 7.3B in this specification, truncated to one decimal place that apply for that operating band among the supported band combinations. In case there is a harmonic relation between low band UL and high band DL, then the maximum  $\Delta R_{IB,c}$  among the different supported band combinations involving such band shall be applied
- When the operating band frequency range is  $> 1$  GHz, the applicable additional  $\Delta R_{IB,c}$  shall be the maximum value for all band combinations defined in clause 7.3A, 7.3B, 7.3C in TS 38.101-1 [2] and 7.3A, 7.3B in this specification for the applicable operating bands.

#### 7.3A.3.1 $\Delta R_{IB,c}$ for Inter-band CA between FR1 and FR2

$\Delta R_{IB,c}$  is independent between FR1 and FR2. For inter-band CA between FR1 and FR2,  $\Delta R_{IB,c}$  for the FR1 band(s) from TS 38.101-1 [2] applies and  $\Delta R_{IB,c}$  for the FR2 NR band(s) is set to zero. Otherwise  $\Delta R_{IB,c}$  is set to zero.

**Table 7.3A.3.1-1: Void**

**Table 7.3A.3.1-2: Void**

**Table 7.3A.3.1-3: Void**

### 7.3A.4 Void

## 7.3B Reference sensitivity level for DC

### 7.3B.1 General

For EN-DC, E-UTRA and NR single carrier, CA, and MIMO operation of REFSENS requirements defined in TS 38.101-1 [2], TS 38.101-2 [3] and TS 36.101 [4] apply to all downlink bands of EN-DC configurations listed in clause 5.5B, unless sensitivity degradation exception is allowed in this clause of this specification, clause 7.3 in TS 38.101-1 [2], clause 7.3 in TS 38.101-2 [3] or clause 7.3 in TS 36.101 [4]. Allowed exceptions specified in this clause of the specification, clause 7.3 in TS 38.101-1 [2], clause 7.3 in TS 38.101-2 [3] or clause 7.3 in TS 36.101 [4] also apply to any higher order EN-DC configuration combination containing one of the band combinations that exception is allowed for. Reference sensitivity exceptions are specified by applying maximum sensitivity degradation (MSD) into applicable REFSENS requirement. EN-DC REFSENS requirements shall be met for NR uplink transmissions using QPSK DFT-s-OFDM waveforms as defined in clause 7.3.2 [2]. Unless otherwise specified UL allocation uses the lowest SCS allowable for a given channel BW. Limits on configured maximum output power for the uplink according to clause 6.2B.4 shall apply.

In case of interband EN-DC the receiver REFSENS requirements in this clause do not apply for 1.4 and 3 MHz E-UTRA carriers. For the case of inter-band EN-DC with a single carrier per cell group and multi carrier per cell group, in

addition to the E-UTRA and NR single carrier, CA, and MIMO operation of REFSENS requirements defined in TS 38.101-1 [2], TS 38.101-2 [3], and TS 36.101 [4], the REFSENS requirements specified therein also apply with both downlink carriers and both uplink carriers active unless sensitivity exceptions are allowed in this clause of this specification, clause 7.3 in TS 38.101-1 [2] or clause 7.3 in TS 36.101 [4].

For reference sensitivity exception test points where the specified carrier frequency does not correspond to a valid NR-ARFCN, the closest NR-ARFCN as specified in clause 5.4.2 applies.

For operations with 4 or 8 Rx antenna ports in an E-UTRA band or 4 Rx antenna port in an NR band, the MSD in the applicable bands shall be increased by the absolute value of  $\Delta R_{IB,4R}$  in Table 7.3.1-1a or  $\Delta R_{IB,8R}$  in Table 7.3.1-1aa of TS 36.101[4] for the E-UTRA band or  $\Delta R_{IB,4R}$  in Table 7.3.2-2 of TS 38.101-1 for the NR band when  $MSD > 0$ .

NOTE: For inter-band EN-DC, the reference sensitivity requirement with both uplink carriers active is allowed to be verified for only a single inter-band EN-DC configuration per NR band.

## 7.3B.2 Reference sensitivity for DC

### 7.3B.2.1 Intra-band contiguous EN-DC

For intra-band contiguous EN-DC configurations, the reference sensitivity power level REFSENS is the minimum mean power applied to each one of the UE antenna ports at which the throughput for the carrier(s) of the E-UTRA and NR CGs shall meet or exceed the requirements for the specified E-UTRA and NR reference measurement channels. The reference sensitivity requirements apply with all uplink carriers and all downlink carriers active for EN-DC configuration and Uplink EN-DC configuration listed in Table 5.5B.2-1 and Table 5.5B.3-1, as supported by the UE. For EN-DC configurations where uplink is not available in either the MCG or the SCG or for EN-DC configurations where the UE only supports single uplink operation, reference sensitivity requirements apply with single uplink transmission. The downlink carrier(s) from the cell group with uplink shall be configured closer to the uplink operating band than any of the downlink carriers from the cell group without uplink.

Sensitivity degradation is allowed for Intra-band contiguous EN-DC configurations listed in Table 7.3B.2.1-1 the reference sensitivity is defined only for the specific uplink and downlink test points which are specified in Table 7.3B.2.1-1 and E-UTRA and NR single carrier requirements do not apply.

**Table 7.3B.2.1-1: Reference sensitivity (MSD) for intra-band contiguous EN-DC**

| EN-DC configuration / channel allocations /MSD |                |                           |                         |                                   |                           |          |             |
|------------------------------------------------|----------------|---------------------------|-------------------------|-----------------------------------|---------------------------|----------|-------------|
| EN-DC configuration                            | E-UTRA/NR band | F <sub>c</sub> (UL) (MHz) | Channel bandwidth (MHz) | UL allocation (L <sub>CRB</sub> ) | F <sub>c</sub> (DL) (MHz) | MSD (dB) | Duplex mode |
| DC_(n)5AA                                      | 5              | 826.5                     | 5                       | N/A                               | 871.5                     | 5.2      | FDD         |
|                                                | n5             | 839                       | 20                      | 20 (RB <sub>end</sub> = 105)      | 884                       | 0        |             |
| DC_(n)5AA                                      | 5              | 829                       | 10                      | N/A                               | 874                       | 5.2      |             |
|                                                | n5             | 841.5                     | 15                      | 20 (RB <sub>end</sub> = 78)       | 886.5                     | 0        |             |
| DC_(n)5AA                                      | 5              | 844                       | 10                      | 25 (RB <sub>end</sub> = 49)       | 889                       | 0        |             |
|                                                | n5             | 831.5                     | 15                      | N/A                               | 876.5                     | 3.1      |             |
| DC_(n)5AA                                      | 5              | 831.5                     | 5                       | N/A                               | 876.5                     | 5.2      |             |
|                                                | n5             | 841.5                     | 15                      | 20 (RB <sub>end</sub> = 78)       | 886.5                     | 0        |             |
| DC_(n)5AA                                      | 5              | 846.5                     | 5                       | 25                                | 891.5                     | 0        |             |
|                                                | n5             | 836.5                     | 15                      | N/A                               | 881.5                     | 1        |             |
| DC_(n)5AA                                      | 5              | 834                       | 10                      | N/A                               | 879                       | 1.5      |             |
|                                                | n5             | 844                       | 10                      | 25 (RB <sub>end</sub> = 51)       | 889                       | 0        |             |
| DC_(n)5AA                                      | 5              | 844                       | 10                      | 25 (RB <sub>end</sub> = 49)       | 889                       | 0        |             |
|                                                | n5             | 834                       | 10                      | N/A                               | 879                       | 1.4      |             |
| DC_(n)12AA                                     | 12             | 703.5                     | 5                       | N/A                               | 733.5                     | 4.5      | FDD         |
|                                                | n12            | 711                       | 10                      | 20 (RB <sub>end</sub> = 51)       | 741                       | 0        |             |
| DC_(n)12AA                                     | 12             | 711                       | 10                      | 20 (RB <sub>end</sub> = 49)       | 741                       | 0        |             |
|                                                | n12            | 703.5                     | 5                       | N/A                               | 733.5                     | 4.5      |             |
| DC_(n)71AA                                     | 71             | 665.5                     | 5                       | 5 (RB <sub>end</sub> = 24)        | 619.5                     | 0        | FDD         |
|                                                | n71            | 675.5                     | 15                      | 15 (RB <sub>start</sub> = 0)      | 629.5                     | 1.8      |             |
| DC_(n)71AA                                     | 71             | 670.5                     | 15                      | 15 (RB <sub>end</sub> = 74)       | 624.5                     | 0        |             |
|                                                | n71            | 680.5                     | 5                       | 5 (RB <sub>start</sub> = 0)       | 634.5                     | 1.6      |             |
| DC_(n)71AA                                     | 71             | 668                       | 10                      | 10 (RB <sub>end</sub> = 49)       | 622                       | 0        |             |

|                                                                                                                                                                                                                                             |     |       |                 |                              |                    |      |     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|-----------------|------------------------------|--------------------|------|-----|--|
|                                                                                                                                                                                                                                             | n71 | 678   | 10              | 10 (RB <sub>start</sub> = 0) | 632                | 1.7  | FDD |  |
| DC_(n)71AA                                                                                                                                                                                                                                  | 71  | 668   | 10              | 10 (RB <sub>start</sub> = 0) | 622                | 17.2 |     |  |
|                                                                                                                                                                                                                                             | n71 | 678   | 10              | 10 (RB <sub>end</sub> = 51)  | 632                | 29.4 |     |  |
| DC_(n)71AA                                                                                                                                                                                                                                  | 71  | 665.5 | 5               | 5 (RB <sub>end</sub> =24)    | 619.5              | 0    |     |  |
|                                                                                                                                                                                                                                             | n71 | 675.5 | 15 <sup>1</sup> | 15 (RB <sub>start</sub> = 0) | 632 <sup>1</sup>   | 2.5  |     |  |
| DC_(n)71AA                                                                                                                                                                                                                                  | 71  | 670.5 | 15              | 15 (RB <sub>end</sub> = 74)  | 624.5              | 0    |     |  |
|                                                                                                                                                                                                                                             | n71 | 680.5 | 5 <sup>1</sup>  | 5 (RB <sub>start</sub> = 0)  | 637 <sup>1</sup>   | 2.2  |     |  |
| DC_(n)71AA                                                                                                                                                                                                                                  | 71  | 668   | 10              | 10 (RB <sub>end</sub> = 49)  | 622                | 0    |     |  |
|                                                                                                                                                                                                                                             | n71 | 678   | 10 <sup>1</sup> | 10 (RB <sub>start</sub> = 0) | 634.5 <sup>1</sup> | 2.5  |     |  |
| DC_(n)71AA                                                                                                                                                                                                                                  | 71  | 668   | 10              | 10 (RB <sub>start</sub> = 0) | 622                | 17.2 |     |  |
|                                                                                                                                                                                                                                             | n71 | 678   | 10 <sup>1</sup> | 10 (RB <sub>end</sub> = 51)  | 634.5 <sup>1</sup> | 29.1 |     |  |
| NOTE 1: In accordance to BCS1, the NR uplink bandwidth is specified as in this table, but the corresponding NR downlink bandwidth is 5 MHz larger.                                                                                          |     |       |                 |                              |                    |      |     |  |
| NOTE 2: The transmitters powers shall be set to P <sub>UMAX</sub> , as defined in TS 38.101-1 [2], TS 38.101-2 [3], and TS 36.101 [4], with additional limits on configured maximum output power for the uplink according to clause 6.2B.4. |     |       |                 |                              |                    |      |     |  |

### 7.3B.2.2 Intra-band non-contiguous EN-DC

For intra-band non-contiguous EN-DC configurations, the reference sensitivity power level REFSENS is the minimum mean power applied to each one of the UE antenna ports at which the throughput for the carrier(s) of the E-UTRA and NR CGs shall meet or exceed the requirements for the specified E-UTRA and NR reference measurement channels.

Sensitivity degradation is allowed for Intra-band non-contiguous EN-DC configurations listed in Table 7.3B.2.2-1, the reference sensitivity is defined only for the specific uplink and downlink test points which are specified in Table 7.3B.2.2-1 and E-UTRA and NR single carrier requirements do not apply.

For UE supporting Intra-band non-contiguous EN-DC configurations with single switched UL, no MSD is specified and E-UTRA and NR single carrier requirements apply.

**Table 7.3B.2.2-1: Reference sensitivity (MSD) for intra-band non-contiguous EN-DC**

| MSD / DC bandwidth class A + A                                                                                                      |                |                           |                         |                               |                           |                                    |             |  |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------|-------------------------|-------------------------------|---------------------------|------------------------------------|-------------|--|
| DC configuration                                                                                                                    | E-UTRA/NR band | F <sub>c</sub> (UL) (MHz) | Channel bandwidth (MHz) | UL allocation (LCRB)          | F <sub>c</sub> (DL) (MHz) | MSD (dB)                           | Duplex mode |  |
| DC_3A_n3A                                                                                                                           | 3              | 1782.5                    | 5                       | 12 (RB <sub>start</sub> = 0)  | 1877.5                    | 0 <sup>1</sup><br>1 <sup>2</sup>   | FDD         |  |
|                                                                                                                                     | n3             | 1772.5                    | 5                       | 12 (RB <sub>end</sub> = 24)   | 1867.5                    | 0 <sup>1</sup><br>1.5 <sup>2</sup> |             |  |
| DC_3A_n3A                                                                                                                           | 3              | 1782.5                    | 5                       | 12 (RB <sub>start</sub> = 9)  | 1877.5                    | 3 <sup>1</sup><br>29 <sup>2</sup>  |             |  |
|                                                                                                                                     | n3             | 1752.5                    | 5                       | 12 (RB <sub>start</sub> = 0)  | 1847.5                    | 15 <sup>1</sup><br>31 <sup>2</sup> |             |  |
| DC_3A_n3A                                                                                                                           | 3              | 1782.5                    | 5                       | 12 (RB <sub>start</sub> = 12) | 1877.5                    | 16 <sup>1,3</sup>                  |             |  |
|                                                                                                                                     | n3             | 1737.5                    | 5                       | 12 (RB <sub>start</sub> = 0)  | 1832.5                    | 33 <sup>1,3</sup>                  |             |  |
| DC_3A_n3A                                                                                                                           | 3              | 1737.5                    | 5                       | 12 (RB <sub>start</sub> = 0)  | 1832.5                    | 33 <sup>1,3,4</sup>                |             |  |
|                                                                                                                                     | n3             | 1782.5                    | 5                       | 12 (RB <sub>start</sub> = 12) | 1877.5                    | 16 <sup>1,3,4</sup>                |             |  |
| NOTE 1: Applicable for UE signaling with dual PA capability.                                                                        |                |                           |                         |                               |                           |                                    |             |  |
| NOTE 2: Applicable for UE signaling without dual PA capability.                                                                     |                |                           |                         |                               |                           |                                    |             |  |
| NOTE 3: The IMD also impacts Rx received blocks for UE signaling without dual PA capability but the requirements are not specified. |                |                           |                         |                               |                           |                                    |             |  |
| NOTE 4: The test point is not applicable for BCS0 of DC_3A_n3A in Table 5.3B.1.3-1.                                                 |                |                           |                         |                               |                           |                                    |             |  |

### 7.3B.2.3 Inter-band EN-DC within FR1

#### 7.3B.2.3.0 General

Reference sensitivity exceptions are specified for the condition when there is uplink transmission only in the aggressor band.

### 7.3B.2.3.1 Reference sensitivity exceptions due to UL harmonic interference for EN-DC in NR FR1

Sensitivity degradation is allowed for a band if it is impacted by UL harmonic interference from another band part of the same EN-DC configuration. Reference sensitivity exceptions for the victim band (high) are specified in Table 7.3B.2.3.1-1 with uplink configuration of the aggressor band (low) specified in Table 7.3B.2.3.1-2.

**Table 7.3B.2.3.1-1: Reference sensitivity exceptions (MSD) due to UL harmonic for EN-DC in NR FR1**

| UL band | E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD |            |             |             |             |             |             |             |             |             |             |             |             |              |
|---------|---------------------------------------------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
|         | DL band                                                             | 5 MHz (dB) | 10 MHz (dB) | 15 MHz (dB) | 20 MHz (dB) | 25 MHz (dB) | 30 MHz (dB) | 40 MHz (dB) | 50 MHz (dB) | 60 MHz (dB) | 70 MHz (dB) | 80 MHz (dB) | 90 MHz (dB) | 100 MHz (dB) |
| 1, 3    | n77 <sup>2,13</sup>                                                 |            | 23.9        | 22.1        | 20.9        | 19.8        | 19.0        | 17.9        | 16.8        | 16.0        | 15.4        | 14.8        | 14.3        | 13.8         |
|         | n77 <sup>3</sup>                                                    |            | 1.1         | 0.8         | 0.3         |             |             |             |             |             |             |             |             |              |
| 2       | n48 <sup>2,13</sup>                                                 | 27.3       | 24.4        | 22.4        | 21.2        |             |             | 18          | 17.1        | 16.3        |             | 15          | 14.5        | 14           |
|         | n48 <sup>3</sup>                                                    | 1.9        | 1.4         | 0.9         | 0.4         |             |             | 0           | 0           | 0           |             | 0           | 0           | 0            |
| 2       | n78 <sup>2,13</sup>                                                 |            | 23.9        | 22.1        | 20.9        | 19.8        | 19.0        | 17.9        | 16.8        | 16.0        | 15.4        | 14.8        | 14.3        | 13.8         |
|         | n78 <sup>3</sup>                                                    |            | 1.1         | 0.8         | 0.3         |             |             |             |             |             |             |             |             |              |
| 3       | n78 <sup>2,13</sup>                                                 |            | 23.9        | 22.1        | 20.9        | 19.8        | 19.0        | 17.9        | 16.8        | 16.0        | 15.4        | 14.8        | 14.3        | 13.8         |
|         | n78 <sup>3</sup>                                                    |            | 1.1         | 0.8         | 0.3         |             |             |             |             |             |             |             |             |              |
| 4       | n78 <sup>2,13</sup>                                                 |            | 23.9        | 22.1        | 20.9        | 19.8        | 19.0        | 17.9        | 16.8        | 16.0        | 15.4        | 14.8        | 14.3        | 13.8         |
|         | n78 <sup>3</sup>                                                    |            | 1.1         | 0.8         | 0.3         |             |             |             |             |             |             |             |             |              |
| 5       | n78 <sup>6,7</sup>                                                  |            | 10.5        | 8.9         | 7.8         | 7.1         | 6.5         | 5.4         | 4.2         | 3.5         | 2.9         | 2.3         | 2.1         | 1.4          |
| 8       | n41 <sup>8,9</sup>                                                  | N/A        | 13          | 11.3        | 10.1        |             | 8.3         | 7.0         | 6.1         | 5.5         |             | 4.3         | 3.9         | 3.5          |
| 8       | n77 <sup>6,7</sup>                                                  |            | 10.8        | 9.1         | 8           | 7.2         | 6.5         | 5.1         | 4.2         | 3.5         | 2.9         | 2.3         | 2.1         | 1.4          |
|         | n78 <sup>6,7</sup>                                                  |            |             |             |             |             |             |             |             |             |             |             |             |              |
| 8       | n79 <sup>4,5</sup>                                                  |            |             |             |             |             |             | 6.8         | 6.2         | 5.6         |             | 4.9         |             | 4.4          |
| n8      | 3 <sup>14</sup>                                                     | N/A        | N/A         | N/A         | N/A         |             |             |             |             |             |             |             |             |              |
| n8      | 7 <sup>8,9,10</sup>                                                 | 10         | 7.6         | 6.2         | 5.3         |             |             |             |             |             |             |             |             |              |
| 12      | n66 <sup>8,9,10</sup>                                               | 10         | 7.5         | 6.2         | 5.5         | 4.5         | 3.7         | 2.4         |             |             |             |             |             |              |
| 12      | n78 <sup>4,5</sup>                                                  |            | 10.4        | 8.9         | 7.8         | 7.1         | 6.5         | 4.7         | 3.7         | 3           | 2.3         | 1.7         | 1.2         | 0.7          |
| n12     | 48 <sup>4,5</sup>                                                   | 13         | 10.4        | 8.9         | 7.8         |             |             |             |             |             |             |             |             |              |
| n12     | 66 <sup>8,9,10</sup>                                                | 10         | 7.5         | 6.2         | 5.5         |             |             |             |             |             |             |             |             |              |
| 18      | n77 <sup>4,5</sup>                                                  |            | 10.4        | 8.9         | 7.8         | 7.1         | 6.5         | 4.7         | 3.7         | 3           | 2.3         | 1.7         | 1.2         | 0.7          |
|         | n78 <sup>4,5</sup>                                                  |            |             |             |             |             |             |             |             |             |             |             |             |              |
| 19      | n77 <sup>4,5</sup>                                                  |            | 10.4        | 8.9         | 7.8         | 7.1         | 6.5         | 4.7         | 3.7         | 3           | 2.3         | 1.7         | 1.2         | 0.7          |
|         | n77 <sup>6,7</sup><br>n78 <sup>6,7</sup>                            |            | 10.5        | 8.9         | 7.8         | 7.1         | 6.5         | 5.4         | 4.2         | 3.5         | 2.9         | 2.3         | 2.1         | 1.4          |
| 28      | n50 <sup>2,13</sup>                                                 | 27.8       | 24.6        | 22.8        | 21.6        |             | 19.5        | 18.5        | 17.5        | 16.7        |             | 15.4        |             |              |
|         | n50 <sup>3</sup>                                                    | 1.9        | 1.4         | 0.9         | 0.4         |             |             |             |             |             |             |             |             |              |
| 28      | n51 <sup>2,13</sup>                                                 | 27.8       |             |             |             |             |             |             |             |             |             |             |             |              |
|         | n51 <sup>3</sup>                                                    | 1.9        |             |             |             |             |             |             |             |             |             |             |             |              |
| 28      | n77 <sup>4,5</sup>                                                  |            | 10.4        | 8.9         | 7.8         | 7.1         | 6.5         | 4.7         | 3.7         | 3           | 2.3         | 1.7         | 1.2         | 0.7          |
|         | n78 <sup>4,5</sup>                                                  |            |             |             |             |             |             |             |             |             |             |             |             |              |
| 20      | n38 <sup>8,9</sup>                                                  | 12.9       | 10.3        | 8.4         | 7.4         | 6.7         | 6.1         | 5           |             |             |             |             |             |              |
| 20      | n41                                                                 | 12.9       | 10.3        | 8.4         | 7.4         |             | 6.1         | 5           | 4.3         | 3.9         |             | 3.1         | 2.7         | 2.1          |
| 20      | n77 <sup>6,7</sup><br>n78 <sup>6,7</sup>                            |            | 10.8        | 9.1         | 8           | 7.3         | 6.8         | 6           | 4.0         | 3.2         | 2.5         | 2.0         | 1.5         | 1.0          |
| 26      | n41 <sup>8,9</sup>                                                  |            | 10.3        | 8.4         | 7.4         |             | 6.1         | 5           | 4.3         | 3.9         |             | 3.1         | 2.9         | 2.7          |
| 26      | n77 <sup>6,7</sup>                                                  |            | 10.8        | 9.1         | 8           | 7.3         | 6.8         | 6           | 4.0         | 3.2         | 2.5         | 2.0         | 1.5         | 1.0          |
|         | n78 <sup>6,7</sup>                                                  |            |             |             |             |             |             |             |             |             |             |             |             |              |
| n28     | 1 <sup>8,9,10</sup>                                                 | 10.2       | 7.6         | 6.2         | 5.3         |             |             |             |             |             |             |             |             |              |
| 28      | n75                                                                 | 28.1       | 25.3        | 24.0        | 22.8        | 21.6        | 20.4        | 19.2        | 18.0        |             |             |             |             |              |
| n28     | 11 <sup>2,10,13</sup>                                               | 24.8       | 21.8        |             |             |             |             |             |             |             |             |             |             |              |
| n28     | 42 <sup>4,5,10</sup>                                                | 14.1       | 10.4        | 8.9         | 7.9         |             |             |             |             |             |             |             |             |              |
| n71     | 2 <sup>11</sup>                                                     | 4.6        | 1.0         | 0.7         | 0.6         |             |             |             |             |             |             |             |             |              |
|         | 2 <sup>12</sup>                                                     | 1.7        | 1.0         | 0.7         | 0.6         |             |             |             |             |             |             |             |             |              |
| n71     | 7 <sup>6,7</sup>                                                    | 14.6       | 11.7        | 10.1        | 9           |             |             |             |             |             |             |             |             |              |
| 66      | n48 <sup>2,13</sup>                                                 | 27.3       | 24.4        | 22.4        | 21.2        |             |             | 18          | 17.1        | 16.3        |             | 15          | 14.5        | 14           |
|         | n48 <sup>3</sup>                                                    | 1.9        | 1.4         | 0.9         | 0.4         |             |             | 0           | 0           | 0           |             | 0           | 0           | 0            |
| 66      | n78 <sup>2,13</sup>                                                 |            | 23.9        | 22.1        | 20.9        | 19.8        | 19.0        | 17.9        | 16.8        | 16.0        | 15.4        | 14.8        | 14.3        | 13.8         |
|         | n78 <sup>3</sup>                                                    |            | 1.1         | 0.8         | 0.3         |             |             |             |             |             |             |             |             |              |
| n66     | 48 <sup>2,13</sup>                                                  | 27.3       | 24.4        | 22.4        | 21.2        |             |             |             |             |             |             |             |             |              |
|         | 48 <sup>3</sup>                                                     | 1.9        | 1.4         | 0.9         | 0.4         |             |             |             |             |             |             |             |             |              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    | E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD |             |             |             |             |             |             |             |             |             |             |             |              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| UL band                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DL band            | 5 MHz (dB)                                                          | 10 MHz (dB) | 15 MHz (dB) | 20 MHz (dB) | 25 MHz (dB) | 30 MHz (dB) | 40 MHz (dB) | 50 MHz (dB) | 60 MHz (dB) | 70 MHz (dB) | 80 MHz (dB) | 90 MHz (dB) | 100 MHz (dB) |
| 71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | n78 <sup>4,5</sup> |                                                                     | 10.4        | 8.9         | 7.8         | 7.1         | 6.5         | 4.7         | 3.7         | 3           | 2.3         | 1.7         | 1.2         | 0.7          |
| NOTE 1: Void                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 2: The requirements should be verified for UL EARFCN or NR ARFCN of the aggressor (lower) band (superscript LB) such that $f_{UL}^{LB} = \lfloor f_{DL}^{HB} / 0.2 \rfloor 0.1$ in MHz and $F_{UL\_low}^{LB} + BW_{Channel}^{LB} / 2 \leq f_{UL}^{LB} \leq F_{UL\_high}^{LB} - BW_{Channel}^{LB} / 2$ with carrier frequency in the victim (higher) band in MHz and the channel bandwidth configured in the lower band.                                                                                                                                                                   |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 3: The requirements are only applicable to channel bandwidths no larger than 20 MHz and with a carrier frequency at $\pm (20 + BW_{Channel}^{HB} / 2)$ MHz offset from $2f_{UL}^{LB}$ in the victim (higher band) with $F_{UL\_low}^{LB} + BW_{Channel}^{LB} / 2 \leq f_{UL}^{LB} \leq F_{UL\_high}^{LB} - BW_{Channel}^{LB} / 2$ , whereand $BW_{Channel}^{HB}$ are the channel bandwidths configured in the aggressor (lower) and victim (higher) bands in MHz, respectively.                                                                                                           |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 4: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (lower) band for which the 5 <sup>th</sup> transmitter harmonic is within the downlink transmission bandwidth of a victim (higher) band.                                                                                                                                                                                                                                                                                                                   |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 5: The requirements should be verified for UL EARFCN of the aggressor (lower) band (superscript LB) such that $f_{UL}^{LB} = \lfloor f_{DL}^{HB} / 0.5 \rfloor 0.1$ in MHz and $F_{UL\_low}^{LB} + BW_{Channel}^{LB} / 2 \leq f_{UL}^{LB} \leq F_{UL\_high}^{LB} - BW_{Channel}^{LB} / 2$ with carrier frequency in the victim (higher) band in MHz and the channel bandwidth configured in the lower band.                                                                                                                                                                               |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 6: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (lower) band for which the 4 <sup>th</sup> transmitter harmonic is within the downlink transmission bandwidth of a victim (higher) band.                                                                                                                                                                                                                                                                                                                   |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 7: The requirements should be verified for UL EARFCN of the aggressor (lower) band (superscript LB) such that $f_{UL}^{LB} = \lfloor f_{DL}^{HB} / 0.4 \rfloor 0.1$ in MHz and $F_{UL\_low}^{LB} + BW_{Channel}^{LB} / 2 \leq f_{UL}^{LB} \leq F_{UL\_high}^{LB} - BW_{Channel}^{LB} / 2$ with carrier frequency in the victim (higher) band in MHz and the channel bandwidth configured in the lower band.                                                                                                                                                                               |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 8: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (lower) for which the 3rd transmitter harmonic is within the downlink transmission bandwidth of a victim (higher) band.                                                                                                                                                                                                                                                                                                                                    |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 9: The requirements should be verified for UL EARFCN of the aggressor (lower) band (superscript LB) such that $f_{UL}^{LB} = \lfloor f_{DL}^{HB} / 0.3 \rfloor 0.1$ in MHz and $F_{UL\_low}^{LB} + BW_{Channel}^{LB} / 2 \leq f_{UL}^{LB} \leq F_{UL\_high}^{LB} - BW_{Channel}^{LB} / 2$ with $f_{DL}^{HB}$ the carrier frequency in the victim (higher) band in MHz and $BW_{Channel}^{LB}$ the channel bandwidth configured in the low band.                                                                                                                                           |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 10: Void.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 11: These requirements apply when the lower edge frequency of the 5 MHz uplink channel in Band 71 is located at or below 668 MHz and the downlink channel in Band 2 is located with its upper edge at 1990 MHz.                                                                                                                                                                                                                                                                                                                                                                           |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 12: These requirements apply when the lower edge frequency of the 10 MHz, 15 MHz, or 20 MHz uplink channel in Band 71 is located at or below 668 MHz and the downlink channel in Band 2 is located with its upper edge at 1990 MHz.                                                                                                                                                                                                                                                                                                                                                       |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 13: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (lower) band for which the 2nd transmitter harmonic is within the downlink transmission bandwidth of a victim (higher) band and a range $\Delta F_{HD}$ above and below the edge of this downlink transmission bandwidth. The value $\Delta F_{HD}$ depends on the EN-DC band combination: $\Delta F_{HD} = 10$ MHz for DC_1_n77, DC_2_n48, DC_2_n77, DC_48_n66, DC_66_n48, DC_66_n77, DC_3_n77, DC_3_n78, DC_11_n28 and DC_28_n50, DC_28_n51, DC_66_n78. |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 14: No requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the low band for which the 2nd transmitter harmonic is within the downlink transmission bandwidth of the high band. The reference sensitivity for all active downlink component carriers is only verified when this is not the case (the requirements specified in clause 7.3.1 from TS 36.101-1 apply unless otherwise specified).                                                                                                                                        |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |
| NOTE 15: MSD test point can be chosen according to supported BW and lowest SCS supported by the UE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    |                                                                     |             |             |             |             |             |             |             |             |             |             |             |              |

Table 7.3B.2.3.1-2: Uplink configuration for reference sensitivity exceptions due to UL harmonic interference for EN-DC in NR FR1

| UL band | DL band  | SCS of UL band (kHz) | E-UTRA or NR Band / Channel bandwidth of the affected DL band / UL RB allocation of the agressor band |               |               |               |               |               |               |               |               |               |               |               |                |
|---------|----------|----------------------|-------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|         |          |                      | 5 MHz (LCRB)                                                                                          | 10 MHz (LCRB) | 15 MHz (LCRB) | 20 MHz (LCRB) | 25 MHz (LCRB) | 30 MHz (LCRB) | 40 MHz (LCRB) | 50 MHz (LCRB) | 60 MHz (LCRB) | 70 MHz (LCRB) | 80 MHz (LCRB) | 90 MHz (LCRB) | 100 MHz (LCRB) |
| 1       | n77      | 15                   |                                                                                                       | 25            | 36            | 50            | 64            | 80            | 100           | 100           | 100           | 100           | 100           | 100           | 100            |
| 2       | n48      | 15                   | 12                                                                                                    | 25            | 36            | 50            |               |               | 100           | 100           | 100           |               | 100           | 100           | 100            |
| 2       | n78      | 15                   |                                                                                                       | 25            | 36            | 50            | 50            | 50            | 50            | 50            | 50            | 50            | 50            | 50            | 50             |
| 3       | n77, n78 | 15                   |                                                                                                       | 25            | 36            | 50            | 64            | 80            | 50            | 50            | 50            | 100           | 50            | 50            | 50             |
| 4       | n78      | 15                   |                                                                                                       | 25            | 36            | 50            | 64            | 80            | 100           | 100           | 100           | 100           | 100           | 100           | 100            |
| 5       | n78      | 15                   | 8                                                                                                     | 16            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| 8       | n41      | 15                   |                                                                                                       | 16            | 25            | 25            |               | 25            | 25            | 25            | 25            |               | 25            | 25            | 25             |
| 8       | n77 n78  | 15                   |                                                                                                       | 16            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| 8       | n79      | 15                   |                                                                                                       |               |               |               |               |               | 25            | 25            | 25            |               | 25            |               | 25             |
| n8      | 7        | 15                   | 8                                                                                                     | 16            | 25            | 25            |               |               |               |               |               |               |               |               |                |
| 12      | n66      | 15                   | 8                                                                                                     | 16            | 20            | 20            | 20            | 20            | 20            |               |               |               |               |               |                |
| 12      | n78      | 15                   |                                                                                                       | 10            | 15            | 20            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| n12     | 48       | 15                   | 5                                                                                                     | 10            | 15            | 20            |               |               |               |               |               |               |               |               |                |
| n12     | 66       | 15                   | 8                                                                                                     | 16            | 20            | 20            |               |               |               |               |               |               |               |               |                |
| 18      | n77, n78 | 15                   |                                                                                                       | 16            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| 19      | n77, n78 | 15                   |                                                                                                       | 16            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| 20      | n38      | 15                   | 8                                                                                                     | 16            | 25            | 25            | 25            | 25            | 25            |               |               |               |               |               |                |
| 20      | n41      | 15                   | 8                                                                                                     | 16            | 25            | 25            |               | 25            | 25            | 25            | 25            |               | 25            | 25            | 25             |
| 20      | n77, n78 | 15                   |                                                                                                       | 16            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| 26      | n41      | 15                   |                                                                                                       | 16            | 25            | 25            |               | 25            | 25            | 25            | 25            |               | 25            | 25            | 25             |
| 26      | n77, n78 | 15                   |                                                                                                       | 16            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| n28     | 1        | 15                   | 8                                                                                                     | 16            | 25            | 25            |               |               |               |               |               |               |               |               |                |
| 28      | n75      | 15                   | 8                                                                                                     | 16            | 25            | 25            | 25            | 25            | 25            | 25            |               |               |               |               |                |
| 28      | n50      | 15                   | 12                                                                                                    | 25            | 25            | 25            |               | 25            | 25            | 25            | 25            |               | 25            |               |                |
| 28      | n51      | 15                   | 12                                                                                                    |               |               |               |               |               |               |               |               |               |               |               |                |
| n28     | 11       | 15                   | 12                                                                                                    | 25            |               |               |               |               |               |               |               |               |               |               |                |
| n28     | 42       | 15                   | 5                                                                                                     | 10            | 15            | 20            |               |               |               |               |               |               |               |               |                |
| 28      | n77, n78 | 15                   |                                                                                                       | 10            | 15            | 20            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             |
| 66      | n48      | 15                   | 12                                                                                                    | 25            | 36            | 50            |               |               | 100           | 100           | 100           |               | 100           | 100           | 100            |
| 66      | n78      | 15                   |                                                                                                       | 25            | 36            | 50            | 64            | 80            | 100           | 100           | 100           | 100           | 100           | 100           | 100            |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     |    |                                   |                                   |                                   |                                   |    |    |    |    |    |    |    |    |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|----|----|----|----|----|----|----|----|----|
| n66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 48  | 15 | 12                                | 25                                | 36                                | 50                                |    |    |    |    |    |    |    |    |    |
| n71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2   | 15 | 25 <sup>4</sup><br>8 <sup>5</sup> | 25 <sup>4</sup><br>8 <sup>5</sup> | 20 <sup>4</sup><br>8 <sup>5</sup> | 20 <sup>4</sup><br>8 <sup>5</sup> |    |    |    |    |    |    |    |    |    |
| n71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 7   | 15 | 8                                 | 16                                | 25                                | 25                                |    |    |    |    |    |    |    |    |    |
| 71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | n78 | 15 |                                   | 10                                | 15                                | 20                                | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| <div>NOTE 1: The UL configuration applies regardless of the channel bandwidth of the UL band unless the UL resource blocks exceed that specified in Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2] for the uplink bandwidth in which case the allocation according to Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2] applies</div> <div>NOTE 2: Void</div> <div>NOTE 3: Unless stated otherwise, UL resource blocks shall be centred within the transmission bandwidth configuration for the channel bandwidth.</div> <div>NOTE 4: These requirements apply when the lower edge frequency of the 5 MHz uplink channel in Band 71 is located at or below 668 MHz and the downlink channel in Band 2 is located with its upper edge at 1990 MHz.</div> <div>NOTE 5: These requirements apply when the lower edge frequency of the 10 MHz, 15 MHz, or 20 MHz uplink channel in Band 71 is located at or below 668 MHz and the downlink channel in Band 2 is located with its upper edge at 1990 MHz.</div> <div>NOTE 6: If the aggressor band is NR band, the test SCS and UL RB can be adjusted according to supported BW and lowest SCS supported by the UE</div> |     |    |                                   |                                   |                                   |                                   |    |    |    |    |    |    |    |    |    |

Table 7.3B.2.3.1-3: Reference sensitivity QPSK PREFSENS (EN-DC with n46)

| E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD |                   |            |             |             |             |             |             |             |             |             |             |              |
|---------------------------------------------------------------------|-------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| UL band                                                             | DL band           | 5 MHz (dB) | 10 MHz (dB) | 15 MHz (dB) | 20 MHz (dB) | 25 MHz (dB) | 40 MHz (dB) | 50 MHz (dB) | 60 MHz (dB) | 80 MHz (dB) | 90 MHz (dB) | 100 MHz (dB) |
| 2                                                                   | n46 <sup>1</sup>  |            |             |             | N/A         |             | N/A         |             | N/A         | N/A         |             |              |
| n46                                                                 | 2 <sup>2,3</sup>  | 28         | 28          | 28          | 28          |             |             |             |             |             |             |              |
| n46                                                                 | 48 <sup>2,4</sup> | 22.6       | 19.5        | 17.8        | 16.6        |             |             |             |             |             |             |              |
| 66                                                                  | n46               |            |             |             | N/A         |             | N/A         |             | N/A         | N/A         |             |              |

NOTE 1: These requirements apply when there is at least one individual RE within the downlink (victim) transmission bandwidth which falls into the reference sensitivity exclusion region as specified in Table 6.x.1.7-2 and Table 6.x.1.7-3.

NOTE 2: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (higher) band and when the frequency range of relative higher band's uplink channel bandwidth or uplink 1<sup>st</sup> adjacent channel bandwidth is fully or partially overlapped with the downlink transmission bandwidth of a victim (lower) band.

NOTE 3: The requirements for a victim (lower) band apply for UL EARFCN of the aggressor (higher) band (superscript HB) such that  $f_{DL}^{LB} = \lfloor f_{UL}^{HB} / 0.3 \rfloor 0.1$  in MHz and  $F_{UL\_low}^{HB} + BW_{Channel}^{HB} / 2 \leq f_{UL}^{HB} \leq F_{UL\_high}^{HB} - BW_{Channel}^{HB} / 2$  with  $f_{DL}^{LB}$  the DL carrier frequency in the lower band and  $f_{UL}^{HB}$  the UL carrier frequency and  $BW_{Channel}^{HB}$  the channel bandwidth configured in the higher band, both in MHz.

Note 4: The requirements should be verified for UL NR-ARFCN of the aggressor (high) band (superscript HB) such that  $f_{UL}^{HB} = \lfloor 15 * f_{DL}^{LB} \rfloor 0.1$  in MHz and  $F_{UL\_low}^{HB} + BW_{Channel}^{HB} / 2 \leq f_{UL}^{HB} \leq F_{UL\_high}^{HB} - BW_{Channel}^{HB} / 2$  with  $f_{DL}^{LB}$  carrier frequency in the victim (lower) band in MHz and  $BW_{Channel}^{HB}$  the channel bandwidth configured in the higher band.

Table 7.3B.2.3.1-4: n46 Reference sensitivity measurement exclusion region in MHz

| Licensed Component Carriers / E-UTRA Band / Harmonic order / Channel BW in UL |                |        |        |        |        |
|-------------------------------------------------------------------------------|----------------|--------|--------|--------|--------|
| Band                                                                          | Harmonic order | 5MHz   | 10MHz  | 15MHz  | 20MHz  |
| 2                                                                             | 3              | +/- 15 | +/- 23 | +/- 35 | +/- 45 |
| 66                                                                            | 3              | +/- 15 | +/- 23 | +/- 35 | +/- 45 |

NOTE 1: Even though UL harmonic does not fall directly into n46 the exclusion region still applies.

NOTE 2: The center of the exclusion region is obtained by multiplying the uplink channel center frequency by the harmonic order.

Table 7.3B.2.3.1-5: Uplink configuration for reference sensitivity exceptions due to receiver harmonic mixing for EN-DC paring with n46

| E-UTRA or NR Band / SCS / Channel bandwidth of the affected DL band / UL RB allocation of the aggressor band |         |                      |              |               |               |               |               |               |               |               |               |               |                |
|--------------------------------------------------------------------------------------------------------------|---------|----------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| UL band                                                                                                      | DL band | SCS of UL band (kHz) | 5 MHz (LCRB) | 10 MHz (LCRB) | 15 MHz (LCRB) | 20 MHz (LCRB) | 25 MHz (LCRB) | 40 MHz (LCRB) | 50 MHz (LCRB) | 60 MHz (LCRB) | 80 MHz (LCRB) | 90 MHz (LCRB) | 100 MHz (LCRB) |
| n46                                                                                                          | 2       | 15                   | 25           | 50            | 75            | 100           |               |               |               |               |               |               |                |
| n46                                                                                                          | 48      | 15                   | 12           | 25            | 36            | 50            |               |               |               |               |               |               |                |

### 7.3B.2.3.2 Reference sensitivity exceptions due to receiver harmonic mixing for EN-DC in NR FR1

Sensitivity degradation is allowed for a band if it is impacted by receiver harmonic mixing due to another band part of the same EN-DC configuration. Reference sensitivity exceptions for the victim band (low) are specified in Table 7.3B.2.3.2-1 with uplink configuration of the aggressor band (high) specified in Table 7.3B.2.3.2-2.

**Table 7.3B.2.3.2-1: Reference sensitivity exceptions (MSD) due to receiver harmonic mixing for EN-DC in NR FR1**

| E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD |                  |            |             |             |             |             |             |             |             |             |             |              |
|---------------------------------------------------------------------|------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| UL band                                                             | DL band          | 5 MHz (dB) | 10 MHz (dB) | 15 MHz (dB) | 20 MHz (dB) | 25 MHz (dB) | 40 MHz (dB) | 50 MHz (dB) | 60 MHz (dB) | 80 MHz (dB) | 90 MHz (dB) | 100 MHz (dB) |
| 1                                                                   | n71 <sup>4</sup> | 26.8       | 23.6        | 21.2        | 15.6        |             |             |             |             |             |             |              |
| 2                                                                   | n71 <sup>4</sup> | 26.8       | 23.6        | 21.2        | 15.6        |             |             |             |             |             |             |              |
| n38                                                                 | 5 <sup>9</sup>   | N/A        | N/A         |             |             |             |             |             |             |             |             |              |
| n40                                                                 | 28 <sup>4</sup>  | 37.8       | 34.8        | 33          | 30.3        |             |             |             |             |             |             |              |
| n41                                                                 | 26 <sup>4</sup>  | 24.3       | 24.3        | 22.5        | N/A         |             |             |             |             |             |             |              |
| 48                                                                  | n12 <sup>2</sup> | 31         | 28          |             |             |             |             |             |             |             |             |              |
| n77                                                                 | 3                | 5.7        | 4.0         | 3.0         | 2.7         |             |             |             |             |             |             |              |
| n78                                                                 | 3                | 5.7        | 4.0         | 3.0         | 2.7         |             |             |             |             |             |             |              |
| n77                                                                 | 7 <sup>8</sup>   | 10.4       | 10.4        | 10.4        | 10.4        |             |             |             |             |             |             |              |
| n77                                                                 | 19               | 7.2        | 5.0         | 3.8         |             |             |             |             |             |             |             |              |
| n77                                                                 | 41 <sup>8</sup>  | 10.4       | 10.4        | 10.4        | 10.4        |             |             |             |             |             |             |              |
| n77                                                                 | 28 <sup>2</sup>  | 28         | 25          | 23.2        | 22          |             |             |             |             |             |             |              |
| n78                                                                 | 8                | 5.7        | 4.0         | 3.0         | 2.7         |             |             |             |             |             |             |              |
| n78                                                                 | 12 <sup>2</sup>  | 31         | 28          |             |             |             |             |             |             |             |             |              |
| n78                                                                 | 13 <sup>2</sup>  | 31         | 28          |             |             |             |             |             |             |             |             |              |
| n78                                                                 | 19               | 7.2        | 5.0         | 3.8         |             |             |             |             |             |             |             |              |
| n78                                                                 | 40 <sup>8</sup>  | 10.4       | 10.4        | 10.4        | 10.4        |             |             |             |             |             |             |              |
| n78                                                                 | 41 <sup>8</sup>  | 10.4       | 10.4        | 10.4        | 10.4        |             |             |             |             |             |             |              |
| n79                                                                 | 11 <sup>4</sup>  | 39.3       | 36.3        | 34.5        |             |             |             |             |             |             |             |              |
| n79                                                                 | 19 <sup>2</sup>  | 29.5       | 26.5        | 24.7        |             |             |             |             |             |             |             |              |
| n79                                                                 | 21 <sup>4</sup>  | 39.3       | 36.3        | 34.5        |             |             |             |             |             |             |             |              |
| n79                                                                 | 26 <sup>2</sup>  | 27         | 24          | 22.2        |             |             |             |             |             |             |             |              |
| n79                                                                 | 8 <sup>2</sup>   | 25         | 22          |             |             |             |             |             |             |             |             |              |

NOTE 1: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (higher) band for which the mixing product due to harmonic of victim (lower) band LO with leakage of aggressor (higher) band is within the downlink transmission bandwidth of a victim (lower) band.

NOTE 2: The requirements should be verified for DL EARFCN of the victim (lower) band (superscript LB) such that  $f_{DL}^{LB} = \lfloor f_{UL}^{HB} / 0.5 \rfloor 0.1$  and  $F_{UL\_low}^{HB} + BW_{Channel}^{HB} / 2 \leq f_{UL}^{HB} \leq F_{UL\_high}^{HB} - BW_{Channel}^{HB} / 2$  with  $f_{DL}^{LB}$  the DL carrier frequency in the lower band and  $f_{UL}^{HB}$  the UL carrier frequency and  $BW_{Channel}^{HB}$  the channel bandwidth configured in the higher band, both in MHz.

NOTE 3: Void.

NOTE 4: The requirements should be verified for DL EARFCN or NR-ARFCN of the victim (lower) band (superscript LB) such that  $f_{DL}^{LB} = \lfloor f_{UL}^{HB} / 0.3 \rfloor 0.1$  and  $F_{UL\_low}^{HB} + BW_{Channel}^{HB} / 2 \leq f_{UL}^{HB} \leq F_{UL\_high}^{HB} - BW_{Channel}^{HB} / 2$  with  $f_{DL}^{LB}$  the DL carrier frequency in the lower band and  $f_{UL}^{HB}$  the UL carrier frequency and  $BW_{Channel}^{HB}$  the channel bandwidth configured in the higher band, both in MHz.

NOTE 5: Void

NOTE 6: Void

NOTE 7: Void

NOTE 8: The requirements should be verified for DL EARFCN of the victim (lower) band (superscript LB) such that  $f_{DL}^{LB} = \lfloor f_{UL}^{HB} / 0.15 \rfloor 0.1$  and  $F_{UL\_low}^{HB} + BW_{Channel}^{HB} / 2 \leq f_{UL}^{HB} \leq F_{UL\_high}^{HB} - BW_{Channel}^{HB} / 2$  with  $f_{DL}^{LB}$  the DL carrier frequency in the lower band and  $f_{UL}^{HB}$  the UL carrier frequency and  $BW_{Channel}^{HB}$  the channel bandwidth configured in the higher band, both in MHz.

NOTE 9: No requirements apply for the case that there is at least one individual RE within the uplink transmission bandwidth of the relative higher band and when the frequency range of relative higher band's uplink channel bandwidth or uplink 1<sup>st</sup> adjacent channel bandwidth is fully or partially overlapped with the 3 times of the frequency range of the relative lower band's downlink channel bandwidth. The reference sensitivity is only verified when this is not the case.

NOTE 10: MSD test point can be chosen according to supported BW and lowest SCS supported by the UE.

**Table 7.3B.2.3.2-2: Uplink configuration for reference sensitivity exceptions due to receiver harmonic mixing for EN-DC in NR FR1**

| E-UTRA or NR Band / SCS / Channel bandwidth of the affected DL band / UL RB allocation of the aggressor band                                                                                                                                          |         |                      |              |               |               |               |               |               |               |               |               |               |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
| UL band                                                                                                                                                                                                                                               | DL band | SCS of UL band (kHz) | 5 MHz (LCRB) | 10 MHz (LCRB) | 15 MHz (LCRB) | 20 MHz (LCRB) | 25 MHz (LCRB) | 40 MHz (LCRB) | 50 MHz (LCRB) | 60 MHz (LCRB) | 80 MHz (LCRB) | 90 MHz (LCRB) | 100 MHz (LCRB) |
| 1                                                                                                                                                                                                                                                     | n71     | 15                   | 25           | 50            | 75            | 100           |               |               |               |               |               |               |                |
| 2                                                                                                                                                                                                                                                     | n71     | 15                   | 25           | 50            | 50            | 50            |               |               |               |               |               |               |                |
| n40                                                                                                                                                                                                                                                   | 28      | 15                   | 25           | 50            | 75            | 100           |               |               |               |               |               |               |                |
| n41                                                                                                                                                                                                                                                   | 26      | 15                   | 25           | 50            | 75            |               |               |               |               |               |               |               |                |
| 48                                                                                                                                                                                                                                                    | n12     | 15                   | 25           | 50            |               |               |               |               |               |               |               |               |                |
| n77                                                                                                                                                                                                                                                   | 3       | 15                   | 25           | 50            | 75            | 100           |               |               |               |               |               |               |                |
| n78                                                                                                                                                                                                                                                   | 3       | 15                   | 25           | 50            | 75            | 100           |               |               |               |               |               |               |                |
| n77                                                                                                                                                                                                                                                   | 7       | 15                   | 12           | 25            | 36            | 50            |               |               |               |               |               |               |                |
| n77                                                                                                                                                                                                                                                   | 19      | 15                   | 25           | 50            | 75            |               |               |               |               |               |               |               |                |
| n77                                                                                                                                                                                                                                                   | 28      | 15                   | 25           | 50            | 75            | 100           |               |               |               |               |               |               |                |
| n77                                                                                                                                                                                                                                                   | 41      | 15                   | 12           | 25            | 36            | 50            |               |               |               |               |               |               |                |
| n78                                                                                                                                                                                                                                                   | 8       | 15                   | 25           | 25            | 20            | 20            |               |               |               |               |               |               |                |
| n78                                                                                                                                                                                                                                                   | 12      | 15                   | 25           | 50            |               |               |               |               |               |               |               |               |                |
| n78                                                                                                                                                                                                                                                   | 13      | 15                   | 25           | 50            |               |               |               |               |               |               |               |               |                |
| n78                                                                                                                                                                                                                                                   | 19      | 15                   | 25           | 50            | 75            |               |               |               |               |               |               |               |                |
| n78                                                                                                                                                                                                                                                   | 40      | 15                   | 12           | 25            | 36            | 50            |               |               |               |               |               |               |                |
| n78                                                                                                                                                                                                                                                   | 41      | 15                   | 12           | 25            | 36            | 50            |               |               |               |               |               |               |                |
| n79                                                                                                                                                                                                                                                   | 11      | 15                   | 25           | 50            | 75            |               |               |               |               |               |               |               |                |
| n79                                                                                                                                                                                                                                                   | 19      | 15                   | 25           | 50            | 75            |               |               |               |               |               |               |               |                |
| n79                                                                                                                                                                                                                                                   | 21      | 15                   | 25           | 50            | 75            |               |               |               |               |               |               |               |                |
| n79                                                                                                                                                                                                                                                   | 26      | 15                   | 25           | 50            | 75            |               |               |               |               |               |               |               |                |
| n79                                                                                                                                                                                                                                                   | 8       | 15                   | 25           | 50            |               |               |               |               |               |               |               |               |                |
| NOTE 1: Void                                                                                                                                                                                                                                          |         |                      |              |               |               |               |               |               |               |               |               |               |                |
| NOTE 2: Void                                                                                                                                                                                                                                          |         |                      |              |               |               |               |               |               |               |               |               |               |                |
| NOTE 3: The UL configuration applies regardless of the channel bandwidth of the UL band. UL resource blocks allocation in the table shall be further limited to that specified in Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2]. |         |                      |              |               |               |               |               |               |               |               |               |               |                |
| NOTE 4: Unless otherwise stated, the UL resource blocks allocation is applied at the center of the channel bandwidth. The note applies to the entire table.                                                                                           |         |                      |              |               |               |               |               |               |               |               |               |               |                |
| NOTE 5: If the aggressor band is NR band, the test SCS and UL RB can be adjusted according to supported BW and lowest SCS supported by the UE.                                                                                                        |         |                      |              |               |               |               |               |               |               |               |               |               |                |

**7.3B.2.3.3 Void****7.3B.2.3.4 Reference sensitivity exceptions due to cross band isolation for EN-DC in NR FR1**

Sensitivity degradation is allowed for a band if it is impacted by UL of another band part of the same EN-DC configuration due to cross band isolation issues. Reference sensitivity exceptions for the victim band are specified in Table 7.3B.2.3.4-1 and Table 7.3B.2.3.4-1a with uplink configuration of the aggressor band specified in Table 7.3B.2.3.4-2.

Table 7.3B.2.3.4-1: Reference sensitivity exceptions (MSD) due to cross band isolation for PC3 EN-DC in NR FR1

| E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD |                 |            |             |             |             |             |             |             |             |             |             |             |             |              |
|---------------------------------------------------------------------|-----------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| UL band                                                             | DL band         | 5 MHz (dB) | 10 MHz (dB) | 15 MHz (dB) | 20 MHz (dB) | 25 MHz (dB) | 30 MHz (dB) | 40 MHz (dB) | 50 MHz (dB) | 60 MHz (dB) | 70 MHz (dB) | 80 MHz (dB) | 90 MHz (dB) | 100 MHz (dB) |
| n1 <sup>3</sup>                                                     | 3               | [3]        | 2.3         | 2           | 1.8         |             |             |             |             |             |             |             |             |              |
| n1                                                                  | 40              | 6.6        | 6.6         | 6.6         | 6.6         |             |             |             |             |             |             |             |             |              |
| 1 <sup>3</sup>                                                      | n3              | 3          | 2.2         | 1.9         | 1.7         | 1.6         | 1.5         | 1.4         |             |             |             |             |             |              |
| 1                                                                   | n40             | 6.6        | 6.6         | 6.6         | 6.6         | 6.6         | 6.6         | 6.6         | 6.6         | 6.6         |             | 6.6         |             |              |
| 1                                                                   | n41             |            | 6.1         | 6.1         | 6.1         |             | 6.1]        | 6.1         | 6.1         | 6.1         |             | 6.1         | 6.1         | 6.1          |
| n3                                                                  | 11              | 6.4        | 6.1         |             |             |             |             |             |             |             |             |             |             |              |
| 3                                                                   | n41             |            | 0.7         | 0.7         | 0.7         |             | 0.7         | 0.7         | 0.7         | 0.7         |             | 0.7         | 0.7         | 0.7          |
| 3                                                                   | n51             | 6.4        |             |             |             |             |             |             |             |             |             |             |             |              |
| 30                                                                  | n66             | 8.3        | 8.3         | 8.3         | 8.3         | 8.3         | 8.3         | 8.3         |             |             |             |             |             |              |
| n3                                                                  | 41              | 0.7        | 0.7         | 0.7         | 0.7         |             |             |             |             |             |             |             |             |              |
| n5                                                                  | 28              | [17.5]     | [15.8]      | [14.0]      | [11.7]      |             |             |             |             |             |             |             |             |              |
| 7                                                                   | n40             | 3.7        | 3.4         | 3.2         | 3.1         | 3.1         | 3.1         | 3.1         | 3.1         | 3.1         |             | 3.1         |             |              |
| n34                                                                 | 3               | 3          | 2.2         | 1.9         | 1.7         |             |             |             |             |             |             |             |             |              |
| n38                                                                 | 1               | 1.9        | 1.9         | 1.9         | 1.9         |             |             |             |             |             |             |             |             |              |
| n38                                                                 | 2               | 0.6        | 0.6         | 0.6         | 0.6         |             |             |             |             |             |             |             |             |              |
| n38                                                                 | 4               | 1.9        | 1.9         | 1.9         | 1.9         |             |             |             |             |             |             |             |             |              |
| n38                                                                 | 66              | 1.9        | 1.9         | 1.9         | 1.9         |             |             |             |             |             |             |             |             |              |
| n40                                                                 | 1               | 8.3        | 8.3         | 8.3         | 8.3         |             |             |             |             |             |             |             |             |              |
| n41                                                                 | 4               | 3.5        | 3.5         | 3.5         | 3.5         |             |             |             |             |             |             |             |             |              |
| 40                                                                  | n1              | 8.3        | 8.3         | 8.3         | 8.3         | 8.3         | 8.3         | 8.3         | 8.3         |             |             |             |             |              |
| n40                                                                 | 7               | 3.7        | 3.7         | 3.7         | 3.7         |             |             |             |             |             |             |             |             |              |
| n41                                                                 | 1               | 9.1        | 9.1         | 9.1         | 9.1         |             |             |             |             |             |             |             |             |              |
| n41                                                                 | 2               | 0.6        | 0.6         | 0.6         | 0.6         |             |             |             |             |             |             |             |             |              |
| n41                                                                 | 3               | 0.6        | 0.6         | 0.6         | 0.6         |             |             |             |             |             |             |             |             |              |
| 41                                                                  | n3              | 0.6        | 0.6         | 0.6         | 0.6         | 0.6         | 0.6         | 0.6         |             |             |             |             |             |              |
| n41                                                                 | 66 <sup>1</sup> | 3.5        | 3.5         | 3.5         | 3.5         |             |             |             |             |             |             |             |             |              |
| n41                                                                 | 25              | 0.6        | 0.6         | 0.6         | 0.6         |             |             |             |             |             |             |             |             |              |
| n50                                                                 | 3               | 2.5        | 1.9         | 1.6         | 1.5         |             |             |             |             |             |             |             |             |              |
| n77                                                                 | 7 <sup>1</sup>  | 4.5        | 4.5         | 4.5         | 4.5         |             |             |             |             |             |             |             |             |              |
| n77                                                                 | 41 <sup>1</sup> | 4.5        | 4.5         | 4.5         | 4.5         |             |             |             |             |             |             |             |             |              |
| 41                                                                  | n77             |            | 8.3         | 8.3         | 8.3         | 7.3         | 6.5         | 6.3         | 5.3         | 4.5         | 4.3         | 4.0         | 3.9         | 3.8          |
| n78                                                                 | 7 <sup>1</sup>  | 4.5        | 4.5         | 4.5         | 4.5         |             |             |             |             |             |             |             |             |              |
| n78                                                                 | 38              | 3.3        | 3.3         | 3.3         | 3.3         |             |             |             |             |             |             |             |             |              |
| n78                                                                 | 40 <sup>1</sup> | 4.5        | 4.5         | 4.5         | 4.5         |             |             |             |             |             |             |             |             |              |
| n78                                                                 | 41 <sup>1</sup> | 4.5        | 4.5         | 4.5         | 4.5         |             |             |             |             |             |             |             |             |              |
| n78                                                                 | 46              |            |             |             | 7           |             |             |             |             |             |             |             |             |              |

|                  |                 |      |      |     |     |     |     |     |     |     |     |     |     |     |
|------------------|-----------------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 41               | n78             |      | 8.3  | 8.3 | 8.3 | 7.3 | 6.5 | 6.3 | 5.3 | 4.5 | 4.3 | 4.0 | 3.9 | 3.8 |
| n79              | 42 <sup>6</sup> | 2.6  | 2.6  | 2.6 | 2.6 |     |     |     |     |     |     |     |     |     |
| n84 <sup>3</sup> | 3               | 3    | 2.3  | 2   | 1.8 |     |     |     |     |     |     |     |     |     |
| 48               | n46             | -    | -    | -   | 7   | -   | -   | 5.7 | -   | 5.1 | -   | 4.7 | -   | -   |
| n46              | 48              | 13.3 | 10.4 | 8.8 | 7.8 | -   | -   | 7.8 | 7   | 6.5 | -   | 5.7 | 5.4 | 5.1 |

NOTE 1: Applicable only when harmonic mixing MSD for this combination is not applied.  
NOTE 2: The B41 requirements are modified by -0.5dB when carrier frequency of the assigned E-UTRA channel bandwidth is within 2515 – 2690 MHz.  
NOTE 3: These requirements apply when the uplink is active in Band n1, n84 and the separation between the lower edge of the uplink channel in Band n1, n84 and the upper edge of the downlink channel in Band 3 is < 60 MHz. For each channel bandwidth in Band 3, the requirement applies regardless of channel bandwidth in Band n1, n84.  
NOTE 4: The DL victim band should be configured using the lowest SCS that is compatible with the highest CBW for which an MSD is specified.  
NOTE 5: MSD test point can be chosen according to supported BW and lowest SCS supported by the UE.  
NOTE 6: The requirements only apply for UEs supporting inter-band DC\_42\_n79 ENDC with simultaneous Rx/Tx capability. Simultaneous Rx/Tx capability does not apply for UEs supporting band 42 with a n77 implementation only. These restrictions are applicable to related higher order configurations.

Table 7.3B.2.3.4-1a: Reference sensitivity exceptions (MSD) due to cross band isolation for PC2 EN-DC in NR FR1

| UL band | DL band | E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD |             |             |             |             |             |             |             |             |             |             |              |
|---------|---------|---------------------------------------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
|         |         | 5 MHz (dB)                                                          | 10 MHz (dB) | 15 MHz (dB) | 20 MHz (dB) | 25 MHz (dB) | 30 MHz (dB) | 40 MHz (dB) | 50 MHz (dB) | 60 MHz (dB) | 80 MHz (dB) | 90 MHz (dB) | 100 MHz (dB) |
| 3       | n41     |                                                                     | 0.7         | 0.7         | 0.7         |             | 0.7         | 0.7         | 0.7         | 0.7         | 0.7         | 0.7         | 0.7          |
| n41     | 3       | 2.3                                                                 | 2.3         | 2.3         | 2.3         |             |             |             |             |             |             |             |              |

Table 7.3B.2.3.4-2: Uplink configuration for reference sensitivity exceptions due to cross band isolation for EN-DC in NR FR1

| E-UTRA or NR Band / SCS / Channel bandwidth of the affected DL band / UL RB allocation of the aggressor band |         |                      |                           |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                             |
|--------------------------------------------------------------------------------------------------------------|---------|----------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------------------|
| UL band                                                                                                      | DL band | SCS of UL band (kHz) | 5 MHz (L <sub>CRB</sub> ) | 10 MHz (L <sub>CRB</sub> ) | 15 MHz (L <sub>CRB</sub> ) | 20 MHz (L <sub>CRB</sub> ) | 25 MHz (L <sub>CRB</sub> ) | 30 MHz (L <sub>CRB</sub> ) | 40 MHz (L <sub>CRB</sub> ) | 50 MHz (L <sub>CRB</sub> ) | 60 MHz (L <sub>CRB</sub> ) | 70 MHz (L <sub>CRB</sub> ) | 80 MHz (L <sub>CRB</sub> ) | 90 MHz (L <sub>CRB</sub> ) | 100 MHz (L <sub>CRB</sub> ) |
| n1                                                                                                           | 3       | 15                   | 25                        | 25                         | 25                         | 25                         |                            |                            |                            |                            |                            |                            |                            |                            |                             |
| n1                                                                                                           | 40      | 15                   | 25                        | 50                         | 75                         | 100                        |                            |                            |                            |                            |                            |                            |                            |                            |                             |
| 1                                                                                                            | n3      | 15                   | 25                        | 25                         | 25                         | 25                         | 25                         | 25                         | 25                         |                            |                            |                            |                            |                            |                             |
| 1                                                                                                            | n40     | 15                   | 25                        | 50                         | 75                         | 100                        | 100                        | 100                        | 100                        | 100                        | 100                        |                            | 100                        |                            |                             |
| 1                                                                                                            | n41     | 15                   |                           | 100                        | 100                        | 100                        |                            | 100                        | 100                        | 100                        | 100                        |                            | 100                        | 100                        | 100                         |
| n3                                                                                                           | 11      | 15                   | 25                        | 50                         |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                             |
| 3                                                                                                            | n41     | 15                   |                           | 50                         | 50                         | 50                         |                            | 50                         | 50                         | 50                         | 50                         |                            | 50                         | 50                         | 50                          |
| 3                                                                                                            | n51     | 15                   | 25                        |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                             |
| 30                                                                                                           | n66     | 15                   | 25                        | 25                         | 25                         | 25                         | 25                         | 25                         | 25                         |                            |                            |                            |                            |                            |                             |
| n3                                                                                                           | 41      | 15                   | 25                        | 50 <sup>2</sup>            | 50 <sup>2</sup>            | 50 <sup>2</sup>            |                            |                            |                            |                            |                            |                            |                            |                            |                             |

|     |     |    |                  |                  |                  |                  |     |     |     |     |     |     |     |     |     |
|-----|-----|----|------------------|------------------|------------------|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| n5  | 28  | 15 | 20               | 20               | 20               | 20               |     |     |     |     |     |     |     |     |     |
| 7   | n40 | 15 | 25               | 50               | 75               | 75               | 75  | 100 | 100 | 100 | 100 |     | 100 |     |     |
| n34 | 3   | 15 | 25               | 25               | 25               | 25               |     |     |     |     |     |     |     |     |     |
| n38 | 1   | 15 | 100              | 100              | 100              | 100              |     |     |     |     |     |     |     |     |     |
| n38 | 2   | 15 | 100              | 100              | 100              | 100              |     |     |     |     |     |     |     |     |     |
| n38 | 4   | 15 | 100              | 100              | 100              | 100              |     |     |     |     |     |     |     |     |     |
| n38 | 66  | 15 | 100              | 100              | 100              | 100              |     |     |     |     |     |     |     |     |     |
| n40 | 1   | 15 | 25               | 50               | 75               | 100              |     |     |     |     |     |     |     |     |     |
| n41 | 4   | 30 | 128              | 128              | 128              | 128              |     |     |     |     |     |     |     |     |     |
| 40  | n1  | 15 | 25               | 50               | 75               | 100              |     |     |     |     |     |     |     |     |     |
| n40 | 7   | 30 | 216              | 216              | 216              | 216              |     |     |     |     |     |     |     |     |     |
| n41 | 1   | 30 | 128              | 128              | 128              | 128              |     |     |     |     |     |     |     |     |     |
| n41 | 2   | 30 | 160              | 160              | 160              | 160              |     |     |     |     |     |     |     |     |     |
| n41 | 3   | 30 | 160              | 160              | 160              | 160              |     |     |     |     |     |     |     |     |     |
| 41  | n3  | 15 | 25               | 50               | 75               | 100              | 100 | 100 | 100 |     |     |     |     |     |     |
| n41 | 66  | 30 | 128              | 128              | 128              | 128              |     |     |     |     |     |     |     |     |     |
| n41 | 25  | 30 | 160              | 160              | 160              | 160              |     |     |     |     |     |     |     |     |     |
| n50 | 3   | 30 | 160              | 160              | 160              | 160              |     |     |     |     |     |     |     |     |     |
| n77 | 7   | 30 | 270              | 270              | 270              | 270              |     |     |     |     |     |     |     |     |     |
| n77 | 41  | 30 | 270              | 270              | 270              | 270              |     |     |     |     |     |     |     |     |     |
| 41  | n77 | 15 |                  | 100              | 100              | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| n78 | 7   | 30 | 270              | 270              | 270              | 270              |     |     |     |     |     |     |     |     |     |
| n78 | 38  | 30 | 270              | 270              | 270              | 270              |     |     |     |     |     |     |     |     |     |
| n78 | 40  | 30 | 270              | 270              | 270              | 270              |     |     |     |     |     |     |     |     |     |
| n78 | 41  | 30 | 270              | 270              | 270              | 270              |     |     |     |     |     |     |     |     |     |
| n78 | 46  | 30 |                  |                  |                  | 270              |     |     |     |     |     |     |     |     |     |
| 41  | n78 | 15 |                  | 100              | 100              | 100              | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| n79 | 42  | 30 | 270 <sup>5</sup> | 270 <sup>5</sup> | 270 <sup>5</sup> | 270 <sup>5</sup> |     |     |     |     |     |     |     |     |     |
| n84 | 3   | 15 | 25               | 25               | 25               | 25               |     |     |     |     |     |     |     |     |     |
| 48  | n46 | 15 |                  |                  |                  | 216              |     |     | 216 |     | 216 |     | 216 |     |     |
| n46 | 48  | 30 | 216              | 216              | 216              | 216              |     |     | 216 | 216 | 216 |     | 216 | 216 | 216 |

NOTE 1: The UL configuration applies regardless of the channel bandwidth of the UL band. UL resource blocks allocation in the table shall be further limited to that specified in Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2].

NOTE 2: The UL resource blocks shall be located as close as possible to the downlink operating band but confined within the transmission bandwidth configuration for the channel bandwidth.

NOTE 3: When the maximum UL RB allocation “ $L_{CRB}$ ” value is less than the maximum transmission bandwidth configuration “ $N_{RB}$ ” defined in Table 5.3.2-1 in 38.101-1 [2] for the specified UL band SCS, the UL band should be configured using the lowest CBW that is compatible with the maximum specified  $L_{CRB}$  value.

NOTE 4: If the aggressor band is NR band, the test SCS and UL RB can be adjusted according to supported BW and lowest SCS supported by the UE.

NOTE 5: The requirements only apply for UEs supporting inter-band ENDC with simultaneous Rx/Tx capability. Simultaneous Rx/Tx capability does not apply for UEs supporting band 42 with a n77 implementation only. These restrictions are applicable to related higher order configurations.

### 7.3B.2.3.5 MSD for intermodulation interference due to dual uplink operation for EN-DC in NR FR1

#### 7.3B.2.3.5.0 General

For EN-DC configurations in NR FR1 the UE may indicate capability of not supporting simultaneous dual uplink operation due to possible intermodulation interference overlapping in frequency to its own primary downlink channel bandwidth if

- the intermodulation order is 2;
- the intermodulation order is 3 when both operating bands are between 450 MHz – 960 MHz or between 1427 MHz – 2690 MHz

In the case for EN-DC configurations in NR FR1 for which the intermodulation products caused by dual uplink operation do not interfere with its own primary downlink channel bandwidth as defined in Annex I the UE is mandated to operate in dual and triple uplink mode.

For EN-DC configurations in NR FR1 with uplink and downlink assigned to E-UTRA and NR FR1 bands given in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1 the reference sensitivity is defined only for the specific uplink and downlink test points specified in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1. For these test points the reference sensitivity levels specified in clause 7.3.1 in TS 36.101 [4] and 7.3.2 of TS 38.101-1 [2] for the corresponding channel bandwidths or in clause 7.3.1 of TS 36.101 [4] are relaxed by the amount of the parameter MSD given in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1.

The throughput on each of the CGs shall be  $\geq 95\%$  of the maximum throughput of the respective reference measurement channels as specified in Annex A of TS 38.101-1 [2] and Annex A of TS 36.101 [4], with parameters specified in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1 with dual UL transmissions overlapping in time unless otherwise stated.

#### 7.3B.2.3.5.1 MSD test points for intermodulation interference due to dual uplink operation for PC3 EN-DC in NR FR1 involving two bands

**Table 7.3B.2.3.5.1-1: MSD test points for PCell due to dual uplink operation for PC3 EN-DC in NR FR1 (two bands)**

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD            |                  |                         |                |                                 |                         |          |                   |
|--------------------------------------------------------------------------|------------------|-------------------------|----------------|---------------------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                      | EUTRA or NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub>             | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_1A_n3A                                                                | 1                | 1950                    | 5              | 25                              | 2140                    | 23       | IMD3              |
|                                                                          | n3               | 1760                    | 5              | 25                              | 1855                    | N/A      | N/A               |
| DC_1C_n3                                                                 | 1C               | 1950<br>1970            | 20<br>20       | 1 (RBstart=0)<br>1 (RBstart=67) | 2140<br>2160            | N/A      | N/A               |
|                                                                          | n3               | N/A                     | 5              | N/A                             | 1877.5                  | 36       | IMD5              |
| DC_1A_n8A                                                                | 1                | 1965                    | 5              | 25                              | 2155                    | 6.0      | IMD4              |
|                                                                          | n8               | 887.5                   | 5              | 25                              | 932.5                   | N/A      | N/A               |
| DC_1A_n71A<br>DC_1A_n71B                                                 | 1                | 1958                    | 5              | 25                              | 2148                    | N/A      | N/A               |
|                                                                          | n71              | 668                     | 5              | 25                              | 622                     | 15.1     | IMD3              |
| DC_1A_n77A,<br>DC_1A_SUL_n77A-<br>n84A,<br>DC_1A_n77(2A),                | 1                | 1950                    | 5              | 25                              | 2140                    | 29.8     | IMD2 <sup>3</sup> |
|                                                                          | n77              | 4090                    | 10             | 50                              | 4090                    | N/A      | N/A               |
| DC_1A_n77A,<br>DC_1A_SUL_n77A-<br>n84A,<br>DC_1A_n77(2A),<br>DC_1A_n78A, | 1                | 1950                    | 5              | 25                              | 2140                    | 8.0      | IMD4 <sup>3</sup> |

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD                                                                                 |                  |                         |                |                     |                         |          |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                                                                                           | EUTRA or NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_1A_SUL_n78A-n84A,<br>DC_1A_n78(2A)                                                                                                         |                  |                         |                |                     |                         |          |                   |
|                                                                                                                                               | n77,<br>n78      | 3710                    | 10             | 50                  | 3710                    | N/A      | N/A               |
| DC_2A_n46A                                                                                                                                    | 2                | 1880                    | 5              | 25                  | 1960                    | 12.0     | IMD3              |
|                                                                                                                                               | n46              | 5720                    | 20             | 100                 | 5720                    | N/A      | N/A               |
| DC_2A_n48A                                                                                                                                    | 2                | 1852.5                  | 5              | 25                  | 1932.5                  | 12       | IMD4              |
|                                                                                                                                               | n48              | 3625                    | 20             | 100                 | 3625                    | N/A      | N/A               |
| DC_2A_n66A,<br>DC_2A-2A_n66A                                                                                                                  | 2                | 1855                    | 5              | 25                  | 1935                    | 20       | IMD3              |
|                                                                                                                                               | n66              | 1775                    | 5              | 25                  | 2175                    | N/A      | N/A               |
| DC_2A_n66A,<br>DC_2A-2A_n66A                                                                                                                  | 2                | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A               |
|                                                                                                                                               | n66              | 1750                    | 5              | 25                  | 2150                    | 4        | IMD5              |
| DC_2A_n78A<br>DC_2A_n78(2A)                                                                                                                   | 2                | 1855                    | 5              | 25                  | 1935                    | 26       | IMD2 <sup>3</sup> |
|                                                                                                                                               | n78              | 3790                    | 10             | 50                  | 3790                    | N/A      | N/A               |
| DC_2A_n78A<br>DC_2A_n78(2A)                                                                                                                   | 2                | 1885                    | 5              | 25                  | 1965                    | 8.0      | IMD4 <sup>3</sup> |
|                                                                                                                                               | n78              | 3690                    | 10             | 50                  | 3690                    | N/A      | N/A               |
| DC_3_n1                                                                                                                                       | 3                | 1760                    | 5              | 25                  | 1855                    | N/A      | N/A               |
|                                                                                                                                               | n1               | 1950                    | 5              | 25                  | 2140                    | 23       | IMD3              |
| DC_3_n5                                                                                                                                       | 3                | 1771                    | 10             | 50                  | 1866                    | 4        | IMD4              |
|                                                                                                                                               | n5               | 838                     | 5              | 25                  | 883                     | N/A      | N/A               |
|                                                                                                                                               | 3                | 1721                    | 10             | 50                  | 1816                    | N/A      | N/A               |
|                                                                                                                                               | n5               | 838                     | 5              | 25                  | 883                     | 24       | IMD2 <sup>3</sup> |
| DC_3A_n7A<br>DC_3C_n7A                                                                                                                        | 3                | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
|                                                                                                                                               | n7               | 2535                    | 10             | 50                  | 2655                    | 10.2     | IMD4              |
| DC_3_n8                                                                                                                                       | n8               | 900                     | 5              | 25                  | 945                     | 8        | IMD4 <sup>3</sup> |
|                                                                                                                                               | 3                | 1755                    | 10             | 50                  | 1850                    | N/A      | N/A               |
|                                                                                                                                               | n8               | 897.5                   | 5              | 25                  | 942.5                   | N/A      | N/A               |
|                                                                                                                                               | 3                | 1747.5                  | 10             | 50                  | 1842.5                  | 6.4      | IMD5              |
| DC_3A-n20A                                                                                                                                    | 3                | 1775                    | 5              | 25                  | 1870                    | 4        | IMD4              |
|                                                                                                                                               | n20              | 840                     | 5              | 25                  | 799                     | N/A      | N/A               |
|                                                                                                                                               | 3                | 1735                    | 5              | 25                  | 1830                    | N/A      | N/A               |
|                                                                                                                                               | n20              | 847                     | 5              | 25                  | 806                     | 9        | IMD4              |
| DC_3A_n38A                                                                                                                                    | 3                | 1712.8                  | 5              | 25                  | 1807.8                  | 8.2      | IMD4              |
|                                                                                                                                               | n38              | 2616.7                  | 10             | 50                  | 2616.7                  | N/A      | N/A               |
| DC_3A_n41A<br>DC_3C_n41A<br>DC_3A_SUL_n41A-n80A,<br>DC_3C_SUL_n41A-n80A                                                                       | 3                | 1740                    | 5              | 25                  | 1835                    | 8.2      | IMD4              |
|                                                                                                                                               | n41              | 2657.5                  | 10             | 50                  | 2657.5                  | N/A      | N/A               |
| DC_3A_n77A,<br>DC_3A_n77(2A),<br>DC_3A_SUL_n77A-n80A,<br>DC_3A_n78A,<br>DC_3A_SUL_n78A-n80A,<br>DC_3A_n78(2A),<br>DC_3C_n78A<br>DC_3C_n78(2A) | 3                | 1740                    | 5              | 25                  | 1835                    | 26       | IMD2 <sup>3</sup> |
|                                                                                                                                               | n77,<br>n78      | 3575                    | 10             | 50                  | 3575                    | N/A      | N/A               |
| DC_3A_n77A,<br>DC_3A_n77(2A),<br>DC_3A_SUL_n77A-n80A,                                                                                         | 3                | 1765                    | 5              | 25                  | 1860                    | 8.0      | IMD4 <sup>3</sup> |

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD                            |                  |                         |                |                     |                         |          |                   |
|------------------------------------------------------------------------------------------|------------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                                      | EUTRA or NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_3A_n78A,<br>DC_3A_SUL_n78A-<br>n80A,<br>DC_3A_n78(2A),<br>DC_3C_n78A<br>DC_3C_n78(2A) |                  |                         |                |                     |                         |          |                   |
|                                                                                          | n77,<br>n78      | 3435                    | 10             | 50                  | 3435                    | N/A      | N/A               |
| DC_5_n7                                                                                  | n7               | 2547                    | 10             | 50                  | 2667                    | N/A      | N/A               |
|                                                                                          | 5                | 834                     | 5              | 25                  | 879                     | 12       | IMD3 <sup>3</sup> |
| DC_5_n38                                                                                 | 5                | 844                     | 5              | 25                  | 889                     | 12       | IMD3 <sup>3</sup> |
|                                                                                          | n38              | 2577                    | 10             | 50                  | 2577                    | N/A      | N/A               |
| DC_5A_n66A                                                                               | 5                | 838                     | 5              | 25                  | 883                     | 30       | IMD2 <sup>3</sup> |
|                                                                                          | n66              | 1721                    | 5              | 25                  | 2121                    | N/A      | N/A               |
| DC_5A_n78A<br>DC_5A_n78(2A)                                                              | 5                | 844                     | 5              | 25                  | 889                     | 8.3      | IMD4              |
|                                                                                          | n78              | 3421                    | 10             | 50                  | 3421                    | N/A      | N/A               |
| DC_7_n3                                                                                  | 7                | 2535                    | 10             | 50                  | 2655                    | 13       | IMD4              |
|                                                                                          | n3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
| DC_7_n5                                                                                  | 7                | 2547                    | 10             | 50                  | 2667                    | N/A      | N/A               |
|                                                                                          | n5               | 834                     | 5              | 25                  | 879                     | 12       | IMD3 <sup>3</sup> |
| DC_7A_n20A                                                                               | 7                | 2512                    | 10             | 50                  | 2632                    | N/A      | N/A               |
|                                                                                          | n20              | 851                     | 5              | 25                  | 810                     | 12       | IMD3 <sup>3</sup> |
| DC_7_n40                                                                                 | 7                | 2510                    | 5              | 25                  | 2630                    | 23       | IMD3              |
|                                                                                          | n40              | 2390                    | 5              | 25                  | 2390                    | N/A      | N/A               |
| DC_7A_n66A<br>DC_7A-7A_n66A<br>DC_7C_n66A                                                | 7                | 2535                    | 10             | 50                  | 2655                    | 15       | IMD4              |
|                                                                                          | n66              | 1730                    | 5              | 25                  | 2130                    | N/A      | N/A               |
| DC_7A_n77A                                                                               | 7                | 2540                    | 5              | 25                  | 2660                    | 7.1      | IMD4              |
|                                                                                          | n77              | 3870                    | 10             | 50                  | 3870                    | N/A      | N/A               |
| DC_8A_n1A                                                                                | 8                | 887.5                   | 5              | 25                  | 932.5                   | N/A      | N/A               |
|                                                                                          | n1               | 1965                    | 5              | 25                  | 2155                    | 6        | IMD4              |
| DC_8A_n3A                                                                                | 8                | 900                     | 5              | 25                  | 945                     | 8        | IMD4 <sup>3</sup> |
|                                                                                          | n3               | 1755                    | 10             | 50                  | 1850                    | N/A      | N/A               |
|                                                                                          | 8                | 897.5                   | 5              | 25                  | 942.5                   | N/A      | N/A               |
|                                                                                          | n3               | 1747.5                  | 10             | 50                  | 1842.5                  | 6.4      | IMD5              |
| DC_8A_n20A                                                                               | n20              | 849.5                   | 5              | 25                  | 808.5                   | 25       | IMD3 <sup>3</sup> |
|                                                                                          | 8                | 890.5                   | 5              | 25                  | 935.5                   | N/A      | N/A               |
|                                                                                          | n20              | 847.5                   | 5              | 25                  | 806.5                   | N/A      | N/A               |
|                                                                                          | 8                | 892.5                   | 5              | 25                  | 937.5                   | 25       | IMD3 <sup>3</sup> |
| DC_8A_n41A<br>DC_8A_SUL_n41A-<br>n81A                                                    | 8                | 882.5                   | 5              | 25                  | 927.5                   | 12.1     | IMD3 <sup>3</sup> |
|                                                                                          | n41              | 2685                    | 10             | 50                  | 2685                    | N/A      | N/A               |
| DC_8A_n77A,<br>DC_8A_n78A,<br>DC_8A_SUL_n78A-<br>n81A                                    | 8                | 897.5                   | 5              | 25                  | 942.5                   | 8.3      | IMD4              |
|                                                                                          | n77,<br>n78      | 3635                    | 10             | 50                  | 3635                    | N/A      | N/A               |
| DC_8A_n79A,<br>DC_8A-n79C,<br>DC_8A_SUL_n79A-<br>n81A                                    | 8                | 897.5                   | 5              | 25                  | 942.5                   | 4.8      | IMD5              |
|                                                                                          | n79              | 4532.5                  | 40             | 216                 | 4532.5                  | N/A      | N/A               |
| DC_11A_n28A                                                                              | 11               | 1430.5                  | 5              | 25                  | 1478.5                  | N/A      | N/A               |
|                                                                                          | n28              | 743                     | 5              | 25                  | 798                     | 10.4     | IMD4              |
| DC_12_n78                                                                                | 12               | 710                     | 5              | 25                  | 740                     | 5.5      | IMD5              |
|                                                                                          | n78              | 3580                    | 10             | 50                  | 3580                    | N/A      | N/A               |
| DC_13_n5                                                                                 | 13               | 783                     | 5              | 25                  | 752                     | N/A      | N/A               |
|                                                                                          | n5               | 828                     | 5              | 25                  | 873                     | 25       | IMD3              |

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD               |                  |                         |                |                     |                         |          |                   |
|-----------------------------------------------------------------------------|------------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                         | EUTRA or NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_13A_n7A<br>DC_13A_n7(2A)                                                 | 13               | 784.5                   | 5              | 25                  | 753.5                   | N/A      | N/A               |
|                                                                             | n7               | 2520                    | 40             | 216                 | 2640                    | 2.5      | IMD5              |
| DC_18A_n3A                                                                  | 18               | 823                     | 5              | 25                  | 868                     | N/A      | N/A               |
|                                                                             | n3               | 1721                    | 5              | 25                  | 1816                    | 4        | IMD4              |
| DC_18A_n77A<br>DC_18A_n78A                                                  | 18               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD4              |
|                                                                             | n77,<br>n78      | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
| DC_19A_n77A                                                                 | 19               | 836.5                   | 5              | 25                  | 881.5                   | 13.6     | IMD4 <sup>3</sup> |
|                                                                             | n77              | 3391                    | 10             | 50                  | 3391                    | N/A      | N/A               |
| DC_19A_n78A                                                                 | 19               | 836.5                   | 5              | 25                  | 881.5                   | 13.6     | IMD4              |
|                                                                             | n78              | 3391                    | 10             | 50                  | 3391                    | N/A      | N/A               |
| DC_20A_n3A                                                                  | 20               | 840                     | 5              | 25                  | 799                     | N/A      | N/A               |
|                                                                             | n3               | 1775                    | 5              | 25                  | 1870                    | 4        | IMD4              |
|                                                                             | 20               | 847                     | 5              | 25                  | 806                     | 9        | IMD4              |
|                                                                             | n3               | 1735                    | 5              | 25                  | 1830                    | N/A      | N/A               |
| DC_20A_n38A                                                                 | 20               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD5              |
|                                                                             | n38              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
| DC_20_n7                                                                    | 20               | 851                     | 5              | 25                  | 810                     | 12       | IMD3 <sup>3</sup> |
|                                                                             | n7               | 2512                    | 10             | 50                  | 2632                    | N/A      | N/A               |
| DC_20A_n8A                                                                  | 20               | 849.5                   | 5              | 25                  | 808.5                   | 25       | IMD3 <sup>3</sup> |
|                                                                             | n8               | 890.5                   | 5              | 25                  | 935.5                   | N/A      | N/A               |
|                                                                             | 20               | 847.5                   | 5              | 25                  | 806.5                   | N/A      | N/A               |
|                                                                             | n8               | 892.5                   | 5              | 25                  | 937.5                   | 25       | IMD3 <sup>3</sup> |
| DC_20_n41                                                                   | 20               | 851                     | 5              | 25                  | 810                     | 12.1     | IMD3              |
|                                                                             | n41              | 2512                    | 10             | 50                  | 2512                    | N/A      | N/A               |
| DC_20_n41                                                                   | 20               | 841                     | 5              | 25                  | 800                     | 8.1      | IMD5              |
|                                                                             | n41              | 2564                    | 10             | 50                  | 2564                    | N/A      | N/A               |
| DC_20A_n77A,<br>DC_20A_n78A,<br>DC_20A_n78(2A),<br>DC_20A_SUL_n78A-<br>n82A | 20               | 850                     | 5              | 25                  | 809                     | 11       | IMD4              |
|                                                                             | n77,<br>n78      | 3359                    | 10             | 50                  | 3359                    | N/A      | N/A               |
| DC_20A_n77A                                                                 | 20               | 840                     | 5              | 25                  | 799                     | 6.5      | IMD5              |
|                                                                             | n77              | 4159                    | 10             | 50                  | 4159                    | N/A      | N/A               |
| DC_21A_n79A                                                                 | 21               | 1457.5                  | 5              | 25                  | 1505.5                  | 18.4     | IMD3              |
|                                                                             | n79              | 4420.5                  | 40             | 216                 | 4420.5                  | N/A      | N/A               |
| DC_26A_n41A                                                                 | 26               | 839                     | 5              | 25                  | 884                     | 15.6     | IMD3 <sup>3</sup> |
|                                                                             | n41              | 2562                    | 10             | 50                  | 2562                    | N/A      | N/A               |
| DC_28_n50                                                                   | 28               | 730                     | 10             | 50                  | 775                     | 15.3     | IMD 2             |
|                                                                             | n50              | 1500                    | 10             | 50                  | 1500                    | N/A      | N/A               |
|                                                                             | 28               | 740                     | 10             | 50                  | 785                     | 6        | IMD 4             |
|                                                                             | n50              | 1500                    | 10             | 50                  | 1500                    | N/A      | N/A               |
|                                                                             | 28               | 740                     | 10             | 50                  | 785                     | 0.5      | IMD 5             |
|                                                                             | n50              | 1500                    | 10             | 50                  | 1500                    | N/A      | N/A               |
| DC_28A_n51A                                                                 | 28               | 742.3                   | 5              | 25                  | 797.3                   | 5        | IMD4              |
|                                                                             | n51              | 1429.5                  | 5              | 25                  | 1429.5                  | N/A      | N/A               |
| DC_26A_n77A,<br>DC_26A_n78A                                                 | 26               | 836.5                   | 5              | 25                  | 881.5                   | 11.1     | IMD4              |
|                                                                             | n77,<br>n78      | 3391                    | 10             | 50                  | 3391                    | N/A      | N/A               |
| DC_28A_n77A,<br>DC_28A_n78A,<br>DC_28A_n78(2A),<br>DC_28A_SUL_n78A-<br>n83A | 28               | 705.5                   | 5              | 25                  | 760.5                   | 5.5      | IMD5              |
|                                                                             | n77,<br>n78      | 3582.5                  | 10             | 50                  | 3582.5                  | N/A      | N/A               |
| DC_41A_n3A                                                                  | n3               | 1740                    | 5              | 25                  | 1835                    | 8.2      | IMD4              |

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                         |                |                     |                         |          |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                               | EUTRA or NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_41C_n3A                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 41               | 2657.5                  | 5              | 25                  | 2657.5                  | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                  |                         |                |                     |                         |          |                   |
| DC_42_n28                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 42               | 3582.5                  | 10             | 50                  | 3582.5                  | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n28              | 705.5                   | 5              | 25                  | 760.5                   | 5.5      | IMD5              |
| DC_48A_n12A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 48               | 3557.5                  | 10             | 50                  | 3557.5                  | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n12              | 705.5                   | 5              | 25                  | 735.5                   | 5.5      | IMD5              |
| DC_48A_n66A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 48               | 3630                    | 20             | 100                 | 3630                    | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n66              | 1715                    | 5              | 25                  | 2115                    | 4        | IMD5              |
| DC_66A_n2A,<br>DC_66A-66A_n2A                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 66               | 1775                    | 5              | 25                  | 2175                    | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n2               | 1855                    | 5              | 25                  | 1935                    | 20       | IMD3              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 66               | 1750                    | 5              | 25                  | 2150                    | 4        | IMD5              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n2               | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A               |
| DC_66A_n5A                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | n5               | 838                     | 5              | 25                  | 883                     | 30       | IMD2 <sup>3</sup> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 66               | 1721                    | 5              | 25                  | 2121                    | N/A      | N/A               |
| DC_66A_n7A<br>DC_66A-66A_n7A<br>DC_66A_n7(2A)<br>DC_66A-66A_n7(2A)                                                                                                                                                                                                                                                                                                                                                                                                                | 66               | 1730                    | 5              | 25                  | 2130                    | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n7               | 2535                    | 10             | 50                  | 2655                    | 15       | IMD4              |
| DC_66A_n25A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 66               | 1775                    | 5              | 25                  | 2175                    | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n25              | 1855                    | 5              | 25                  | 1935                    | 20       | IMD3              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 66               | 1712.5                  | 5              | 25                  | 2112.5                  | 23       | IMD3              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n25              | 1912.5                  | 5              | 25                  | 1992.5                  | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 66               | 1750                    | 5              | 25                  | 2150                    | 4        | IMD5              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n25              | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A               |
| DC_66A_n46A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 66               | 1735                    | 5              | 25                  | 2135                    | 12.0     | IMD3              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n46              | 5605                    | 20             | 100                 | 5605                    | N/A      | N/A               |
| DC_66A_n48A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 66               | 1715                    | 5              | 25                  | 2115                    | 4        | IMD5              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n48              | 3630                    | 20             | 100                 | 3630                    | N/A      | N/A               |
| DC_66A_n71A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 66               | 1750                    | 5              | 25                  | 2150                    | 5        | IMD4              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n71              | 675                     | 5              | 25                  | 629                     | N/A      | N/A               |
| DC_66A_n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 66               | 1730                    | 5              | 25                  | 2150                    | 5.0      | IMD5              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n78              | 3660                    | 10             | 50                  | 3660                    | N/A      | N/A               |
| DC_71A_n38A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 71               | 665                     | 5              | 25                  | 619                     | 11       | IMD4              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n38              | 2614                    | 10             | 50                  | 2614                    | N/A      | N/A               |
| DC_71A_n66A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 71               | 675                     | 5              | 25                  | 629                     | N/A      | N/A               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n66              | 1750                    | 5              | 25                  | 2150                    | 5        | IMD4              |
| DC_71A_n78A                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 71               | 681.5                   | 5              | 25                  | 635.5                   | 5.5      | IMD5              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | n78              | 3361.5                  | 10             | 50                  | 3582.5                  | N/A      | N/A               |
| NOTE 1: E-UTRA carrier shall be set to min(+20 dBm, P <sub>CMAX,L,E-UTRA,c</sub> ) and NR carrier shall be set to min(+20 dBm, P <sub>CMAX,L,f,c,NR</sub> ) as defined in clause 6.2B.4.1.3. NOTE 2: RB <sub>start</sub> = 0<br>NOTE 3: This band is subject to IMD5 also which MSD is not specified.<br>NOTE 4: Void.<br>NOTE 5: Void<br>NOTE 6: For NR band, UL/DL BW and UL L <sub>CRB</sub> can be adjusted according to the supported BW and lowest SCS supported by the UE. |                  |                         |                |                     |                         |          |                   |

**Table 7.3B.2.3.5.1-1a: MSD test points for PCell due to dual uplink operation for PC2 EN-DC in NR FR1 (two bands)**

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD |                  |                         |                |                     |                         |          |           |
|---------------------------------------------------------------|------------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                           | EUTRA or NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_3A_n41A                                                    | 3                | 1740                    | 5              | 25                  | 1835                    | 18.4     | IMD4      |
|                                                               | n41              | 2657.5                  | 10             | 50                  | 2657.5                  | N/A      | N/A       |
| DC_3A_n78A                                                    | 3                | 1740                    | 5              | 25                  | 1835                    | 31.9     | IMD2      |
|                                                               | n78              | 3575                    | 10             | 50                  | 3575                    | N/A      | N/A       |
| DC_3A_n78A                                                    | 3                | 1765                    | 5              | 25                  | 1860                    | 18.5     | IMD4      |
|                                                               | n78              | 3435                    | 10             | 50                  | 3435                    | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD                                                                                                                                |                  |                         |                |                     |                         |          |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                                                                                                                                          | EUTRA or NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_3A_n41A                                                                                                                                                                                   | 3                | 1740                    | 5              | 25                  | 1835                    | 18.4     | IMD4      |
|                                                                                                                                                                                              | n41              | 2657.5                  | 10             | 50                  | 2657.5                  | N/A      | N/A       |
| NOTE 1: E-UTRA carrier shall be set to min(+23 dBm, P <sub>CMAX,L,E-UTRA,c</sub> ) and NR carrier shall be set to min(+23 dBm, P <sub>CMAX,L,f,c,NR</sub> ) as defined in clause 6.2B.4.1.3. |                  |                         |                |                     |                         |          |           |

7.3B.2.3.5.2 MSD test points for intermodulation interference due to dual uplink operation for EN-DC in NR FR1 involving three bands

**Table 7.3B.2.3.5.2-0: MSD test points for Pcell due to dual uplink operation for EN-DC in NR FR1 (three bands)**

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD                                                                                                                               |               |                         |                |                                |                         |          |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------|----------------|--------------------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                                                                                                                                         | EUTRA/NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub>            | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_66A-(n)71AA                                                                                                                                                                              | 66            | 1750                    | 5              | 25                             | 2150                    | 5        | IMD4      |
|                                                                                                                                                                                             | n71           | 678                     | 10             | 10<br>(RB <sub>start</sub> =0) | 632                     | N/A      | N/A       |
| NOTE 1: For NR band, UL/DL BW and UL L <sub>CRB</sub> can be adjusted according to the supported BW and lowest SCS supported by the UE.                                                     |               |                         |                |                                |                         |          |           |
| NOTE 2: E-UTRA carrier shall be set to min(+20 dBm, P <sub>CMAX,L,E-UTRA,c</sub> ) and NR carrier shall be set to min(+20 dBm, P <sub>CMAX,L,f,c,NR</sub> ) as defined in clause 6.2B.4.1.3 |               |                         |                |                                |                         |          |           |

**Table 7.3B.2.3.5.2-1: MSD test points for Scell due to dual uplink operation for EN-DC in NR FR1 (three bands)**

| NR or E-UTRA Band / Channel bandwidth / N <sub>RB</sub> / MSD |                 |                         |                |                     |                         |          |           |
|---------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                           | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_1A-3A_n28A<br>DC_1A-3C_n28A                                | 1               | 1975                    | 5              | 25                  | 2165                    | N/A      | N/A       |
|                                                               | n28             | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A       |
|                                                               | 3               | 1723.5                  | 5              | 25                  | 1818.5                  | 4.0      | IMD5      |
| DC_1A_n3A-n28A                                                | 1               | 1975                    | 5              | 25                  | 2165                    | N/A      | N/A       |
|                                                               | n28             | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A       |
|                                                               | n3              | 1723.5                  | 5              | 25                  | 1818.5                  | 4.0      | IMD5      |
| DC_1A-3A_n28A<br>DC_1A-3C_n28A                                | 3               | 1780                    | 5              | 25                  | 1875                    | N/A      | N/A       |
|                                                               | n28             | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A       |
|                                                               | 1               | 1949                    | 5              | 25                  | 2139                    | 11.0     | IMD4      |
| DC_1A-3A_n71A<br>DC_1A-3A_n71B                                | 1               | 1960                    | 5              | 25                  | 2150                    | 5        | IMD4      |
|                                                               | 3               | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A       |
|                                                               | n71             | 675                     | 5              | 25                  | 629                     | N/A      | N/A       |
| DC_1A-7A_n28A<br>DC_1A-7C_n28A                                | 1               | 1935                    | 5              | 25                  | 2125                    | N/A      | N/A       |
|                                                               | n28             | 718                     | 5              | 25                  | 773                     | N/A      | N/A       |
|                                                               | 7               | 2533                    | 10             | 50                  | 2653                    | 30.0     | IMD2      |
| DC_1A-7A_n40A                                                 | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                               | 7               | 2510                    | 5              | 25                  | 2630                    | 23       | IMD3      |
|                                                               | n40             | 2390                    | 5              | 25                  | 2390                    | N/A      | N/A       |
|                                                               | 1               | 1930                    | 5              | 25                  | 2120                    | 16.4     | IMD3      |
|                                                               | 7               | 2530                    | 5              | 25                  | 2650                    | N/A      | N/A       |
|                                                               | n40             | 2310                    | 5              | 25                  | 2310                    | N/A      | N/A       |
| DC_1A-8A_n78A                                                 | 1               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                               | 8               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD5      |
|                                                               | n78             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                      |                 |                         |                |                     |                         |          |           |
|------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                    | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_1A-3A_n77A                                                          | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | 3               | 1712.5                  | 5              | 25                  | 1807.5                  | 31.5     | IMD2      |
|                                                                        | n77             | 3757.5                  | 10             | 50                  | 3757.5                  | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | 3               | 1775                    | 5              | 25                  | 1870                    | 8.5      | IMD4      |
|                                                                        | n77             | 3980                    | 10             | 50                  | 3980                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | 31.0     | IMD2      |
|                                                                        | 3               | 1775                    | 5              | 25                  | 1870                    | N/A      | N/A       |
| DC_1A-3A_n78A<br>DC_1A-3C_n78A<br>DC_1A-3A_n78(2A)<br>DC_1A-3C_n78(2A) | n77             | 3915                    | 10             | 50                  | 3915                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | 3               | 1712.5                  | 5              | 25                  | 1807.5                  | 31.2     | IMD2      |
|                                                                        | n78             | 3757.5                  | 10             | 50                  | 3757.5                  | N/A      | N/A       |
|                                                                        | 1               | 1935                    | 5              | 25                  | 2125                    | 2.8      | IMD5      |
|                                                                        | 3               | 1775                    | 5              | 25                  | 1870                    | N/A      | N/A       |
| DC_1A_n3A-n78A                                                         | n78             | 3725                    | 10             | 50                  | 3725                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | n3              | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A       |
|                                                                        | n78             | 3700                    | 10             | 50                  | 3700                    | 28.4     | IMD2      |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | n3              | 1735                    | 5              | 25                  | 1830                    | 27.9     | IMD2      |
| DC_1A-5A_n78A                                                          | n78             | 3780                    | 10             | 50                  | 3780                    | N/A      | N/A       |
|                                                                        | 1               | 1932                    | 5              | 25                  | 2122                    | 18.1     | IMD3      |
|                                                                        | 5               | 829                     | 5              | 25                  | 874                     | N/A      | N/A       |
|                                                                        | n78             | 3780                    | 10             | 50                  | 3780                    | N/A      | N/A       |
|                                                                        | 1               | 1975                    | 5              | 25                  | 2165                    | N/A      | N/A       |
|                                                                        | 5               | 840                     | 5              | 25                  | 885                     | 3.1      | IMD5      |
| DC_1A_n5A-n78A                                                         | n78             | 3405                    | 10             | 50                  | 3405                    | N/A      | N/A       |
|                                                                        | 1               | 1932                    | 5              | 25                  | 2122                    | N/A      | N/A       |
|                                                                        | n5              | 829                     | 5              | 25                  | 874                     | N/A      | N/A       |
|                                                                        | n78             | 3583                    | 10             | 50                  | 3583                    | 18.1     | IMD3      |
|                                                                        | 1               | 1975                    | 5              | 25                  | 2165                    | N/A      | N/A       |
|                                                                        | n5              | 840                     | 5              | 25                  | 885                     | 3.1      | IMD5      |
| DC_1A-7A_n78A<br>DC_1A-7C_n78A<br>DC_1A-7A_n78(2A)<br>DC_1A-7C_n78(2A) | n78             | 3405                    | 10             | 50                  | 3405                    | N/A      | N/A       |
|                                                                        | 1               | 1977.5                  | 5              | 25                  | 2167.5                  | N/A      | N/A       |
|                                                                        | 7               | 2507.5                  | 5              | 25                  | 2627.5                  | 9.1      | IMD4      |
|                                                                        | n78             | 3305                    | 10             | 50                  | 3305                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | 8.7      | IMD4      |
|                                                                        | 7               | 2510                    | 10             | 50                  | 2630                    | N/A      | N/A       |
| DC_1A_n7A-n78A<br>DC_1A_n7B-n78A                                       | n78             | 3580                    | 10             | 50                  | 3580                    | N/A      | N/A       |
|                                                                        | 1               | 1977.5                  | 5              | 25                  | 2167.5                  | N/A      | N/A       |
|                                                                        | n7              | 2507.5                  | 5              | 25                  | 2627.5                  | 9.1      | IMD4      |
|                                                                        | n78             | 3305                    | 10             | 50                  | 3305                    | N/A      | N/A       |
|                                                                        | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                                        | n7              | 2520                    | 5              | 25                  | 2640                    | N/A      | N/A       |
| DC_1A-3A_n79A                                                          | n78             | 3390                    | 10             | 50                  | 3390                    | 10.1     | IMD4      |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | 3.6      | IMD5      |
|                                                                        | 3               | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A       |
| DC_1A-5A_n79A                                                          | n79             | 4860                    | 40             | 216                 | 4860                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | 5               | 837.5                   | 5              | 25                  | 882.5                   | 18.3     | IMD3      |
|                                                                        | n79             | 4782.5                  | 40             | 216                 | 4782.5                  | N/A      | N/A       |
|                                                                        | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                        | 5               | 837.5                   | 5              | 25                  | 882.5                   | 8.9      | IMD4      |
|                                                                        | n79             | 4907.5                  | 40             | 216                 | 4907.5                  | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | 8.1      | IMD4      |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |                 |                         |                |                     |                         |          |           |
|---------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
|                                                   | 5               | 837.5                   | 5              | 25                  | 882.5                   | N/A      | N/A       |
|                                                   | n79             | 4652.5                  | 40             | 216                 | 4652.5                  | N/A      | N/A       |
| DC_1A-8A_n28A                                     | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                   | n28             | 730                     | 5              | 25                  | 785                     | N/A      | N/A       |
|                                                   | 8               | 905                     | 5              | 25                  | 950                     | 3.3      | IMD5      |
| DC_1A_n8A-n40A                                    | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                   | n8              | 885                     | 5              | 25                  | 930                     | 8.0      | IMD4      |
|                                                   | n40             | 2395                    | 5              | 25                  | 2395                    | N/A      | N/A       |
| DC_1A-8A_n77A                                     | 1               | 1955                    | 5              | 25                  | 2145                    | N/A      | N/A       |
|                                                   | n77             | 3410                    | 10             | 50                  | 3410                    | N/A      | N/A       |
|                                                   | 8               | 910                     | 5              | 25                  | 955                     | 3.3      | IMD5      |
| DC_1A-8A_n77A                                     | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A       |
|                                                   | n77             | 3960                    | 10             | 50                  | 3960                    | N/A      | N/A       |
|                                                   | 1               | 1950                    | 5              | 25                  | 2140                    | 14.4     | IMD3      |
| DC_1A_n8A-n78A                                    | 1               | 1945                    | 5              | 25                  | 2135                    | N/A      | N/A       |
|                                                   | n8              | 900                     | 5              | 25                  | 945                     | N/A      | N/A       |
|                                                   | n78             | 3745                    | 10             | 50                  | 3745                    | 14.9     | IMD3      |
|                                                   | 1               | 1940                    | 5              | 25                  | 2130                    | N/A      | N/A       |
|                                                   | n8              | 895                     | 5              | 25                  | 940                     | 3.3      | IMD5      |
|                                                   | n78             | 3380                    | 10             | 50                  | 3330                    | N/A      | N/A       |
| DC_1A-8A_n79A                                     | 1               | 1935                    | 5              | 25                  | 2125                    | N/A      | N/A       |
|                                                   | n79             | 4815                    | 40             | 216                 | 4815                    | N/A      | N/A       |
|                                                   | 8               | 900                     | 5              | 25                  | 945                     | 15.8     | IMD3      |
| DC_1A-8A_n79A                                     | 8               | 900                     | 5              | 25                  | 945                     | N/A      | N/A       |
|                                                   | n79             | 4845                    | 40             | 216                 | 4845                    | N/A      | N/A       |
|                                                   | 1               | 1955                    | 5              | 25                  | 2145                    | 8.2      | IMD4      |
| DC_1A-11A_n3A                                     | 1               | 1960                    | 5              | 25                  | 2150                    | N/A      | N/A       |
|                                                   | n3              | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A       |
|                                                   | 11              | 1432                    | 5              | 25                  | 1480                    | 15.2     | IMD3      |
| DC_1A-11A_n77A                                    | 1               | 1955                    | 5              | 25                  | 2145                    | N/A      | N/A       |
|                                                   | n77             | 3441                    | 10             | 50                  | 3441                    | N/A      | N/A       |
|                                                   | 11              | 1438                    | 5              | 25                  | 1486                    | 31.4     | IMD2      |
| DC_1A-11A_n77A                                    | 11              | 1438                    | 5              | 25                  | 1486                    | N/A      | N/A       |
|                                                   | n77             | 3578                    | 10             | 50                  | 3578                    | N/A      | N/A       |
|                                                   | 1               | 1950                    | 5              | 25                  | 2140                    | 30.8     | IMD2      |
| DC_1A-11A_n78A                                    | 1               | 1955                    | 5              | 25                  | 2145                    | N/A      | N/A       |
|                                                   | n78             | 3441                    | 10             | 50                  | 3441                    | N/A      | N/A       |
|                                                   | 11              | 1438                    | 5              | 25                  | 1486                    | 31.4     | IMD2      |
| DC_1A-11A_n78A                                    | 11              | 1438                    | 5              | 25                  | 1486                    | N/A      | N/A       |
|                                                   | n78             | 3578                    | 10             | 50                  | 3578                    | N/A      | N/A       |
|                                                   | 1               | 1950                    | 5              | 25                  | 2140                    | 30.8     | IMD2      |
| DC_1A-18A_n77A                                    | 1               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | 18              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD5      |
|                                                   | n77             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | 1               | 1930                    | 5              | 25                  | 2120                    | 16.4     | IMD3      |
|                                                   | 18              | 825                     | 5              | 25                  | 870                     | N/A      | N/A       |
|                                                   | n77             | 3770                    | 10             | 50                  | 3770                    | N/A      | N/A       |
| DC_1A-18A_n78A                                    | 1               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | 18              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD5      |
|                                                   | n78             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | 1               | 1930                    | 5              | 25                  | 2120                    | 16.4     | IMD3      |
|                                                   | 18              | 819                     | 5              | 25                  | 864                     | N/A      | N/A       |
|                                                   | n78             | 3758                    | 10             | 50                  | 3758                    | N/A      | N/A       |
| DC_1A-18A_n79A                                    | 1               | 1935                    | 5              | 25                  | 2125                    | N/A      | N/A       |
|                                                   | 18              | 822.5                   | 5              | 25                  | 867.5                   | 18.3     | IMD3      |
|                                                   | n79             | 4737.5                  | 40             | 216                 | 4737.5                  | N/A      | N/A       |
|                                                   | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                   | 18              | 820                     | 5              | 25                  | 865                     | 8.9      | IMD4      |
|                                                   | n79             | 4925                    | 40             | 216                 | 4925                    | N/A      | N/A       |
|                                                   | 1               | 1935                    | 5              | 25                  | 2125                    | 8.1      | IMD4      |
|                                                   | 18              | 822.5                   | 5              | 25                  | 867.5                   | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                      |                 |                         |                |                     |                         |          |           |
|------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                    | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_1A-19A_n77A<br>DC_1A-19A_n78A                                       | n79             | 4592.5                  | 40             | 216                 | 4592.5                  | N/A      | N/A       |
|                                                                        | 1               | 1940                    | 5              | 25                  | 2130                    | 17.8     | IMD3      |
|                                                                        | 19              | 832.5                   | 5              | 25                  | 877.5                   | N/A      | N/A       |
|                                                                        | n77, n78        | 3795                    | 10             | 50                  | 3795                    | N/A      | N/A       |
|                                                                        | 1               | 1940                    | 5              | 25                  | 2130                    | N/A      | N/A       |
|                                                                        | 19              | 835                     | 5              | 25                  | 880                     | 5.1      | IMD5      |
| DC_1A-20A_n8A                                                          | n77, n78        | 3350                    | 10             | 50                  | 3350                    | N/A      | N/A       |
|                                                                        | 1               | 1925                    | 5              | 25                  | 2115                    | N/A      | N/A       |
|                                                                        | n8              | 910                     | 5              | 25                  | 955                     | N/A      | N/A       |
| DC_1A-20A_n38A                                                         | 20              | 846                     | 5              | 25                  | 805                     | 11.5     | IMD4      |
|                                                                        | 1               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                                        | 20              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD5      |
| DC_1A-28A_n3A                                                          | n38             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                                        | 28              | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A       |
|                                                                        | n3              | 1780                    | 5              | 25                  | 1875                    | N/A      | N/A       |
| DC_1A-28A_n7A<br>DC_1A-1A-28A_n7A<br>DC_1A-28A_n7B<br>DC_1A-1A-28A_n7B | 1               | 1949                    | 5              | 25                  | 2139                    | 11.0     | IMD4      |
|                                                                        | 1               | 1935                    | 5              | 25                  | 2125                    | N/A      | N/A       |
|                                                                        | 28              | 730                     | 10             | 50                  | 785                     | 4.5      | IMD5      |
| DC_1A-19A_n79A                                                         | n7              | 2510                    | 10             | 50                  | 2630                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | 19              | 837.5                   | 5              | 25                  | 882.5                   | 18.3     | IMD3      |
|                                                                        | n79             | 4782.5                  | 40             | 216                 | 4782.5                  | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | 8.1      | IMD4      |
|                                                                        | 19              | 837.5                   | 5              | 25                  | 882.5                   | N/A      | N/A       |
| DC_1A-20A_n78A                                                         | n79             | 4652.5                  | 40             | 216                 | 4652.5                  | N/A      | N/A       |
|                                                                        | 1               | 1930                    | 5              | 25                  | 2120                    | 20.3     | IMD3      |
|                                                                        | 20              | 835                     | 5              | 25                  | 794                     | N/A      | N/A       |
| DC_1A-20A_n78A                                                         | n78             | 3790                    | 10             | 50                  | 3790                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | 20              | 851                     | 5              | 25                  | 810                     | 3.0      | IMD5      |
| DC_1A-21A_n77A<br>DC_1A-21A_n78A                                       | n78             | 3330                    | 10             | 50                  | 3330                    | N/A      | N/A       |
|                                                                        | 1               | 1964.6                  | 5              | 25                  | 2154.6                  | 30.6     | IMD2      |
|                                                                        | 21              | 1450.4                  | 5              | 25                  | 1498.4                  | N/A      | N/A       |
|                                                                        | n77, n78        | 3605                    | 10             | 50                  | 3605                    | N/A      | N/A       |
|                                                                        | 1               | 1964.6                  | 5              | 25                  | 2154.6                  | 3.6      | IMD5      |
|                                                                        | 21              | 1450.4                  | 5              | 25                  | 1498.4                  | N/A      | N/A       |
|                                                                        | n77, n78        | 3647                    | 10             | 50                  | 3647                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                        | 21              | 1452                    | 5              | 25                  | 1500                    | 31.5     | IMD2      |
|                                                                        | n77, n78        | 3450                    | 10             | 50                  | 3450                    | N/A      | N/A       |
|                                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
| DC_1A-21A_n79A                                                         | 21              | 1452                    | 5              | 25                  | 1500                    | 2.9      | IMD5      |
|                                                                        | n77, n78        | 3675                    | 10             | 50                  | 3675                    | N/A      | N/A       |
|                                                                        | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
| DC_1A_n28A-n40A                                                        | 21              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD4      |
|                                                                        | n79             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                                        | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                        | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A       |
|                                                                        | n40             | 2374                    | 5              | 25                  | 2374                    | 10.1     | IMD4      |
|                                                                        | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                        | n28             | 713                     | 5              | 25                  | 768                     | 8.6      | IMD4      |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                          |                 |                         |                |                     |                         |          |           |
|----------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                        | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_1A-28A_n40A                                                             | n40             | 2314                    | 5              | 25                  | 2314                    | N/A      | N/A       |
|                                                                            | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                            | 28              | 725                     | 5              | 25                  | 780                     | 8.9      | IMD4      |
| DC_1A-28A_n77A                                                             | n40             | 2340                    | 5              | 25                  | 2340                    | N/A      | N/A       |
|                                                                            | 1               | 1960                    | 5              | 25                  | 2150                    | 15.8     | IMD3      |
|                                                                            | 28              | 740                     | 5              | 25                  | 795                     | N/A      | N/A       |
| DC_1A-28A_n77A                                                             | n77             | 3630                    | 10             | 50                  | 3630                    | N/A      | N/A       |
|                                                                            | 1               | 1960                    | 5              | 25                  | 2150                    | N/A      | N/A       |
|                                                                            | 28              | 725                     | 5              | 25                  | 780                     | 4.3      | IMD5      |
| DC_1A-28A_n77A<br>DC_1A-28A_n78A                                           | n77             | 3330                    | 10             | 50                  | 3330                    | N/A      | N/A       |
|                                                                            | 1               | 1960                    | 5              | 25                  | 2150                    | 15.7     | IMD3      |
|                                                                            | 28              | 740                     | 5              | 25                  | 795                     | N/A      | N/A       |
| DC_1A-28A_n77A<br>DC_1A-28A_n78A                                           | n77/n78         | 3630                    | 10             | 50                  | 3630                    | N/A      | N/A       |
|                                                                            | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                                            | 28              | 739                     | 5              | 25                  | 794                     | 4.2      | IMD5      |
| DC_1A_n28A-n77A<br>DC_1A_n28A-n78A                                         | n77/n78         | 3352                    | 10             | 50                  | 3352                    | N/A      | N/A       |
|                                                                            | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                            | n28             | 733                     | 5              | 25                  | 788                     | N/A      | N/A       |
|                                                                            | n77/n78         | 3416                    | 10             | 50                  | 3416                    | 15.7     | IMD3      |
|                                                                            | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                            | n78             | 3320                    | 10             | 50                  | 3320                    | N/A      | N/A       |
| DC_1A-28A_n79A                                                             | n77/n28         | 735                     | 5              | 25                  | 790                     | 3.3      | IMD5      |
|                                                                            | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                            | 28              | 733                     | 5              | 25                  | 788                     | 15.2     | IMD3      |
|                                                                            | n79             | 4648                    | 40             | 216                 | 4648                    | N/A      | N/A       |
|                                                                            | 1               | 1925                    | 5              | 25                  | 2115                    | N/A      | N/A       |
|                                                                            | 28              | 740                     | 5              | 25                  | 795                     | 10.0     | IMD4      |
|                                                                            | n79             | 4980                    | 40             | 216                 | 4980                    | N/A      | N/A       |
|                                                                            | 1               | 1977.5                  | 5              | 25                  | 2167.5                  | 1.2      | IMD4      |
|                                                                            | 28              | 745.5                   | 5              | 25                  | 800.5                   | N/A      | N/A       |
|                                                                            | n79             | 4420                    | 40             | 216                 | 4420                    | N/A      | N/A       |
|                                                                            | 1               | 1935                    | 5              | 25                  | 2125                    | 4.5      | IMD5      |
|                                                                            | 28              | 718                     | 5              | 25                  | 773                     | N/A      | N/A       |
| DC_1A-32A_n78A<br>DC_1A-32A_n78(2A)                                        | n79             | 4807                    | 40             | 216                 | 4807                    | N/A      | N/A       |
|                                                                            | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                            | 32              | N/A                     | 5              | 25                  | 1470                    | 31.8     | IMD2      |
|                                                                            | n78             | 3400                    | 10             | 50                  | 3400                    | N/A      | N/A       |
|                                                                            | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
| DC_1A_n40A-n78A<br>DC_1A_n40A-n78(2A)                                      | 32              | N/A                     | 5              | 25                  | 1470                    | 0        | IMD5      |
|                                                                            | n78             | 3630                    | 10             | 50                  | 3630                    | N/A      | N/A       |
|                                                                            | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                            | n40             | 2340                    | 5              | 25                  | 2340                    | N/A      | N/A       |
|                                                                            | n78             | 3450                    | 10             | 50                  | 3450                    | 9.8      | IMD4      |
|                                                                            | 1               | 1960                    | 5              | 25                  | 2150                    | N/A      | N/A       |
| DC_1A-41A_n3A<br>DC_1A-41C_n3A                                             | n40             | 2360                    | 5              | 25                  | 2360                    | 10.6     | IMD4      |
|                                                                            | n78             | 3520                    | 10             | 50                  | 3520                    | N/A      | N/A       |
|                                                                            | 1               | 1977.5                  | 5              | 25                  | 2167.5                  | N/A      | N/A       |
| DC_1A-41A_n28A                                                             | n3              | 1712.5                  | 5              | 25                  | 1807.5                  | N/A      | N/A       |
|                                                                            | 41              | 2507.5                  | 5              | 25                  | 2507.5                  | 5.0      | IMD5      |
|                                                                            | 1               | 1935                    | 5              | 25                  | 2125                    | N/A      | N/A       |
| DC_1A-41A_n77A<br>DC_1A-41C_n77A<br>DC_1A-41A_n77(2A)<br>DC_1A-41C_n77(2A) | n28             | 718                     | 5              | 25                  | 773                     | N/A      | N/A       |
|                                                                            | 41              | 2653                    | 10             | 50                  | 2653                    | 30       | IMD2      |
|                                                                            | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                          |                 |                         |                |                     |                         |          |           |
|----------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                        | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
|                                                                            | n77             | 3400                    | 10             | 50                  | 3400                    | N/A      | N/A       |
|                                                                            | 41              | 2510                    | 5              | 25                  | 2510                    | 11.0     | IMD4      |
|                                                                            | 1               | 1950                    | 5              | 25                  | 2140                    | 9.3      | IMD4      |
|                                                                            | n77             | 3710                    | 10             | 50                  | 3710                    | N/A      | N/A       |
|                                                                            | 41              | 2640                    | 5              | 25                  | 2640                    | N/A      | N/A       |
|                                                                            | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                            | n77             | 4150                    | 10             | 50                  | 4150                    | N/A      | N/A       |
|                                                                            | 41              | 2510                    | 5              | 25                  | 2510                    | 3.6      | IMD5      |
| DC_1A-41A_n78A<br>DC_1A-41C_n78A<br>DC_1A-41A_n78(2A)<br>DC_1A-41C_n78(2A) | 1               | 1950                    | 5              | 25                  | 2140                    | 9.3      | IMD4      |
|                                                                            | 41              | 2640                    | 5              | 25                  | 2640                    | N/A      | N/A       |
|                                                                            | n78             | 3710                    | 10             | 50                  | 3710                    | N/A      | N/A       |
|                                                                            | 1               | 1975                    | 5              | 25                  | 2165                    | N/A      | N/A       |
|                                                                            | 41              | 2515                    | 5              | 25                  | 2515                    | 12       | IMD4      |
|                                                                            | n78             | 3410                    | 10             | 50                  | 3410                    | N/A      | N/A       |
| DC_1A-41A_n78A                                                             | 1               | 1955                    | 5              | 25                  | 2145                    | 8.7      | IMD4      |
|                                                                            | 41              | 2507.5                  | 10             | 50                  | 2507.5                  | N/A      | N/A       |
|                                                                            | n78             | 3580                    | 10             | 50                  | 3580                    | N/A      | N/A       |
| DC_1A_n41A-n78A                                                            | 1               | 1975                    | 5              | 25                  | 2165                    | N/A      | N/A       |
|                                                                            | n41             | 2515                    | 10             | 50                  | 2515                    | 11.5     | IMD4      |
|                                                                            | n78             | 3410                    | 10             | 50                  | 3410                    | N/A      | N/A       |
|                                                                            | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                                            | n41             | 2650                    | 10             | 25                  | 2650                    | N/A      | N/A       |
|                                                                            | n78             | 3330                    | 10             | 50                  | 3330                    | 19.6     | IMD3      |
| DC_1A-41A_n79A                                                             | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                                            | n79             | 4500                    | 40             | 216                 | 4500                    | N/A      |           |
|                                                                            | 41              | 2530                    | 5              | 25                  | 2530                    | 29.4     | IMD2      |
| DC_1A_n75A-n78A<br>DC_1A_n75A-n78(2A)                                      | 1               | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A       |
|                                                                            | n78             | 3400                    | 10             | 50                  | 3400                    | N/A      | N/A       |
|                                                                            | n75             | -                       | -              | -                   | 1470                    | 30.4     | IMD2      |
| DC_1A-42A_n28A                                                             | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                            | n28             | 733                     | 5              | 25                  | 788                     | N/A      | N/A       |
|                                                                            | 42              | 3416                    | 5              | 25                  | 3416                    | 15.7     | IMD3      |
| DC_1A-42A_n28A                                                             | 42              | 3580                    | 5              | 25                  | 3580                    | N/A      | N/A       |
|                                                                            | n28             | 723                     | 5              | 25                  | 778                     | N/A      | N/A       |
|                                                                            | 1               | 1944                    | 5              | 25                  | 2134                    | 15.7     | IMD3      |
| DC_1A-42A_n79A                                                             | 1               | 1977.5                  | 5              | 25                  | 2167.5                  | N/A      | N/A       |
|                                                                            | n79             | 4420                    | 40             | 216                 | 4420                    | N/A      | N/A       |
|                                                                            | 42              | 3490                    | 5              | 25                  | 3490                    | 4.8      | IMD5      |
|                                                                            | 42              | 3402.5                  | 5              | 25                  | 3402.5                  | N/A      | N/A       |
|                                                                            | n79             | 4640                    | 40             | 216                 | 4640                    | N/A      | N/A       |
|                                                                            | 1               | 1975                    | 5              | 25                  | 2165                    | 15.5     | IMD3      |
|                                                                            | 42              | 3450                    | 5              | 25                  | 3450                    | N/A      | N/A       |
|                                                                            | n79             | 4520                    | 40             | 216                 | 4520                    | N/A      | N/A       |
|                                                                            | 1               | 1950                    | 5              | 25                  | 2140                    | 9.3      | IMD4      |
| DC_1A_SUL_n77A-n80A                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | 23       | IMD3      |
|                                                                            | n80             | 1760                    | 5              | 25                  |                         | N/A      | N/A       |
| DC_1A_SUL_n77A-n80A                                                        | 1               | 1922.5                  | 5              | 25                  | 2112.5                  | N/A      | N/A       |
|                                                                            | n80             | 1782.5                  | 5              | 25                  |                         | N/A      | N/A       |
|                                                                            | n78             | 3425                    | 10             | 50                  | 3425                    | 13.0     | IMD4      |
| DC_1A_n78A-n79A                                                            | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                            | n78             | 3410                    | 10             | 50                  | 3410                    | N/A      | N/A       |
|                                                                            | n79             | 4870                    | 40             | 216                 | 4870                    | 15.9     | IMD3      |
|                                                                            | 1               | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                            | n79             | 4670                    | 40             | 216                 | 4670                    | N/A      | N/A       |
|                                                                            | n78             | 3490                    | 10             | 50                  | 3490                    | 4.6      | IMD5      |
| DC_1A_SUL_n78A-n80A                                                        | 1               | 1950                    | 5              | 25                  | 2140                    | 23       | IMD3      |
|                                                                            | n80             | 1760                    | 5              | 25                  |                         | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                                 |                 |                         |                |                     |                         |          |               |
|-------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|---------------|
| EN-DC Configuration                                                                                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order     |
|                                                                                                                   | 1               | 1922.5                  | 5              | 25                  | 2112.5                  | N/A      | N/A           |
|                                                                                                                   | n80             | 1782.5                  | 5              | 25                  |                         | N/A      | N/A           |
|                                                                                                                   | n78             | 3425                    | 10             | 50                  | 3425                    | 13.0     | IMD4          |
| DC_2A-4A_n41A                                                                                                     | 2               | 1860                    | 5              | 25                  | 1940                    | 11.0     | IMD4          |
|                                                                                                                   | 4               | 1715                    | 5              | 25                  | 2115                    | N/A      | N/A           |
|                                                                                                                   | n41             | 2685                    | 10             | 50                  | 2685                    | N/A      | N/A           |
| DC_2A-5A_n71A                                                                                                     | 2               | 1855                    | 5              | 25                  | 1935                    | N/A      | N/A           |
|                                                                                                                   | n71             | 686.5                   | 5              | 25                  | 640.5                   | N/A      | N/A           |
|                                                                                                                   | 5               | 846.5                   | 5              | 25                  | 891.5                   | 4.2      | IMD5          |
| DC_2A-7A_n78A<br>DC_2A-7C_n78A<br>DC_2A-7A-7A_n78A<br>DC_2A-7A_n78(2A)<br>DC_2A-7C_n78(2A)<br>DC_2A-7A-7A_n78(2A) | 2               | 1870                    | 5              | 25                  | 1950                    | 8.6      | IMD4          |
|                                                                                                                   | 7               | 2550                    | 5              | 25                  | 2685                    | N/A      | N/A           |
|                                                                                                                   | n78             | 3525                    | 10             | 50                  | 3475                    | N/A      | N/A           |
| DC_2A_n7A-n78A,<br>DC_2A_n7(2A)-n78A<br>DC_2A_n7A-n78(2A)<br>DC_2A_n7(2A)-n78(2A)                                 | 2               | 1900                    | 5              | 25                  | 1980                    | N/A      | N/A           |
|                                                                                                                   | n7              | 2525                    | 5              | 25                  | 2645                    | N/A      | N/A           |
|                                                                                                                   | n78             | 3775                    | 10             | 50                  | 3775                    | 4.2      | IMD5          |
| DC_2A_12A-n66A                                                                                                    | 2               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD4          |
|                                                                                                                   | 12              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A           |
|                                                                                                                   | n66             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A           |
| DC_2A-13A_n66A<br>DC_2A-2A-13A_n66A                                                                               | 2               | 1860                    | 5              | 25                  | 1940                    | 6.2      | IMD4          |
|                                                                                                                   | 13              | 780                     | 10             | 50                  | 749                     | N/A      | N/A           |
|                                                                                                                   | n66             | 1750                    | 5              | 25                  | 2150                    | N/A      | N/A           |
| DC_2A_n38A-n78A                                                                                                   | 2               | 1870                    | 5              | 25                  | 1950                    | N/A      | N/A           |
|                                                                                                                   | n38             | 2610                    | 10             | 50                  | 2610                    | N/A      | N/A           |
|                                                                                                                   | n78             | 3350                    | 10             | 50                  | 3350                    | 14.8     | IMD3          |
| DC_2A-14A_n66A                                                                                                    | 2               | 1874                    | 5              | 25                  | 1954                    | 7.2      | IMD4          |
|                                                                                                                   | 14              | 793                     | 5              | 25                  | 763                     | N/A      | N/A           |
|                                                                                                                   | 66              | 1770                    | 5              | 25                  | 2170                    | N/A      | N/A           |
| DC_2A_n41A-n71A                                                                                                   | 2               | 1900                    | 5              | 25                  | 1980                    | N/A      | N/A           |
|                                                                                                                   | n41             | 2530                    | 10             | 50                  | 2530                    | N/A      | N/A           |
|                                                                                                                   | n71             | 676                     | 5              | 50                  | 630                     | 28.7     | IMD2          |
|                                                                                                                   | 2               | 1900                    | 5              | 25                  | 1980                    | N/A      | N/A           |
|                                                                                                                   | n41             | 2586                    | 10             | 50                  | 2586                    | 29.2     | IMD2          |
| DC_2A-46A_n66A <sup>5</sup><br>DC_2A-46C_n66A <sup>5</sup><br>DC_2A-46D_n66A <sup>5</sup>                         | 2               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A           |
|                                                                                                                   | 46              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD3,<br>IMD5 |
|                                                                                                                   | n66             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A           |
| DC_2A-48A_n66A                                                                                                    | 2               | 1880                    | 5              | 25                  | 1960                    | N/A      | N/A           |
|                                                                                                                   | 48              | 3620                    | 10             | 50                  | 3620                    | 29.4     | IMD2          |
|                                                                                                                   | n66             | 1740                    | 5              | 25                  | 2140                    | N/A      | N/A           |
|                                                                                                                   | 2               | 1880                    | 5              | 25                  | 1960                    | 28.3     | IMD2          |
|                                                                                                                   | 48              | 3695                    | 5              | 25                  | 3695                    | N/A      | N/A           |
| DC_2A-66A_n2A                                                                                                     | n66             | 1735                    | 5              | 25                  | 2135                    | N/A      | N/A           |
|                                                                                                                   | 2               | 1900                    | 5              | 25                  | 1980                    | 20       | IMD3          |
|                                                                                                                   | 66              | 1730                    | 5              | 25                  | 2130                    | N/A      | N/A           |
| DC_2A-66A_n5A                                                                                                     | n2              | 1855                    | 5              | 25                  | 1935                    | N/A      | N/A           |
|                                                                                                                   | 2               | 1900                    | 5              | 25                  | 1980                    | N/A      | N/A           |
|                                                                                                                   | 66              | 1740                    | 5              | 25                  | 2140                    | 7.2      | IMD4          |
| DC_2A-66A_n25A                                                                                                    | n5              | 830                     | 5              | 25                  | 875                     | N/A      | N/A           |
|                                                                                                                   | 2               | 1855                    | 5              | 25                  | 1935                    | 20       | IMD3          |
|                                                                                                                   | 66              | 1775                    | 5              | 25                  | 2175                    | N/A      | N/A           |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                     |                 |                         |                |                     |                         |          |           |
|-------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                                                   | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
|                                                                                                       | n25             | 1855                    | 5              | 25                  | 1935                    | 20       | IMD3      |
|                                                                                                       | 2               | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A       |
|                                                                                                       | 66              | 1750                    | 5              | 25                  | 2150                    | 4        | IMD5      |
|                                                                                                       | n25             | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A       |
|                                                                                                       | 2               | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A       |
|                                                                                                       | 66              | 1712.5                  | 5              | 25                  | 2112.5                  | 23       | IMD3      |
|                                                                                                       | n25             | 1912.5                  | 5              | 25                  | 1992.5                  | N/A      | N/A       |
| DC_2A-66A_n41A<br>DC_2A-66A_n41C<br>DC_2A-66A_n41(2A)                                                 | 2               | 1860                    | 5              | 25                  | 1940                    | 11.0     | IMD4      |
|                                                                                                       | 66              | 1715                    | 5              | 25                  | 2115                    | N/A      | N/A       |
|                                                                                                       | n41             | 2685                    | 5              | 25                  | 2685                    | N/A      | N/A       |
| DC_2A-66A_n48A<br>DC_2A-66A_n48B<br>DC_2A-66A-66A_n48A<br>DC_2A-66A-66A_n48B                          | 2               | 1905                    | 5              | 25                  | 1985                    | N/A      | N/A       |
|                                                                                                       | 66              | 1755                    | 5              | 25                  | 2155                    | 12.1     | IMD4      |
|                                                                                                       | n48             | 3560                    | 5              | 25                  | 3560                    | N/A      | N/A       |
| DC_2A-66A_n48A<br>DC_2A-66A_n48B<br>DC_2A-66A-66A_n48A<br>DC_2A-66A-66A_n48B                          | 2               | 1880                    | 5              | 25                  | 1960                    | 28.3     | IMD5      |
|                                                                                                       | 66              | 1735                    | 5              | 25                  | 2135                    | N/A      | N/A       |
|                                                                                                       | n48             | 3695                    | 5              | 25                  | 3695                    | N/A      | N/A       |
| DC_2A-66A_n78A<br>DC_2A-66A_n78(2A)<br>DC_2A-66A-66A_n78A<br>DC_2A-66A-66A_n78(2A)<br>DC_2A_n66A-n78A | 2               | 1880                    | 5              | 25                  | 1960                    | N/A      | N/A       |
|                                                                                                       | 66/n66          | 1760                    | 5              | 25                  | 2160                    | 10.3     | IMD4      |
|                                                                                                       | n78             | 3480                    | 10             | 50                  | 3480                    | N/A      | N/A       |
| DC_2A-66A_n78A<br>DC_2A-66A_n78(2A)<br>DC_2A-66A-66A_n78A<br>DC_2A-66A-66A_n78(2A)                    | 2               | 1880                    | 5              | 25                  | 1960                    | 32.1     | IMD2      |
|                                                                                                       | 66              | 1740                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                                                       | n78             | 3700                    | 10             | 50                  | 3700                    | N/A      | N/A       |
| DC_2A-66A_n78A<br>DC_2A-66A_n78(2A)<br>DC_2A-66A-66A_n78A<br>DC_2A-66A-66A_n78(2A)                    | 2               | 1880                    | 5              | 25                  | 1960                    | 9.1      | IMD4      |
|                                                                                                       | 66              | 1770                    | 5              | 25                  | 2170                    | N/A      | N/A       |
|                                                                                                       | n78             | 3350                    | 10             | 50                  | 3350                    | N/A      | N/A       |
| DC_2A-66A_n78A<br>DC_2A-66A_n78(2A)<br>DC_2A-66A-66A_n78A<br>DC_2A-66A-66A_n78(2A)                    | 2               | 1880                    | 5              | 25                  | 1960                    | 2.1      | IMD5      |
|                                                                                                       | 66              | 1760                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                                                                       | n78             | 3620                    | 10             | 50                  | 3620                    | N/A      | N/A       |
| DC_2A_n66A-n78A                                                                                       | 2               | 1880                    | 5              | 25                  | 1960                    | N/A      | N/A       |
|                                                                                                       | n66             | 1740                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                                                       | n78             | 3620                    | 10             | 50                  | 3620                    | 29.4     | IMD2      |
|                                                                                                       | 2               | 1880                    | 5              | 25                  | 1960                    | N/A      | N/A       |
|                                                                                                       | n66             | 1740                    | 5              | 25                  | 2140                    | N/A      | N/A       |
|                                                                                                       | n78             | 3340                    | 10             | 50                  | 3340                    | 8.9      | IMD4      |
| DC_2A-71A_n38A<br>DC_2A-2A-71A_n38A                                                                   | 2               | 1862                    | 5              | 25                  | 1942                    | 26       | IMD2      |
|                                                                                                       | 71              | 668                     | 5              | 25                  | 622                     | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                |                 |                         |                |                     |                         |          |                           |
|------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|---------------------------|
| EN-DC Configuration                                              | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order                 |
| DC_2A-71A_n78A<br>DC_2A-2A-71A_n78A                              | n38             | 2610                    | 10             | 50                  | 2610                    | N/A      | N/A                       |
|                                                                  | 2               | 1874                    | 5              | 25                  | 1954                    | 16.5     | IMD3                      |
|                                                                  | 71              | 693                     | 5              | 25                  | 647                     | N/A      | N/A                       |
|                                                                  | n78             | 3340                    | 10             | 50                  | 3340                    | N/A      | N/A                       |
| DC_3A_n1A-n28A<br>DC_3C_n1A-n28A                                 | 3               | 1780                    | 5              | 25                  | 1875                    | N/A      | N/A                       |
|                                                                  | n28             | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A                       |
|                                                                  | n1              | 1949                    | 5              | 25                  | 2139                    | 11.0     | IMD4                      |
| DC_3A_n1A-n40A                                                   | n1              | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A                       |
|                                                                  | 3               | 1735                    | 5              | 25                  | 1830                    | N/A      | N/A                       |
|                                                                  | 40              | 2380                    | 5              | 25                  | 2380                    | 8.0      | IMD5                      |
| DC_3A_n1A-n77A                                                   | 3               | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A                       |
|                                                                  | n1              | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A                       |
|                                                                  | n77             | 3700                    | 10             | 50                  | 3700                    | 28.4     | IMD2                      |
|                                                                  | 3               | 1775                    | 5              | 25                  | 1870                    | N/A      | N/A                       |
|                                                                  | n1              | 1950                    | 5              | 25                  | 2140                    | 31.0     | IMD2                      |
|                                                                  | n77             | 3915                    | 10             | 50                  | 3915                    | N/A      | N/A                       |
| DC_3A_n1A-n78A<br>DC_3C_n1A-n78A<br>DC_3A-3A_n1A-n78A            | 3               | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A                       |
|                                                                  | n1              | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A                       |
|                                                                  | n78             | 3700                    | 10             | 50                  | 3700                    | 28.4     | IMD2                      |
|                                                                  | 3               | 1770                    | 5              | 25                  | 1865                    | N/A      | N/A                       |
|                                                                  | n1              | 1940                    | 5              | 25                  | 2130                    | 3.5      | IMD5                      |
|                                                                  | n78             | 3720                    | 10             | 50                  | 3720                    | N/A      | N/A                       |
| DC_3A_n1A-n79A                                                   | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A                       |
|                                                                  | n1              | 1930                    | 5              | 25                  | 2120                    | N/A      | N/A                       |
|                                                                  | n79             | 4950                    | 40             | 216                 | 4950                    | 4.7      | IMD5                      |
|                                                                  | 3               | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A                       |
|                                                                  | n1              | 1950                    | 40             | 216                 | 2140                    | 3.6      | IMD5                      |
|                                                                  | n79             | 4860                    | 5              | 25                  | 4860                    | N/A      | N/A                       |
| DC_3A-5A_n78A                                                    | 3               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD3                      |
|                                                                  | 5               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A                       |
|                                                                  | n78             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A                       |
| DC_3A_n5A-n78A<br>DC_3C_n5A-n78A                                 | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A                       |
|                                                                  | n5              | 845                     | 5              | 25                  | 890                     | N/A      | N/A                       |
|                                                                  | n78             | 3420                    | 10             | 52                  | 3420                    | 16.1     | IMD3                      |
| DC_3A-5A_n79A                                                    | 3               | 1775                    | 5              | 25                  | 1870                    | N/A      | N/A                       |
|                                                                  | 5               | 840                     | 5              | 25                  | 885                     | 18.5     | IMD3                      |
|                                                                  | n79             | 4435                    | 40             | 216                 | 4435                    | N/A      | N/A                       |
|                                                                  | 3               | 1782.5                  | 5              | 25                  | 1877.5                  | 0.2      | IMD4                      |
|                                                                  | 5               | 842.5                   | 5              | 25                  | 887.5                   | N/A      | N/A                       |
|                                                                  | n79             | 4420                    | 40             | 216                 | 4420                    | N/A      | N/A                       |
| DC_3A-7A_n5A                                                     | 3               | 1780                    | 10             | 50                  | 1875                    | N/A      | N/A                       |
|                                                                  | 7               | 2505                    | 10             | 50                  | 2625                    | 30.0     | IMD2 <sup>1</sup>         |
|                                                                  | n5              | 845                     | 5              | 25                  | 890                     | N/A      | N/A                       |
| DC_3A-7A_n8A                                                     | 3               | 1780                    | 5              | 25                  | 1875                    | N/A      | N/A                       |
|                                                                  | n8              | 890                     | 5              | 25                  | 935                     | N/A      | N/A                       |
|                                                                  | 7               | 2550                    | 10             | 50                  | 2670                    | 29.0     | IMD2<br>IMD3 <sup>3</sup> |
| DC_3A-7A_n28A<br>DC_3A-7C_n28A<br>DC_3C-7A_n28A<br>DC_3C-7C_n28A | 3               | 1712.5                  | 5              | 25                  | 1807.5                  | N/A      | N/A                       |
|                                                                  | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A                       |
|                                                                  | 7               | 2562                    | 10             | 50                  | 2682                    | 16.9     | IMD3                      |
|                                                                  | 7               | 2543                    | 10             | 50                  | 2663                    | N/A      | N/A                       |
|                                                                  | n28             | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A                       |
|                                                                  | 3               | 1737.5                  | 5              | 25                  | 1832.5                  | 26.0     | IMD2                      |
| DC_3A-18A_n77A<br>DC_3A-18A_n78A                                 | 3               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD3                      |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                                                                                                                                              |                 |                         |                |                     |                         |          |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                                                                                                                                                                            | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
|                                                                                                                                                                                                                                | 18              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                                                                                                                                                                                                | n77, n78        | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
| DC_3A-19A_n77A<br>DC_3A-19A_n78A                                                                                                                                                                                               | 3               | 1775                    | 5              | 25                  | 1850                    | 17.3     | IMD3      |
|                                                                                                                                                                                                                                | 19              | 835                     | 5              | 25                  | 880                     | N/A      | N/A       |
|                                                                                                                                                                                                                                | n77, n78        | 3520                    | 10             | 50                  | 3520                    | N/A      | N/A       |
| DC_3A_n7A-n28A<br>DC_3C_n7A-n28A                                                                                                                                                                                               | 3               | 1747                    | 5              | 25                  | 1842                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n7              | 2543                    | 5              | 25                  | 2663                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n28             | 741                     | 5              | 25                  | 796.0                   | 20.0     | IMD2      |
|                                                                                                                                                                                                                                | 3               | 1712.5                  | 5              | 25                  | 1807.5                  | N/A      | N/A       |
|                                                                                                                                                                                                                                | n7              | 2562                    | 5              | 25                  | 2682                    | 17.0     | IMD3      |
|                                                                                                                                                                                                                                | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A       |
| DC_3A-7A_n40A                                                                                                                                                                                                                  | 3               | 1771.6                  | 5              | 25                  | 1866.6                  | 3.4      | IMD5      |
|                                                                                                                                                                                                                                | 7               | 2530                    | 5              | 25                  | 2650                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n40             | 2310                    | 5              | 25                  | 2310                    | N/A      | N/A       |
| DC_3A-7A_n77A                                                                                                                                                                                                                  | 3               | 1725                    | 5              | 25                  | 1820                    | 17.6     | IMD3      |
|                                                                                                                                                                                                                                | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n77             | 3310                    | 10             | 50                  | 3310                    | N/A      | N/A       |
| DC_3A-7A_n77A                                                                                                                                                                                                                  | 3               | 1725                    | 5              | 25                  | 1820                    | 8.6      | IMD4      |
|                                                                                                                                                                                                                                | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n77             | 3475                    | 10             | 50                  | 3475                    | N/A      | N/A       |
| DC_3A-7A_n77A                                                                                                                                                                                                                  | 3               | 1715                    | 5              | 25                  | 1810                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | 7               | 2550                    | 5              | 25                  | 2670                    | 5.2      | IMD5      |
|                                                                                                                                                                                                                                | n77             | 4190                    | 10             | 50                  | 4190                    | N/A      | N/A       |
| DC_3A-7A_n77A                                                                                                                                                                                                                  | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | 7               | 2520                    | 5              | 25                  | 2640                    | 3.4      | IMD5      |
|                                                                                                                                                                                                                                | n77             | 3900                    | 10             | 50                  | 3900                    | N/A      | N/A       |
| DC_3A-7A_n78A<br>DC_3C-7A_n78A<br>DC_3C-7C_n78A<br>DC_3A-3A-7A_n78A<br>DC_3A-3A-7A-7A_n78A<br>DC_3A-7A_SUL_n78A-n80A<br>DC_3C-7A_SUL_n78A-n80A<br>DC_3A-7A_n78(2A)<br>DC_3C-7A_n78(2A)<br>DC_3A-7C_n78(2A)<br>DC_3C-7C_n78(2A) | 3               | 1725                    | 5              | 25                  | 1820                    | 17.6     | IMD3      |
|                                                                                                                                                                                                                                | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n78             | 3310                    | 10             | 50                  | 3310                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | 3               | 1725                    | 5              | 25                  | 1820                    | 8.6      | IMD4      |
|                                                                                                                                                                                                                                | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n78             | 3475                    | 10             | 50                  | 3475                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n78             | 3475                    | 10             | 50                  | 3475                    | N/A      | N/A       |
| DC_3A-8A_n77A                                                                                                                                                                                                                  | 3               | 1715                    | 5              | 25                  | 1810                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n77             | 4190                    | 10             | 50                  | 4190                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | 8               | 910                     | 5              | 25                  | 955                     | 9.7      | IMD4      |
| DC_3A-8A_n77A                                                                                                                                                                                                                  | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A       |
|                                                                                                                                                                                                                                | n77             | 3640                    | 10             | 50                  | 3640                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | 3               | 1725                    | 5              | 25                  | 1820                    | 16.5     | IMD3      |
| DC_3A-8A_n78A<br>DC_3A-3A-8A_n78A                                                                                                                                                                                              | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A       |
|                                                                                                                                                                                                                                | n78             | 3640                    | 10             | 50                  | 3640                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | 3               | 1725                    | 5              | 25                  | 1820                    | 16.5     | IMD3      |
| DC_3A_n8A-n78A                                                                                                                                                                                                                 | 3               | 1740                    | 5              | 25                  | 1835                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n8              | 900                     | 5              | 25                  | 945                     | N/A      | N/A       |
|                                                                                                                                                                                                                                | n78             | 3540                    | 10             | 50                  | 3540                    | 16.3     | IMD3      |
| DC_3A-8A_n79A                                                                                                                                                                                                                  | 3               | 1755                    | 5              | 25                  | 1850                    | N/A      | N/A       |
|                                                                                                                                                                                                                                | n79             | 4465                    | 40             | 216                 | 4465                    | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                                                |                 |                         |                |                     |                         |          |                   |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                                                                              | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_3A-8A_n79A                                                                                                                    | 8               | 910                     | 5              | 25                  | 955                     | 15.3     | IMD3              |
|                                                                                                                                  | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A               |
|                                                                                                                                  | n79             | 4580                    | 40             | 216                 | 4580                    | N/A      | N/A               |
| DC_3A-8A_n79A                                                                                                                    | 3               | 1755                    | 5              | 25                  | 1850                    | 8.8      | IMD4              |
|                                                                                                                                  | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
|                                                                                                                                  | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
| DC_3A_n7A-n78A<br>DC_3A_n7B-n78A<br>DC_3C_n7A-n78A<br>DC_3C_n7B-n78A<br>DC_3A_n7A-n78(2A)<br>DC_3C_n7A-n78(2A)<br>DC_3A-19A_n79A | n7              | 2560                    | 5              | 25                  | 2680                    | N/A      | N/A               |
|                                                                                                                                  | n78             | 3390                    | 10             | 50                  | 3390                    | 16.1     | IMD3              |
|                                                                                                                                  | n78             | 3390                    | 10             | 50                  | 3390                    | 16.1     | IMD3              |
| DC_3A-19A_n79A                                                                                                                   | 3               | 1775                    | 5              | 25                  | 1870                    | N/A      | N/A               |
|                                                                                                                                  | 19              | 840                     | 5              | 25                  | 885                     | 18.5     | IMD3              |
|                                                                                                                                  | n79             | 4435                    | 40             | 216                 | 4435                    | N/A      | N/A               |
| DC_3A-19A_n79A                                                                                                                   | 3               | 1782.5                  | 5              | 25                  | 1877.5                  | 5.5      | IMD4              |
|                                                                                                                                  | 19              | 842.5                   | 5              | 25                  | 887.5                   | N/A      | N/A               |
|                                                                                                                                  | n79             | 4420                    | 40             | 216                 | 4420                    | N/A      | N/A               |
| DC_3A-20A_n7A<br>DC_3C-20A_n7A                                                                                                   | 3               | 1737                    | 5              | 25                  | 1832                    | N/A      | N/A               |
|                                                                                                                                  | 20              | 847                     | 10             | 20                  | 806                     | 10.5     | IMD2              |
|                                                                                                                                  | n7              | 2543                    | 10             | 50                  | 2663                    | N/A      | N/A               |
| DC_3A-20A_n8A                                                                                                                    | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                                                                                  | n8              | 910                     | 5              | 25                  | 955                     | N/A      | N/A               |
|                                                                                                                                  | 20              | 851                     | 5              | 25                  | 810                     | 27       | IMD2              |
| DC_3A-20A_n8A                                                                                                                    | 3               | 1765                    | 5              | 25                  | 1860                    | 14.5     | IMD4              |
|                                                                                                                                  | n8              | 900                     | 5              | 25                  | 945                     | N/A      | N/A               |
|                                                                                                                                  | 20              | 840                     | 5              | 25                  | 799                     | N/A      | N/A               |
| DC_3A-20A_n28A<br>DC_3C-20A_n28A                                                                                                 | 20              | 852                     | 5              | 25                  | 811                     | N/A      | N/A               |
|                                                                                                                                  | n28             | 728                     | 5              | 25                  | 783                     | N/A      | N/A               |
|                                                                                                                                  | 3               | 1733                    | 5              | 25                  | 1828                    | 9.4      | IMD4              |
| DC_3A-20A_n38A                                                                                                                   | 3               | 1779                    | 5              | 25                  | 1874                    | N/A      | N/A               |
|                                                                                                                                  | 20              | 852                     | 10             | 20                  | 811                     | 26.0     | IMD2 <sup>1</sup> |
|                                                                                                                                  | n38             | 2590                    | 10             | 50                  | 2590                    | N/A      | N/A               |
| DC_3A-20A_n41A<br>DC_3C-20A_n41A                                                                                                 | 3               | 1744                    | 5              | 25                  | 1839                    | 26.0     | IMD2              |
|                                                                                                                                  | n41             | 2680                    | 10             | 50                  | 2680                    | N/A      | N/A               |
|                                                                                                                                  | 20              | 841                     | 10             | 50                  | 800                     | N/A      | N/A               |
| DC_3A-20A_n41A<br>DC_3C-20A_n41A                                                                                                 | 3               | 1779                    | 5              | 25                  | 1874                    | N/A      | N/A               |
|                                                                                                                                  | n41             | 2590                    | 10             | 50                  | 2590                    | N/A      | N/A               |
|                                                                                                                                  | 20              | 852                     | 10             | 50                  | 811                     | 26.0     | IMD2              |
| DC_3A-20A_n41A<br>DC_3C-20A_n41A                                                                                                 | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
|                                                                                                                                  | n41             | 2660                    | 10             | 50                  | 2660                    | N/A      | N/A               |
|                                                                                                                                  | 20              | 841                     | 5              | 25                  | 800                     | 12.5     | IMD3              |
| DC_3A_20A_SUL_n78A-n80A<br>DC_3C_20A_SUL_n78A-n80A                                                                               | 3               | 1725                    | 5              | 25                  | 1820                    | 17.3     | IMD3              |
|                                                                                                                                  | 20              | 845                     | 5              | 25                  | 804                     | N/A      | N/A               |
|                                                                                                                                  | n78             | 3510                    | 10             | 50                  | 3510                    | N/A      | N/A               |
| DC_3A_n20A-n78A                                                                                                                  | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
|                                                                                                                                  | n20             | 845                     | 5              | 25                  | 804                     | N/A      | N/A               |
|                                                                                                                                  | n78             | 3420                    | 10             | 50                  | 3420                    | 16.1     | IMD3              |
| DC_3A-20A_n78A<br>DC_3C-20A_n78A                                                                                                 | 3               | 1725                    | 5              | 25                  | 1820                    | 17.3     | IMD3              |
|                                                                                                                                  | 20              | 845                     | 5              | 25                  | 804                     | N/A      | N/A               |
|                                                                                                                                  | n78             | 3510                    | 10             | 50                  | 3510                    | N/A      | N/A               |
| DC_3A-21A_n77A<br>DC_3A-21A_n78A                                                                                                 | 3               | 1767.5                  | 5              | 25                  | 1862.5                  | 30.8     | IMD2              |
|                                                                                                                                  | 21              | 1459.5                  | 5              | 25                  | 1507.5                  | N/A      | N/A               |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                        |                 |                         |                |                     |                         |          |                   |
|----------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                                                      | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
|                                                                                                          | n77, n78        | 3322                    | 10             | 50                  | 3322                    | N/A      | N/A               |
|                                                                                                          | 3               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD2              |
|                                                                                                          | 21              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
|                                                                                                          | n78             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
| DC_3A-21A_n77A                                                                                           | 3               | 1771.6                  | 5              | 25                  | 1866.6                  | 3.4      | IMD5              |
|                                                                                                          | 21              | 1450.4                  | 5              | 25                  | 1498.4                  | N/A      | N/A               |
|                                                                                                          | n77             | 3935                    | 10             | 50                  | 3935                    | N/A      | N/A               |
| DC_3A-21A_n79A                                                                                           | 3               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
|                                                                                                          | 21              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD3              |
|                                                                                                          | n79             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
|                                                                                                          | 3               | 1774.2                  | 5              | 25                  | 1869.2                  | 17.8     | IMD3              |
|                                                                                                          | 21              | 1450.4                  | 5              | 25                  | 1498.4                  | N/A      | N/A               |
|                                                                                                          | n79             | 4770                    | 40             | 216                 | 4770                    | N/A      | N/A               |
| DC_3A-28A_n5A<br>DC_3C-28A_n5A                                                                           | 3               | 1735                    | 5              | 25                  | 1830                    | 8.7      | IMD4              |
|                                                                                                          | 28              | 705                     | 5              | 25                  | 798                     | N/A      | N/A               |
|                                                                                                          | n5              | 845                     | 5              | 25                  | 874                     | N/A      | N/A               |
|                                                                                                          | 3               | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A               |
|                                                                                                          | 28              | 730                     | 5              | 25                  | 785                     | 9.4      | IMD4              |
|                                                                                                          | n5              | 845                     | 5              | 25                  | 874                     | N/A      | N/A               |
| DC_3A-28A_n7A<br>DC_3C-28A_n7A<br>DC_3A-3A-28A_n7A<br>DC_3A-28A_n7B<br>DC_3C-28A_n7B<br>DC_3A-3A-28A_n7B | 3               | 1737.5                  | 5              | 25                  | 1832.5                  | 26.0     | IMD2              |
|                                                                                                          | 28              | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A               |
|                                                                                                          | n7              | 2543                    | 10             | 50                  | 2663                    | N/A      | N/A               |
|                                                                                                          | 3               | 1747                    | 5              | 25                  | 1842                    | N/A      | N/A               |
|                                                                                                          | 28              | 741                     | 5              | 25                  | 796.0                   | 20.0     | IMD2              |
|                                                                                                          | n7              | 2543                    | 5              | 25                  | 2663                    | N/A      | N/A               |
| DC_3A-28A_n77A                                                                                           | 3               | 1712.5                  | 5              | 25                  | 1807.5                  | N/A      | N/A               |
|                                                                                                          | 28              | 715                     | 5              | 25                  | 770                     | 15.3     | IMD3              |
|                                                                                                          | n77             | 4195                    | 10             | 50                  | 4195                    | N/A      | N/A               |
|                                                                                                          | 3               | 1755                    | 5              | 25                  | 1850                    | 17.0     | IMD3              |
|                                                                                                          | 28              | 735                     | 5              | 25                  | 790                     | N/A      | N/A               |
|                                                                                                          | n77             | 3320                    | 10             | 50                  | 3320                    | N/A      | N/A               |
| DC_3A_n28A-n77A                                                                                          | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                                                          | 28              | 733                     | 5              | 25                  | 788                     | N/A      | N/A               |
|                                                                                                          | n77             | 4173                    | 10             | 50                  | 4173                    | 15.9     | IMD3              |
|                                                                                                          | 3               | 1712.5                  | 5              | 25                  | 1807.5                  | N/A      | N/A               |
|                                                                                                          | 28              | 715                     | 5              | 25                  | 770                     | 15.3     | IMD3              |
|                                                                                                          | n77             | 4195                    | 10             | 50                  | 4195                    | N/A      | N/A               |
| DC_3A-28A_n41A                                                                                           | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                                                          | n41             | 2510                    | 5              | 25                  | 2510                    | N/A      | N/A               |
|                                                                                                          | 28              | 735                     | 5              | 25                  | 790                     | 26.0     | IMD2 <sup>1</sup> |
|                                                                                                          | 3               | 1737.5                  | 5              | 25                  | 1832.5                  | 26.0     | IMD2              |
|                                                                                                          | n41             | 2543                    | 10             | 50                  | 2543                    | N/A      | N/A               |
|                                                                                                          | 28              | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A               |
| DC_3A-28A_n78A<br>DC_3C-28A_n78A<br>DC_3A-3A-28A_n78A                                                    | 3               | 1775                    | 5              | 25                  | 1870                    | 17.3     | IMD3              |
|                                                                                                          | 28              | 740                     | 5              | 25                  | 760                     | N/A      | N/A               |
|                                                                                                          | n78             | 3350                    | 10             | 25                  | 3350                    | N/A      | N/A               |
| DC_3A-28A_n79A                                                                                           | 3               | 1770                    | 5              | 25                  | 1865                    | N/A      | N/A               |
|                                                                                                          | 28              | 725                     | 5              | 25                  | 780                     | 10.3     | IMD4              |
|                                                                                                          | n79             | 4530                    | 40             | 216                 | 4530                    | N/A      | N/A               |
|                                                                                                          | 3               | 1775                    | 5              | 25                  | 1870                    | 5.7      | IMD5              |
|                                                                                                          | 28              | 725                     | 5              | 25                  | 780                     | N/A      | N/A               |
|                                                                                                          | n79             | 4770                    | 40             | 216                 | 4770                    | N/A      | N/A               |
| DC_3A_n28A-n78A                                                                                          | 3               | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A               |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                          |                 |                         |                |                     |                         |          |                   |
|----------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                        | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_3C_n28A-n78A                                                            | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A               |
|                                                                            | n78             | 3764                    | 10             | 50                  | 3764                    | 4.5      | IMD5              |
| DC_3A_SUL_n77A-n84A                                                        | 3               | 1782.5                  | 5              | 25                  | 1877.5                  | N/A      | N/A               |
|                                                                            | n84             | 1922.5                  | 5              | 25                  |                         | N/A      | N/A               |
|                                                                            | n77             | 3425                    | 10             | 50                  | 3425                    | 13.0     | IMD4              |
| DC_3A_n40A-n78A                                                            | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
|                                                                            | n40             | 2360                    | 5              | 25                  | 2360                    | N/A      | N/A               |
|                                                                            | n78             | 3620                    | 10             | 50                  | 3620                    | 4.8      | IMD5              |
|                                                                            | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                            | n40             | 2360                    | 5              | 25                  | 2360                    | 4.4      | IMD5              |
|                                                                            | n78             | 3760                    | 10             | 50                  | 3760                    | N/A      | N/A               |
|                                                                            |                 |                         |                |                     |                         |          |                   |
| DC_3A_n40A-n79A                                                            | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                            | n40             | 2330                    | 5              | 25                  | 2330                    | N/A      | N/A               |
|                                                                            | n79             | 4550                    | 40             | 216                 | 4550                    | 4.7      | IMD5              |
|                                                                            | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                            | n40             | 2330                    | 5              | 25                  | 2330                    | 3.2      | IMD5              |
|                                                                            | n79             | 4550                    | 40             | 216                 | 4550                    | N/A      | N/A               |
| DC_3A_n41A-n79A                                                            | 3               | 1770                    | 5              | 25                  | 1865                    | N/A      | N/A               |
|                                                                            | n41             | 2670                    | 10             | 50                  | 2670                    | N/A      | N/A               |
|                                                                            | n79             | 4440                    | 40             | 216                 | 4440                    | 30.8     | IMD2 <sup>4</sup> |
| DC_3A_n75A-n78A<br>DC_3A_n75A-n78(2A)                                      | 3               | 1782.5                  | 5              | 25                  | 1877.5                  | N/A      | N/A               |
|                                                                            | n78             | 3305                    | 10             | 50                  | 3305                    | N/A      | N/A               |
|                                                                            | n75             | -                       | -              | -                   | 1514.5                  | 10.0     | IMD2              |
| DC_3A_n78A-n79A                                                            | 3               | 1770                    | 5              | 25                  | 1865                    | N/A      | N/A               |
|                                                                            | n78             | 3340                    | 10             | 50                  | 3340                    | N/A      | N/A               |
|                                                                            | n79             | 4910                    | 40             | 216                 | 4910                    | 16.3     | IMD3              |
|                                                                            | 3               | 1770                    | 5              | 25                  | 1865                    | N/A      | N/A               |
|                                                                            | n79             | 4510                    | 40             | 216                 | 4510                    | N/A      | N/A               |
|                                                                            | n78             | 3710                    | 10             | 50                  | 3710                    | 4.2      | IMD5              |
| DC_3A_SUL_n78A-n82A                                                        | 3               | 1775                    | 5              | 25                  | 1870                    | 4        | IMD4              |
|                                                                            | n82             | 840                     | 5              | 25                  |                         | N/A      | N/A               |
| DC_3A_SUL_n78A-n84A                                                        | 3               | 1782.5                  | 5              | 25                  | 1877.5                  | N/A      | N/A               |
|                                                                            | n84             | 1922.5                  | 5              | 25                  |                         | N/A      | N/A               |
|                                                                            | n78             | 3425                    | 10             | 50                  | 3425                    | 13.0     | IMD4              |
| DC_3A-32A_n78A<br>DC_3A-32A_n78(2A)                                        | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A               |
|                                                                            | 32              | N/A                     | 5              | 25                  | 1470                    | 4.9      | IMD4              |
|                                                                            | n78             | 3720                    | 10             | 50                  | 3720                    | N/A      | N/A               |
|                                                                            | 3               | 1775                    | 5              | 25                  | 1870                    | N/A      | N/A               |
|                                                                            | 32              | N/A                     | 5              | 25                  | 1475                    | 0        | IMD5              |
|                                                                            | n78             | 3400                    | 10             | 50                  | 3400                    | N/A      | N/A               |
| DC_3A-40A_n1A                                                              | n1              | 1950                    | 5              | 25                  | 2140                    | N/A      | N/A               |
|                                                                            | 3               | 1735                    | 5              | 25                  | 1830                    | N/A      | N/A               |
|                                                                            | 40              | 2380                    | 5              | 25                  | 2380                    | 8.0      | IMD5              |
| DC_3A-41A_n28A<br>DC_3A-41C_n28A                                           | 41              | 2543                    | 10             | 50                  | 2543                    | N/A      | N/A               |
|                                                                            | n28             | 710.5                   | 5              | 25                  | 765.5                   | N/A      | N/A               |
|                                                                            | 3               | 1737.5                  | 5              | 25                  | 1832.5                  | 26       | IMD2              |
|                                                                            | 3               | 1780                    | 5              | 25                  | 1875                    | N/A      | N/A               |
|                                                                            | n28             | 738                     | 5              | 25                  | 793                     | N/A      | N/A               |
|                                                                            | 41              | 2518                    | 5              | 25                  | 2518                    | 27.4     | IMD2              |
|                                                                            | 3               | 1715                    | 5              | 25                  | 1810                    | N/A      | N/A               |
|                                                                            | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A               |
| DC_3A-41A_n77A<br>DC_3A-41C_n77A<br>DC_3A-41A_n77(2A)<br>DC_3A-41C_n77(2A) | 41              | 2687                    | 5              | 25                  | 2687                    | 15.9     | IMD3              |
|                                                                            | 3               | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                            |                 |                         |                |                     |                         |          |                   |
|                                                                            |                 |                         |                |                     |                         |          |                   |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                                     |                 |                         |                |                     |                         |          |           |
|-----------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                                                                   | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
|                                                                                                                       | n77             | 3900                    | 10             | 50                  | 3900                    | N/A      | N/A       |
|                                                                                                                       | 41              | 2640                    | 5              | 25                  | 2640                    | 5.3      | IMD5      |
|                                                                                                                       | 41              | 2620                    | 5              | 25                  | 2620                    | N/A      | N/A       |
|                                                                                                                       | n77             | 3400                    | 10             | 50                  | 3400                    | N/A      | N/A       |
|                                                                                                                       | 3               | 1745                    | 5              | 25                  | 1840                    | 16.4     | IMD3      |
| DC_3A-41A_n78A<br>DC_3A-41C_n78A<br>DC_3A-41A_n78(2A)<br>DC_3A-41C_n78(2A)                                            | 41              | 2620                    | 5              | 25                  | 2620                    | N/A      | N/A       |
|                                                                                                                       | n78             | 3400                    | 10             | 50                  | 3400                    | N/A      | N/A       |
|                                                                                                                       | 3               | 1745                    | 5              | 25                  | 1840                    | 16.4     | IMD3      |
| DC_3A_n41A-n78A                                                                                                       | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A       |
|                                                                                                                       | n41             | 2560                    | 10             | 50                  | 2560                    | N/A      | N/A       |
|                                                                                                                       | n78             | 3390                    | 10             | 50                  | 3390                    | 16.4     | IMD3      |
| DC_3A-41A_n79A                                                                                                        | 3               | 1770                    | 5              | 25                  | 1865                    | N/A      | N/A       |
|                                                                                                                       | n79             | 4440                    | 40             | 216                 | 4440                    | N/A      | N/A       |
|                                                                                                                       | 41              | 2670                    | 5              | 25                  | 2670                    | 30.2     | IMD2      |
|                                                                                                                       | 41              | 2570                    | 5              | 25                  | 2570                    | N/A      | N/A       |
|                                                                                                                       | n79             | 4420                    | 40             | 216                 | 4420                    | N/A      | N/A       |
|                                                                                                                       | 3               | 1755                    | 5              | 25                  | 1850                    | 29.4     | IMD2      |
| DC_5A-7A_n71A                                                                                                         | 5               | 835                     | 5              | 25                  | 880                     | N/A      | N/A       |
|                                                                                                                       | 7               | 2540                    | 5              | 25                  | 2660                    | 6.5      | IMD5      |
|                                                                                                                       | n71             | 680                     | 5              | 25                  | 634                     | N/A      | N/A       |
| DC_5A-7A_n78A                                                                                                         | 5               | 844                     | 5              | 25                  | 889                     | N/A      | N/A       |
|                                                                                                                       | 7               | 2525                    | 10             | 50                  | 2645                    | 30.1     | IMD2      |
|                                                                                                                       | n78             | 3489                    | 10             | 50                  | 3489                    | N/A      | N/A       |
|                                                                                                                       | 5               | 834                     | 5              | 25                  | 879                     | 30.2     | IMD2      |
|                                                                                                                       | 7               | 2550                    | 10             | 50                  | 2670                    | N/A      | N/A       |
|                                                                                                                       | n78             | 3429                    | 10             | 50                  | 3429                    | N/A      | N/A       |
|                                                                                                                       | 5               | 830                     | 5              | 25                  | 875                     | 3.3      | IMD5      |
|                                                                                                                       | 7               | 2525                    | 10             | 50                  | 2645                    | N/A      | N/A       |
| DC_5A_n7A-n78A,<br>DC_5A_n7(2A)-n78A<br>DC_5A_n7A-n78(2A)<br>DC_5A_n7(2A)-n78(2A)                                     | n78             | 3350                    | 10             | 50                  | 3350                    | N/A      | N/A       |
|                                                                                                                       | 5               | 844                     | 5              | 25                  | 889                     | N/A      | N/A       |
|                                                                                                                       | n7              | 2525                    | 5              | 25                  | 2645                    | 30.1     | IMD2      |
|                                                                                                                       | n78             | 3489                    | 10             | 50                  | 3489                    | N/A      | N/A       |
|                                                                                                                       | 5               | 835                     | 5              | 25                  | 880                     | N/A      | N/A       |
|                                                                                                                       | n7              | 2540                    | 5              | 25                  | 2660                    | N/A      | N/A       |
| DC_5A_41A_n78A                                                                                                        | n78             | 3375                    | 10             | 50                  | 3375                    | 29.7     | IMD2      |
|                                                                                                                       | 5               | 860                     | 5              | 25                  | 885                     | 30.2     | IMD2      |
|                                                                                                                       | 41              | 2615                    | 5              | 25                  | 2615                    | N/A      | N/A       |
|                                                                                                                       | n78             | 3500                    | 10             | 50                  | 3500                    | N/A      | N/A       |
|                                                                                                                       | 5               | 856.5                   | 5              | 25                  | 881.5                   | 3.1      | IMD5      |
|                                                                                                                       | 41              | 2620.5                  | 5              | 25                  | 2620.5                  | N/A      | N/A       |
| DC_5A-41A_n79A                                                                                                        | n78             | 3490                    | 10             | 50                  | 3490                    | N/A      | N/A       |
|                                                                                                                       | 5               | 835                     | 5              | 25                  | 880                     | 23.9     | IMD3      |
|                                                                                                                       | 41              | 2665                    | 20             | 100                 | 2665                    | N/A      | N/A       |
|                                                                                                                       | n79             | 4450                    | 40             | 216                 | 4450                    | N/A      | N/A       |
|                                                                                                                       | 5               | 826.5                   | 5              | 25                  | 871.5                   | N/A      | N/A       |
|                                                                                                                       | 41              | 2517.5                  | 20             | 100                 | 2517.5                  | 1.8      | IMD4      |
| DC_5A-66A_n2A<br>DC_5BA-66A_n2A<br>DC_5A-5A-66A_n2A<br>DC_5A-66A-66A_n2A<br>DC_5B-66A-66A_n2A<br>DC_5A-5A-66A-66A_n2A | n79             | 4980                    | 40             | 216                 | 4980                    | N/A      | N/A       |
|                                                                                                                       | 5               | 834                     | 5              | 25                  | 879                     | N/A      | N/A       |
|                                                                                                                       | 66              | 1712                    | 5              | 25                  | 2132                    | 7.2      | IMD4      |
|                                                                                                                       | n2              | 1900                    | 5              | 25                  | 1980                    | N/A      | N/A       |
| DC_5A-66A_n71A                                                                                                        | 5               | 830                     | 5              | 25                  | 875                     | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |                 |                         |                |                     |                         |          |                        |
|---------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|------------------------|
| EN-DC Configuration                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order              |
|                                                   | 66              | 1761                    | 5              | 25                  | 2161                    | 13       | IMD3                   |
|                                                   | n71             | 665.5                   | 5              | 25                  | 619.5                   | N/A      | N/A                    |
|                                                   | 5               | 846.5                   | 5              | 25                  | 891.5                   | 4.2      | IMD5                   |
|                                                   | 66              | 1770                    | 5              | 25                  | 2170                    | N/A      | N/A                    |
|                                                   | n71             | 665.5                   | 5              | 25                  | 619.5                   | N/A      | N/A                    |
| DC_5A-66A_n78A<br>DC_5A-66A_n78(2A)               | 5               | 826.5                   | 5              | 25                  | 871.5                   | N/A      | N/A                    |
|                                                   | 66              | 1742                    | 5              | 25                  | 2142                    | 13.2     | IMD3                   |
|                                                   | n78             | 3795                    | 10             | 50                  | 3795                    | N/A      | N/A                    |
| DC_7A_n1A-n40A                                    | 7               | 2540                    | 5              | 25                  | 2660                    | N/A      | N/A                    |
|                                                   | n40             | 2335                    | 5              | 25                  | 2335                    | N/A      | N/A                    |
|                                                   | n1              | 1940                    | 5              | 25                  | 2130                    | 15.2     | IMD3                   |
| DC_7A_n1A-n78A<br>DC_7C_n1A-n78A                  | 7               | 2520                    | 5              | 25                  | 2640                    | N/A      | N/A                    |
|                                                   | n1              | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A                    |
|                                                   | n78             | 3390                    | 10             | 50                  | 3390                    | 10.1     | IMD4                   |
|                                                   | 7               | 2530                    | 5              | 25                  | 2650                    | N/A      | N/A                    |
|                                                   | n1              | 1970                    | 5              | 25                  | 2160                    | 9.0      | IMD4                   |
| DC_7A_n3A-n78A                                    | n78             | 3610                    | 10             | 50                  | 3610                    | N/A      | N/A                    |
|                                                   | 7               | 2560                    | 5              | 25                  | 2680                    | N/A      | N/A                    |
|                                                   | n3              | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A                    |
|                                                   | n78             | 3390                    | 10             | 50                  | 3390                    | 16.1     | IMD3                   |
|                                                   | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A                    |
| DC_7A_n8A-n40A                                    | n3              | 1725                    | 5              | 25                  | 1820                    | 15.6     | IMD3                   |
|                                                   | n78             | 3310                    | 10             | 50                  | 3310                    | N/A      | N/A                    |
|                                                   | 7               | 2530                    | 5              | 25                  | 2650                    | N/A      | N/A                    |
| DC_7A_n8A-n40A                                    | n8              | 905                     | 5              | 25                  | 950                     | N/A      | N/A                    |
|                                                   | n40             | 2345                    | 5              | 25                  | 2345                    | 3.0      | IMD5                   |
| DC_7A-8A_n3A                                      | n3              | 1735                    | 5              | 25                  | 1830                    | N/A      | N/A                    |
|                                                   | 7               | 2530                    | 10             | 50                  | 2650                    | N/A      | N/A                    |
|                                                   | 8               | 895                     | 5              | 25                  | 940                     | 18.0     | IMD3                   |
| DC_7A-8A_n3A                                      | n3              | 1780                    | 5              | 25                  | 1875                    | N/A      | N/A                    |
|                                                   | 8               | 890                     | 5              | 25                  | 935                     | N/A      | N/A                    |
|                                                   | 7               | 2550                    | 10             | 50                  | 2670                    | 29.0     | IMD2+IMD3 <sup>3</sup> |
| DC_7A-8A_n77A                                     | 7               | 2530                    | 5              | 25                  | 2650                    | N/A      | N/A                    |
|                                                   | 8               | 895                     | 5              | 25                  | 940                     | 30.5     | IMD2                   |
|                                                   | n77             | 3470                    | 10             | 50                  | 3470                    | N/A      | N/A                    |
| DC_7A-8A_n77A                                     | 7               | 2520                    | 5              | 25                  | 2640                    | N/A      | N/A                    |
|                                                   | 8               | 895                     | 5              | 25                  | 940                     | 3.1      | IMD5                   |
|                                                   | n77             | 3310                    | 10             | 50                  | 3310                    | N/A      | N/A                    |
| DC_7A-8A_n77A                                     | 7               | 2530                    | 5              | 25                  | 2650                    | 28       | IMD2                   |
|                                                   | 8               | 895                     | 5              | 25                  | 940                     | N/A      | N/A                    |
|                                                   | n77             | 3545                    | 10             | 50                  | 3545                    | N/A      | N/A                    |
| DC_7A-8A_n78A                                     | 7               | 2530                    | 5              | 25                  | 2650                    | N/A      | N/A                    |
|                                                   | 8               | 895                     | 5              | 25                  | 940                     | 30.5     | IMD2                   |
|                                                   | n78             | 3470                    | 10             | 50                  | 3470                    | N/A      | N/A                    |
| DC_7A-8A_n78A                                     | 7               | 2520                    | 5              | 25                  | 2640                    | N/A      | N/A                    |
|                                                   | 8               | 895                     | 5              | 25                  | 940                     | 3.1      | IMD5                   |
|                                                   | n78             | 3310                    | 10             | 50                  | 3310                    | N/A      | N/A                    |
| DC_7A-8A_n78A                                     | 7               | 2530                    | 5              | 25                  | 2650                    | 28       | IMD2                   |
|                                                   | 8               | 895                     | 5              | 25                  | 940                     | N/A      | N/A                    |
|                                                   | n78             | 3545                    | 10             | 50                  | 3545                    | N/A      | N/A                    |
| DC_7A_n8A-n78A                                    | 7               | 2555                    | 5              | 25                  | 2675                    | N/A      | N/A                    |
|                                                   | n8              | 900                     | 5              | 25                  | 945                     | N/A      | N/A                    |
|                                                   | n78             | 3455                    | 10             | 50                  | 3455                    | 28.5     | IMD2                   |
|                                                   | 7               | 2555                    | 5              | 25                  | 2675                    | N/A      | N/A                    |
|                                                   | n8              | 900                     | 5              | 25                  | 945                     | 29.7     | IMD2                   |
| DC_7A-13A_n66A                                    | n78             | 3500                    | 10             | 50                  | 3500                    | N/A      | N/A                    |
|                                                   | 7               | 2520                    | 5              | 25                  | 2640                    | N/A      | N/A                    |
|                                                   | 13              | 781                     | 5              | 25                  | 750                     | 31       | IMD2                   |
|                                                   | n66             | 1770                    | 5              | 25                  | 2170                    | N/A      | N/A                    |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |                 |                         |                |                     |                         |          |                   |
|---------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_7A-13A_n66A                                    | 7               | 2540                    | 5              | 25                  | 2660                    | 18       | IMD3              |
|                                                   | 13              | 780                     | 5              | 25                  | 749                     | N/A      | N/A               |
|                                                   | n66             | 1720                    | 5              | 25                  | 2120                    | N/A      | N/A               |
| DC_7A-20A_n1A<br>DC_7C-20A_n1A                    | 7               | 2510                    | 10             | 50                  | 2630                    | N/A      | N/A               |
|                                                   | 20              | 841                     | 10             | 50                  | 800                     | 4.5      | IMD5              |
|                                                   | n1              | 1940                    | 5              | 25                  | 2130                    | N/A      | N/A               |
| DC_7A-20A_n3A                                     | 7               | 2543                    | 10             | 50                  | 2663                    | N/A      | N/A               |
|                                                   | 20              | 847                     | 10             | 20                  | 806                     | 10.5     | IMD2              |
|                                                   | n3              | 1737                    | 5              | 25                  | 1832                    | N/A      | N/A               |
|                                                   | 7               | 2510                    | 10             | 50                  | 2630                    | 26.0     | IMD2 <sup>1</sup> |
|                                                   | 20              | 855                     | 5              | 25                  | 814                     | N/A      | N/A               |
|                                                   | n3              | 1775                    | 10             | 50                  | 1870                    | N/A      | N/A               |
| DC_7A-20A_n8A                                     | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A               |
|                                                   | n8              | 885                     | 5              | 25                  | 930                     | N/A      | N/A               |
|                                                   | 20              | 836                     | 5              | 25                  | 795                     | 17.4     | IMD3              |
| DC_7A-20A_n8A                                     | 7               | 2520                    | 5              | 25                  | 2640                    | 21.1     | IMD3              |
|                                                   | n8              | 900                     | 5              | 25                  | 945                     | N/A      | N/A               |
|                                                   | 20              | 840                     | 5              | 25                  | 799                     | N/A      | N/A               |
| DC_7A-20A_n8A                                     | 7               | 2504                    | 5              | 25                  | 2624                    | 18.8     | IMD3              |
|                                                   | n8              | 910                     | 5              | 25                  | 955                     | N/A      | N/A               |
|                                                   | 20              | 857                     | 5              | 25                  | 816                     | N/A      | N/A               |
| DC_7A-20A_n28A                                    | 20              | 842                     | 5              | 25                  | 801                     | N/A      | N/A               |
|                                                   | n28             | 728                     | 5              | 25                  | 783                     | N/A      | N/A               |
|                                                   | 7               | 2520                    | 10             | 50                  | 2640                    | 5.9      | IMD5              |
| DC_7A-20A_n78A                                    | 7               | 2560                    | 5              | 25                  | 2680                    | N/A      | N/A               |
|                                                   | 20              | 851                     | 5              | 25                  | 810                     | 30.5     | IMD2              |
|                                                   | n78             | 3370                    | 10             | 50                  | 3370                    | N/A      | N/A               |
| DC_7A-20A_n78A                                    | 7               | 2560                    | 5              | 25                  | 2680                    | N/A      | N/A               |
|                                                   | 20              | 851                     | 5              | 25                  | 810                     | 3.0      | IMD5              |
|                                                   | n78             | 3435                    | 10             | 50                  | 3435                    | N/A      | N/A               |
| DC_7A-20A_n78A                                    | 7               | 2555                    | 5              | 25                  | 2675                    | 30.8     | IMD2              |
|                                                   | 20              | 845                     | 5              | 25                  | 804                     | N/A      | N/A               |
|                                                   | n78             | 3520                    | 10             | 50                  | 3520                    | N/A      | N/A               |
| DC_7A-28A_n3A<br>DC_7C-28A_n3A                    | 7               | 2543                    | 5              | 25                  | 2663                    | N/A      | N/A               |
|                                                   | 28              | 741                     | 5              | 25                  | 796.0                   | 20.0     | IMD2              |
|                                                   | n3              | 1747                    | 5              | 25                  | 1842                    | N/A      | N/A               |
|                                                   | 7               | 2540                    | 5              | 25                  | 2685                    | 18       | IMD3              |
|                                                   | 28              | 745                     | 5              | 25                  | 800                     | N/A      | N/A               |
|                                                   | n3              | 1715                    | 5              | 25                  | 1810                    | N/A      | N/A               |
| DC_7A-28A_n5A<br>DC_7C-28A_n5A                    | 7               | 2540                    | 5              | 25                  | 2725                    | N/A      | N/A               |
|                                                   | 28              | 721                     | 5              | 25                  | 776                     | 4.4      | IMD5              |
|                                                   | n5              | 829                     | 5              | 25                  | 854                     | N/A      | N/A               |
|                                                   | 7               | 2510                    | 5              | 25                  | 2630                    | 5.9      | IMD5              |
|                                                   | 28              | 730                     | 5              | 25                  | 785                     | N/A      | N/A               |
|                                                   | n5              | 840                     | 5              | 25                  | 874                     | N/A      | N/A               |
| DC_7A-28A_n40A                                    | 7               | 2510                    | 5              | 25                  | 2630                    | 5.9      | IMD5              |
|                                                   | 28              | 743                     | 5              | 25                  | 798                     | N/A      | N/A               |
|                                                   | n40             | 2310                    | 5              | 25                  | 2310                    | N/A      | N/A               |
| DC_7A-28A_n78A                                    | 7               | 2567.5                  | 5              | 25                  | 2687.5                  | N/A      | N/A               |
|                                                   | 28              | 727.5                   | 5              | 25                  | 782.5                   | 28.8     | IMD2              |
|                                                   | n78             | 3350                    | 10             | 50                  | 3350                    | N/A      | N/A               |
|                                                   | 7               | 2567.5                  | 5              | 25                  | 2687.5                  | N/A      | N/A               |
|                                                   | 28              | 727.5                   | 5              | 25                  | 782.5                   | 3.0      | IMD5              |
|                                                   | n78             | 3460                    | 10             | 50                  | 3460                    | N/A      | N/A               |
|                                                   | 7               | 2530                    | 5              | 25                  | 2650                    | 30.5     | IMD2              |
|                                                   | 28              | 740                     | 5              | 25                  | 795                     | N/A      | N/A               |
|                                                   | n78             | 3390                    | 10             | 50                  | 3390                    | N/A      | N/A               |
| DC_7A_n28A-n78A                                   | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A               |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                                                                                                                                                                                                                                                      |                 |                         |                |                     |                         |          |            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|------------|
| EN-DC Configuration                                                                                                                                                                                                                                                                                                                    | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order  |
| DC_7C_n28A-n78A                                                                                                                                                                                                                                                                                                                        | n28             | 745                     | 5              | 25                  | 800                     | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n78             | 3310                    | 10             | 50                  | 3310                    | 29.7     | IMD2       |
|                                                                                                                                                                                                                                                                                                                                        | 7               | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n78             | 3365                    | 10             | 50                  | 3365                    | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n28             | 745                     | 5              | 25                  | 800                     | 28.8     | IMD2       |
| DC_7A-40A_n1A                                                                                                                                                                                                                                                                                                                          | n1              | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | 7               | 2530                    | 5              | 25                  | 2650                    | 32.1     | IMD3       |
|                                                                                                                                                                                                                                                                                                                                        | 40              | 2310                    | 5              | 25                  | 2310                    | N/A      | N/A        |
| DC_7A-46A_n78A <sup>6</sup>                                                                                                                                                                                                                                                                                                            | 7               | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | 46              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD2, IMD5 |
|                                                                                                                                                                                                                                                                                                                                        | n78             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A        |
| DC_7A-66A_n78A<br>DC_7C-66A_n78A<br>DC_7A-7A-66A_n78A<br>DC_7A-66A-66A_n78A<br>DC_7A-7A-66A-66A_n78A<br>DC_7C-66A-66A_n78A<br>DC_7A_n66A-n78A<br>DC_7A-7A_n66A-n78A<br>DC_7C_n66A-n78A<br>DC_7A-66A_n78(2A)<br>DC_7C-66A_n78(2A)<br>DC_7A-7A-66A_n78(2A)<br>DC_7A-66A-66A_n78(2A)<br>DC_7A-7A-66A-66A_n78(2A)<br>DC_7C-66A-66A_n78(2A) | 7               | 2550                    | 5              | 25                  | 2685                    | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | 66/n66          | 1750                    | 5              | 25                  | 2150                    | 8.7      | IMD4       |
|                                                                                                                                                                                                                                                                                                                                        | n78             | 3625                    | 10             | 50                  | 3475                    | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | 7               | 2542                    | 5              | 25                  | 2662                    | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n66             | 1740                    | 5              | 25                  | 2140                    | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n78             | 3344                    | 10             | 50                  | 3344                    | 16.0     | IMD3       |
|                                                                                                                                                                                                                                                                                                                                        | n80             | 1730                    | 5              | 25                  |                         | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | 7               | 2535                    | 10             | 50                  | 2655                    | 13       | IMD4       |
|                                                                                                                                                                                                                                                                                                                                        | 8               | 900                     | 5              | 25                  | 945                     | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n1              | 1945                    | 5              | 25                  | 2135                    | N/A      | N/A        |
| DC_8A_n1A-n78A                                                                                                                                                                                                                                                                                                                         | n78             | 3745                    | 10             | 50                  | 3745                    | 14.9     | IMD3       |
|                                                                                                                                                                                                                                                                                                                                        | 8               | 912.5                   | 5              | 25                  | 957.5                   | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n3              | 1712.5                  | 5              | 25                  | 1807.5                  | N/A      | N/A        |
| DC_8A_n3A-n28A                                                                                                                                                                                                                                                                                                                         | n28             | 745                     | 5              | 25                  | 800                     | 30.4     | IMD2       |
|                                                                                                                                                                                                                                                                                                                                        | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n77             | 3311                    | 10             | 50                  | 3311                    | N/A      | N/A        |
| DC_8A-11A_n77A                                                                                                                                                                                                                                                                                                                         | 11              | 1443                    | 5              | 25                  | 1491                    | 18.8     | IMD3       |
|                                                                                                                                                                                                                                                                                                                                        | 11              | 1430.5                  | 5              | 25                  | 1478.5                  | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n77             | 3791                    | 10             | 50                  | 3791                    | N/A      | N/A        |
| DC_8A-11A_n77A                                                                                                                                                                                                                                                                                                                         | 8               | 885                     | 5              | 25                  | 930                     | 18.2     | IMD3       |
|                                                                                                                                                                                                                                                                                                                                        | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n78             | 3311                    | 10             | 50                  | 3311                    | N/A      | N/A        |
| DC_8A-11A_n78A                                                                                                                                                                                                                                                                                                                         | 11              | 1443                    | 5              | 25                  | 1491                    | 18.8     | IMD3       |
|                                                                                                                                                                                                                                                                                                                                        | 11              | 1430.5                  | 5              | 25                  | 1478.5                  | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n78             | 3791                    | 10             | 50                  | 3791                    | N/A      | N/A        |
| DC_8A-11A_n78A                                                                                                                                                                                                                                                                                                                         | 8               | 885                     | 5              | 25                  | 930                     | 18.2     | IMD3       |
|                                                                                                                                                                                                                                                                                                                                        | 8               | 890                     | 5              | 25                  | 935                     | N/A      | N/A        |
|                                                                                                                                                                                                                                                                                                                                        | n78             | 3470                    | 10             | 50                  | 3470                    | N/A      | N/A        |
| DC_8A-20A_n78A                                                                                                                                                                                                                                                                                                                         | 20              | 841                     | 5              | 25                  | 800                     | 12.1     | IMD4       |
|                                                                                                                                                                                                                                                                                                                                        | 8               | 895                     | 5              | 25                  | 940                     | 12.1     | IMD4       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                     |                 |                         |                |                     |                         |          |                   |
|---------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                                   | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
|                                                                                       | n78             | 3481                    | 10             | 50                  | 3481                    | N/A      | N/A               |
|                                                                                       | 20              | 847                     | 5              | 25                  | 806                     | N/A      | N/A               |
| DC_8A_n28A-n77A                                                                       | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A               |
|                                                                                       | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A               |
|                                                                                       | n77             | 3473                    | 10             | 50                  | 3473                    | 10.3     | IMD4              |
|                                                                                       | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A               |
|                                                                                       | n28             | 710                     | 5              | 25                  | 765                     | 11.6     | IMD4              |
|                                                                                       | n77             | 3495                    | 10             | 50                  | 3495                    | N/A      | N/A               |
| DC_8A_n40A-n79A                                                                       | 8               | 885                     | 5              | 25                  | 930                     | N/A      | N/A               |
|                                                                                       | n40             | 2305                    | 5              | 25                  | 2305                    | N/A      | N/A               |
|                                                                                       | n79             | 4960                    | 40             | 216                 | 4960                    | 10.7     | IMD4              |
|                                                                                       | 8               | 885                     | 5              | 25                  | 930                     | N/A      | N/A               |
|                                                                                       | n40             | 2305                    | 5              | 25                  | 2305                    | 9.2      | IMD4              |
|                                                                                       | n79             | 4960                    | 40             | 216                 | 4960                    | N/A      | N/A               |
| DC_8A_n41A-n79A                                                                       | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A               |
|                                                                                       | n41             | 2650                    | 10             | 50                  | 2650                    | N/A      | N/A               |
|                                                                                       | n79             | 4470                    | 40             | 216                 | 4470                    | 16.3     | IMD3              |
|                                                                                       | 8               | 910                     | 5              | 25                  | 955                     | N/A      | N/A               |
|                                                                                       | n41             | 2650                    | 10             | 50                  | 2650                    | 15.5     | IMD3              |
|                                                                                       | n79             | 4470                    | 40             | 216                 | 4470                    | N/A      | N/A               |
| DC_8A-42A_n28A                                                                        | 8               | 900                     | 5              | 25                  | 945                     | N/A      | N/A               |
|                                                                                       | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A               |
|                                                                                       | 42              | 3443                    | 5              | 25                  | 3443                    | 8.7      | IMD4              |
| DC_8A_SUL_n78A-n80A                                                                   | n80             | 1755                    | 10             | 50                  |                         | N/A      | N/A               |
|                                                                                       | 8               | 900                     | 5              | 25                  | 945                     | 8        | IMD4              |
|                                                                                       | n80             | 1750                    | 10             | 50                  |                         | N/A      | N/A               |
|                                                                                       | 8               | 900                     | 5              | 25                  | 945                     | N/A      | N/A               |
|                                                                                       | n78             | 3550                    | 10             | 50                  | 3550                    | 8        | IMD3 <sup>3</sup> |
| DC_11A-18A_n77A                                                                       | 11              | 1443                    | 5              | 25                  | 1491                    | N/A      | N/A               |
|                                                                                       | n77             | 3706                    | 10             | 50                  | 3706                    | N/A      | N/A               |
|                                                                                       | 18              | 820                     | 5              | 25                  | 865                     | 18.7     | IMD3              |
| DC_11A-18A_n78A                                                                       | 11              | 1443                    | 5              | 25                  | 1491                    | N/A      | N/A               |
|                                                                                       | n78             | 3706                    | 10             | 50                  | 3706                    | N/A      | N/A               |
|                                                                                       | 18              | 820                     | 5              | 25                  | 865                     | 18.7     | IMD3              |
| DC_12A_n7A-n78A,<br>DC_12A_n7(2A)-n78A<br>DC_12A_n7A-n78(2A)<br>DC_12A_n7(2A)-n78(2A) | 12              | 708                     | 5              | 25                  | 738                     | N/A      | N/A               |
|                                                                                       | n7              | 2520                    | 5              | 25                  | 2640                    | N/A      | N/A               |
|                                                                                       | n78             | 3624                    | 10             | 50                  | 3624                    | 9        | IMD4              |
|                                                                                       | 12              | 708                     | 5              | 25                  | 738                     | N/A      | N/A               |
|                                                                                       | n78             | 3370                    | 10             | 50                  | 3370                    | N/A      | N/A               |
|                                                                                       | n7              | 2542                    | 5              | 25                  | 2662                    | 29.6     | IMD2              |
| DC_12A-30A_n2A                                                                        | 12              | 708.5                   | 5              | 25                  | 738.5                   | N/A      | N/A               |
|                                                                                       | 30              | 2308                    | 5              | 25                  | 2353                    | 12.0     | IMD4              |
|                                                                                       | n2              | 1885                    | 5              | 25                  | 1965                    | N/A      | N/A               |
| DC_13A-66A_n2A<br>DC_13A-66A-66A_n2A                                                  | 13              | 782                     | 5              | 25                  | 751                     | N/A      | N/A               |
|                                                                                       | 66              | 1736                    | 5              | 25                  | 2156                    | 7..2     | IMD4              |
|                                                                                       | n2              | 1860                    | 5              | 25                  | 1940                    | N/A      | N/A               |
| DC_12A-66A_n25A                                                                       | 12              | 708.5                   | 5              | 25                  | 738.5                   | N/A      | N/A               |
|                                                                                       | 66              | 1775                    | 5              | 25                  | 2175                    | N/A      | N/A               |
|                                                                                       | n25             | 1855                    | 5              | 25                  | 1935                    | 20       | IMD3              |
|                                                                                       | 12              | 708.5                   | 5              | 25                  | 738.5                   | N/A      | N/A               |
|                                                                                       | 66              | 1750                    | 5              | 25                  | 2150                    | 4        | IMD5              |
|                                                                                       | n25             | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A               |
|                                                                                       | 12              | 708.5                   | 5              | 25                  | 738.5                   | N/A      | N/A               |
|                                                                                       | 66              | 1712.5                  | 5              | 25                  | 2112.5                  | 23       | IMD3              |
|                                                                                       | n25             | 1912.5                  | 5              | 25                  | 1992.5                  | N/A      | N/A               |
| DC_13A-66A_n48A<br>DC_13A-66A_n48B<br>DC_13A-66A-66A_n48A                             | 13              | 782                     | 5              | 25                  | 751                     | N/A      | N/A               |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |                 |                         |                |                     |                         |          |                   |
|---------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_13A-66A-66A_n48B                               |                 |                         |                |                     |                         |          |                   |
|                                                   | 66              | 1731                    | 5              | 25                  | 2131                    | 17.1     | IMD3              |
|                                                   | n48             | 3695                    | 5              | 25                  | 3695                    | N/A      | N/A               |
| DC_18A_n3A-n77A                                   | 18              | 820                     | 5              | 25                  | 865                     | N/A      | N/A               |
|                                                   | n3              | 1770                    | 5              | 25                  | 1865                    | N/A      | N/A               |
|                                                   | n77             | 3410                    | 10             | 50                  | 3410                    | 16.3     | IMD3              |
|                                                   | 18              | 820                     | 5              | 25                  | 865                     | N/A      | N/A               |
|                                                   | n3              | 1770                    | 5              | 25                  | 1865                    | 15.7     | IMD3              |
|                                                   | n77             | 3505                    | 10             | 50                  | 3505                    | N/A      | N/A               |
| DC_14A-66A_n2A<br>DC_14A-66A-66A_n2A              | 14              | 793                     | 5              | 25                  | 763                     | N/A      | N/A               |
|                                                   | 66              | 1762                    | 5              | 25                  | 2162                    | 7.6      | IMD4              |
|                                                   | n2              | 1874                    | 5              | 25                  | 1954                    | N/A      | N/A               |
| DC_18A_n3A-n78A                                   | 18              | 820                     | 5              | 25                  | 865                     | N/A      | N/A               |
|                                                   | n3              | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A               |
|                                                   | n78             | 3390                    | 10             | 50                  | 3390                    | 15.2     | IMD3 <sup>3</sup> |
| DC_18A-28A_n77A                                   | 18              | 820                     | 5              | 25                  | 865                     | N/A      | N/A               |
|                                                   | 28              | 723                     | 5              | 25                  | 778                     | 4.4      | IMD5              |
|                                                   | n77             | 4058                    | 10             | 50                  | 4058                    | N/A      | N/A               |
| DC_18A-28A_n77A                                   | 18              | 820                     | 5              | 25                  | 865                     | 3.9      | IMD5              |
|                                                   | 28              | 723                     | 5              | 25                  | 778                     | N/A      | N/A               |
|                                                   | n77             | 3757                    | 10             | 50                  | 3757                    | N/A      | N/A               |
| DC_18A-28A_n78A                                   | 18              | 819                     | 5              | 25                  | 864                     | 3.8      | IMD5              |
|                                                   | 28              | 723                     | 5              | 25                  | 778                     | N/A      | N/A               |
|                                                   | n78             | 3756                    | 10             | 50                  | 3756                    | N/A      | N/A               |
| DC_18A-41A_n3A<br>DC_18A-41C_n3A                  | 18              | 820                     | 5              | 25                  | 865                     | N/A      | N/A               |
|                                                   | n3              | 1725                    | 5              | 25                  | 1820                    | N/A      | N/A               |
|                                                   | 41              | 2630                    | 5              | 25                  | 2630                    | 16.0     | IMD3              |
|                                                   | 18              | 820                     | 5              | 25                  | 865                     | 28.9     | IMD2 <sup>1</sup> |
|                                                   | n3              | 1765                    | 5              | 25                  | 1860                    | N/A      | N/A               |
|                                                   | 41              | 2630                    | 5              | 25                  | 2630                    | N/A      | N/A               |
| DC_18A-41A_n77A<br>DC_18A-41C_n77A                | 18              | 820                     | 5              | 25                  | 865                     | 3.4      | IMD5              |
|                                                   | n77             | 3527.5                  | 10             | 50                  | 3527.5                  | N/A      | N/A               |
|                                                   | 41              | 2640                    | 5              | 25                  | 2640                    | N/A      | N/A               |
| DC_18A-41A_n78A<br>DC_18A-41C_n78A                | 18              | 820                     | 5              | 25                  | 865                     | 3.4      | IMD5              |
|                                                   | n78             | 3527.5                  | 10             | 50                  | 3527.5                  | N/A      | N/A               |
|                                                   | 41              | 2640                    | 5              | 25                  | 2640                    | N/A      | N/A               |
| DC_19A-21A_n77A<br>DC_19A-21A_n78A                | 19              | 837.5                   | 5              | 25                  | 882.5                   | 18.7     | IMD3              |
|                                                   | 21              | 1450.4                  | 5              | 25                  | 1498.4                  | N/A      | N/A               |
|                                                   | n77,<br>n78     | 3783.3                  | 10             | 50                  | 3783.3                  | N/A      | N/A               |
|                                                   | 19              | 837.5                   | 5              | 25                  | 882.5                   | 13.2     | IMD4              |
|                                                   | 21              | 1450.4                  | 5              | 25                  | 1498.4                  | N/A      | N/A               |
|                                                   | n77,<br>n78     | 3468.7                  | 10             | 50                  | 3468.7                  | N/A      | N/A               |
| DC_19A-21A_n77A                                   | 19              | 837.5                   | 5              | 25                  | 882.5                   | N/A      | N/A               |
|                                                   | 21              | 1454.5                  | 5              | 25                  | 1502.5                  | 9.0      | IMD4              |
|                                                   | n77             | 4015                    | 10             | 50                  | 4015                    | N/A      | N/A               |
| DC_19A-21A_n79A                                   | 19              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD5              |
|                                                   | 21              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
|                                                   | n79             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A               |
|                                                   | 19              | 837.5                   | 5              | 25                  | 882.2                   | N/A      | N/A               |
|                                                   | 21              | 1452                    | 5              | 25                  | 1500                    | 3.8      | IMD5              |
|                                                   | n79             | 4850                    | 40             | 216                 | 4850                    | N/A      | N/A               |
| DC_20A_n1A-n78A                                   | 20              | 845                     | 5              | 25                  | 804                     | N/A      | N/A               |
|                                                   | n1              | 1940                    | 5              | 25                  | 2130                    | N/A      | N/A               |
|                                                   | n78             | 3630                    | 10             | 50                  | 3630                    | 16.0     | IMD3              |
|                                                   | 20              | 835                     | 5              | 25                  | 794                     | N/A      | N/A               |
|                                                   | n1              | 1930                    | 5              | 25                  | 2120                    | 15.3     | IMD3              |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |                 |                         |                |                     |                         |          |           |
|---------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_20A_n3A-n78A                                   | n78             | 3790                    | 10             | 50                  | 3790                    | N/A      | N/A       |
|                                                   | 20              | 845                     | 5              | 25                  | 804                     | N/A      | N/A       |
|                                                   | n3              | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A       |
|                                                   | n78             | 3420                    | 10             | 50                  | 3420                    | 16.1     | IMD3      |
|                                                   | 20              | 845                     | 5              | 25                  | 804                     | N/A      | N/A       |
|                                                   | n3              | 1765                    | 5              | 25                  | 1860                    | 15.7     | IMD3      |
| DC_20A_38A-n78A                                   | n78             | 3550                    | 10             | 50                  | 3550                    | N/A      | N/A       |
|                                                   | 20              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD2      |
|                                                   | 38              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | n78             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | 20              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | 38              | N/A                     | N/A            | N/A                 | N/A                     | N/A      | IMD2      |
| DC_20A_n7A-n28A                                   | n78             | N/A                     | N/A            | N/A                 | N/A                     | N/A      | N/A       |
|                                                   | 20              | 857                     | 5              | 25                  | 816                     | N/A      | N/A       |
|                                                   | n7              | 2512                    | 5              | 25                  | 2632                    | N/A      | N/A       |
|                                                   | n28             | 743                     | 5              | 25                  | 798                     | 13.9     | IMD3      |
|                                                   | 20              | 852                     | 5              | 25                  | 811                     | N/A      | N/A       |
|                                                   | n7              | 2550                    | 10             | 50                  | 2670                    | 5.9      | IMD5      |
| DC_20A_SUL_n78A-n80A                              | n28             | 738                     | 5              | 25                  | 793                     | N/A      | N/A       |
|                                                   | 20              | 847                     | 5              | 25                  | 806                     | 9        | IMD4      |
| DC_20A_n41A-n78A                                  | n80             | 1735                    | 5              | 25                  |                         | N/A      | N/A       |
|                                                   | 20              | 845                     | 5              | 25                  | 804                     | N/A      | N/A       |
|                                                   | n41             | 2675                    | 10             | 50                  | 2675                    | 29.8     | IMD2      |
|                                                   | n78             | 3520                    | 10             | 50                  | 3520                    | N/A      | N/A       |
|                                                   | 20              | 850                     | 5              | 25                  | 809                     | N/A      | N/A       |
|                                                   | n41             | 2550                    | 10             | 50                  | 2550                    | N/A      | N/A       |
| DC_21A-28A_n77A<br>DC_21A-28A_n78A                | n78             | 3400                    | 10             | 50                  | 3400                    | 28.8     | IMD2      |
|                                                   | 21              | 1452                    | 5              | 25                  | 1500                    | N/A      | N/A       |
|                                                   | 28              | 730.5                   | 5              | 25                  | 785.5                   | 16.9     | IMD3      |
|                                                   | n77/n78         | 3689.5                  | 10             | 50                  | 3689.5                  | N/A      | N/A       |
|                                                   | 21              | 1450.5                  | 5              | 25                  | 1498.5                  | 9.9      | IMD4      |
|                                                   | 28              | 730.5                   | 5              | 25                  | 785.5                   | N/A      | N/A       |
| DC_21A-28A_n79A                                   | n77/n78         | 3690                    | 10             | 50                  | 3690                    | N/A      | N/A       |
|                                                   | 21              | 1450                    | 5              | 25                  | 1498                    | 5.2      | IMD5      |
|                                                   | 28              | 730.5                   | 5              | 25                  | 785.5                   | N/A      | N/A       |
| DC_28A_n3A-n77A                                   | n79             | 4420                    | 40             | 216                 | 4420                    | N/A      | N/A       |
|                                                   | 28              | 735                     | 5              | 25                  | 790                     | N/A      | N/A       |
|                                                   | n3              | 1755                    | 5              | 25                  | 1850                    | 17.0     | IMD3      |
|                                                   | n77             | 3320                    | 10             | 50                  | 3320                    | N/A      | N/A       |
|                                                   | 28              | 733                     | 5              | 25                  | 788                     | N/A      | N/A       |
|                                                   | n3              | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A       |
| DC_28A_n3A-n78A                                   | n77             | 4173                    | 10             | 50                  | 4173                    | 15.9     | IMD3      |
|                                                   | 28              | 735                     | 5              | 25                  | 790                     | N/A      | N/A       |
|                                                   | n3              | 1755                    | 5              | 25                  | 1850                    | 17.0     | IMD3      |
|                                                   | n78             | 3320                    | 10             | 50                  | 3320                    | N/A      | N/A       |
|                                                   | n3              | 1750                    | 5              | 25                  | 1845                    | N/A      | N/A       |
|                                                   | 28              | 743                     | 5              | 25                  | 798                     | N/A      | N/A       |
| DC_28A_n5A-n78A                                   | n78             | 3764                    | 10             | 50                  | 3764                    | 4.5      | IMD5      |
|                                                   | 28              | 723                     | 5              | 25                  | 778                     | N/A      | N/A       |
|                                                   | n5              | 829                     | 5              | 25                  | 874                     | 3.8      | IMD5      |
|                                                   | n78             | 3766                    | 10             | 50                  | 3766                    | N/A      | N/A       |
|                                                   | 28              | 723                     | 5              | 25                  | 778                     | N/A      | N/A       |
|                                                   | n5              | 829                     | 5              | 25                  | 874                     | N/A      | N/A       |
| DC_28A_n7A-n78A<br>DC_28A_n7B-n78A                | n78             | 3721                    | 10             | 50                  | 3721                    | 4.7      | IMD5      |
|                                                   | 28              | 745                     | 5              | 25                  | 800                     | N/A      | N/A       |
|                                                   | n7              | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                   | n78             | 3310                    | 10             | 50                  | 3310                    | 29.7     | IMD2      |
|                                                   | 28              | 740                     | 5              | 25                  | 795                     | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |                 |                         |                |                     |                         |          |           |
|---------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
|                                                   | n7              | 2530                    | 5              | 25                  | 2650                    | 30.5     | IMD2      |
|                                                   | n78             | 3390                    | 10             | 50                  | 3390                    | N/A      | N/A       |
| DC_28A-41A_n77A                                   | 28              | 738                     | 5              | 25                  | 793                     | N/A      | N/A       |
|                                                   | n77             | 3380                    | 10             | 50                  | 3380                    | N/A      | N/A       |
|                                                   | 41              | 2642                    | 5              | 25                  | 2642                    | 29.5     | IMD2      |
| DC_28A-41A_n77A                                   | 41              | 2642                    | 5              | 25                  | 2642                    | N/A      | N/A       |
|                                                   | n77             | 3440                    | 10             | 50                  | 3440                    | N/A      | N/A       |
|                                                   | 28              | 743                     | 5              | 25                  | 798                     | 30.8     | IMD2      |
| DC_28A-41A_n77A                                   | 41              | 2567.5                  | 10             | 50                  | 2567.5                  | N/A      | N/A       |
|                                                   | n77             | 3460                    | 10             | 50                  | 3460                    | N/A      | N/A       |
|                                                   | 28              | 727.5                   | 5              | 25                  | 782.5                   | 3.0      | IMD5      |
| DC_28A-41A_n78A                                   | 28              | 738                     | 5              | 25                  | 793                     | N/A      | N/A       |
|                                                   | n78             | 3380                    | 10             | 50                  | 3380                    | N/A      | N/A       |
|                                                   | 41              | 2642                    | 5              | 25                  | 2642                    | 29.5     | IMD2      |
| DC_28A-41A_n78A                                   | 41              | 2642                    | 5              | 25                  | 2642                    | N/A      | N/A       |
|                                                   | n78             | 3440                    | 10             | 50                  | 3440                    | N/A      | N/A       |
|                                                   | 28              | 743                     | 5              | 25                  | 798                     | 30.8     | IMD2      |
| DC_28A-41A_n79A                                   | 28              | 743                     | 5              | 25                  | 798                     | N/A      | N/A       |
|                                                   | n79             | 4739                    | 40             | 216                 | 4739                    | N/A      | N/A       |
|                                                   | 41              | 2510                    | 5              | 25                  | 2510                    | 8.6      | IMD4      |
| DC_28A-41A_n79A                                   | 41              | 2650                    | 5              | 25                  | 2650                    | N/A      | N/A       |
|                                                   | n79             | 4502                    | 40             | 216                 | 4502                    | N/A      | N/A       |
|                                                   | 28              | 743                     | 5              | 25                  | 798                     | 15.9     | IMD3      |
| DC_28A-42A_79A                                    | 28              | 730                     | 5              | 25                  | 785                     | N/A      | N/A       |
|                                                   | 42              | 3420                    | 5              | 25                  | 3420                    | 15.3     | IMD3      |
|                                                   | n79             | 4880                    | 40             | 216                 | 4880                    | N/A      | N/A       |
|                                                   | 28              | 745                     | 5              | 25                  | 800                     | 16.2     | IMD2      |
|                                                   | 42              | 3597.5                  | 5              | 25                  | 3597.5                  | N/A      | N/A       |
|                                                   | n79             | 4420                    | 40             | 216                 | 4420                    | N/A      | N/A       |
| DC_19A_n78A-n79A                                  | 19              | 835                     | 5              | 25                  | 880                     | N/A      | N/A       |
|                                                   | n78             | 3680                    | 10             | 50                  | 3680                    | N/A      | N/A       |
|                                                   | n79             | 4515                    | 40             | 216                 | 4515                    | 29.3     | IMD2      |
|                                                   | 19              | 835                     | 5              | 25                  | 880                     | N/A      | N/A       |
|                                                   | n79             | 4550                    | 40             | 216                 | 4550                    | N/A      | N/A       |
|                                                   | n78             | 3715                    | 10             | 50                  | 3715                    | 28.8     | IMD2      |
| DC_20A_n28A-n78A,<br>DC_20A_SUL_n78A-n83A         | 20              | 857                     | 5              | 25                  | 816                     | N/A      | N/A       |
|                                                   | n28,<br>n83     | 743                     | 5              | 25                  | 798                     | N/A      | N/A       |
|                                                   | n78             | 3314                    | 10             | 50                  | 3314                    | 8.7      | IMD4      |
|                                                   | 20              | 837                     | 5              | 25                  | 796                     | N/A      | N/A       |
|                                                   | n78             | 3310                    | 10             | 50                  | 3310                    | N/A      | N/A       |
|                                                   | n28             | 744                     | 5              | 25                  | 799                     | 9.4      | IMD4      |
| DC_21A_n78A-n79A                                  | 21              | 1453                    | 5              | 25                  | 1501                    | N/A      | N/A       |
|                                                   | n78             | 3420                    | 10             | 50                  | 3420                    | N/A      | N/A       |
|                                                   | n79             | 4873                    | 40             | 216                 | 4873                    | 30.1     | IMD2      |
|                                                   | 21              | 1453                    | 5              | 25                  | 1501                    | N/A      | N/A       |
|                                                   | n79             | 4940                    | 40             | 216                 | 4940                    | N/A      | N/A       |
|                                                   | n78             | 3487                    | 10             | 50                  | 3487                    | 29.8     | IMD2      |
| DC_28A_n8A-n78A                                   | 28              | 728                     | 5              | 25                  | 783                     | N/A      | N/A       |
|                                                   | n8              | 910                     | 5              | 25                  | 955                     | N/A      | N/A       |
|                                                   | n78             | 3458                    | 10             | 50                  | 3458                    | 9.1      | IMD4      |
|                                                   | 28              | 713                     | 5              | 25                  | 768                     | N/A      | N/A       |
|                                                   | n8              | 890                     | 5              | 25                  | 935                     | 4.3      | IMD5      |
|                                                   | n78             | 3787                    | 10             | 50                  | 3787                    | N/A      | N/A       |
| DC_29A-30A_n66A                                   | 29              | N/A                     | 5              | 25                  | 719.5                   | 4.5      | IMD5      |
|                                                   | 30              | 2307.5                  | 5              | 25                  | 2352.5                  | N/A      | N/A       |
|                                                   | n66             | 1777.5                  | 5              | 25                  | 2177.5                  | N/A      | N/A       |
| DC_30A-66A_n5A,                                   | 30              | 2310                    | 5              | 25                  | 2355                    | N/A      | N/A       |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                            |                 |                         |                |                     |                         |          |                   |
|----------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-------------------|
| EN-DC Configuration                                                                          | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order         |
| DC_30A-66A-66A_n5A,<br>DC_30A-66A-66A-<br>66A_n5A                                            |                 |                         |                |                     |                         |          |                   |
|                                                                                              | 66              | 1730                    | 5              | 25                  | 2130                    | 2.5      | IMD5              |
|                                                                                              | n5              | 830                     | 5              | 25                  | 875                     | N/A      | N/A               |
| DC_39A_n40A-n79A                                                                             | 39              | 1917.5                  | 5              | 25                  | 1917.5                  | N/A      | N/A               |
|                                                                                              | n40             | 2302.5                  | 5              | 25                  | 2302.5                  | N/A      | N/A               |
|                                                                                              | n79             | 4980                    | 40             | 216                 | 4980                    | 5.8      | IMD4              |
| DC_39A_n41A-n79A                                                                             | 39              | 1900                    | 5              | 25                  | 1900                    | N/A      | N/A               |
|                                                                                              | n41             | 2620                    | 10             | 50                  | 2620                    | N/A      | N/A               |
|                                                                                              | n79             | 4520                    | 40             | 216                 | 4520                    | 29.8     | IMD2 <sup>4</sup> |
|                                                                                              | 39              | 1900                    | 5              | 25                  | 1900                    | N/A      | N/A               |
|                                                                                              | n41             | 2620                    | 10             | 50                  | 2620                    | 30.2     | IMD2 <sup>4</sup> |
|                                                                                              | n79             | 4520                    | 40             | 216                 | 4520                    | N/A      | N/A               |
|                                                                                              |                 |                         |                |                     |                         |          |                   |
| DC_41A_n3A-n77A<br>DC_41C_n3A-n77A<br>DC_41A_n3A-n78A<br>DC_41C_n3A-n78A                     | 41              | 2620                    | 5              | 25                  | 2620                    | N/A      | N/A               |
|                                                                                              | n3              | 1745                    | 5              | 25                  | 1840                    | 16.4     | IMD3              |
|                                                                                              | n77/n78         | 3400                    | 10             | 50                  | 3400                    | N/A      | N/A               |
|                                                                                              | 41              | 2580                    | 5              | 25                  | 2580                    | N/A      | N/A               |
|                                                                                              | n3              | 1720                    | 5              | 25                  | 1815                    | N/A      | N/A               |
|                                                                                              | n77/n78         | 3440                    | 10             | 50                  | 3440                    | 16.8     | IMD3 <sup>4</sup> |
| DC_41A_n28A-n77A<br>DC_41C_n28A-n77A<br>DC_41A_n28A-n78A<br>DC_41C_n28A-n78A                 | 41              | 2580                    | 5              | 25                  | 2580                    | N/A      | N/A               |
|                                                                                              | n28             | 743                     | 5              | 25                  | 798                     | N/A      | N/A               |
|                                                                                              | n77/n78         | 3323                    | 10             | 50                  | 3323                    | 28.2     | IMD2 <sup>1</sup> |
|                                                                                              | 41              | 2642                    | 5              | 25                  | 2642                    | N/A      | N/A               |
|                                                                                              | n28             | 743                     | 5              | 25                  | 798                     | 30.8     | IMD2 <sup>1</sup> |
|                                                                                              | n77/n78         | 3440                    | 10             | 50                  | 3440                    | N/A      | N/A               |
| DC_46A-66A_n5A                                                                               | 46              | 5163                    | 10             | 50                  | 5163                    | 9.0      | IMD4              |
|                                                                                              | 66              | 1775                    | 5              | 25                  | 2175                    | N/A      | N/A               |
|                                                                                              | n5              | 847                     | 5              | 25                  | 892                     | N/A      | N/A               |
| DC_46A-66A_n25A <sup>4</sup><br>DC_46C-66A_n25A <sup>4</sup><br>DC_46D-66A_n25A <sup>4</sup> | 46              | 5505                    | 10             | 50                  | 5505                    | 16.1     | IMD3              |
|                                                                                              | 66              | 1775                    | 5              | 25                  | 2175                    | N/A      | N/A               |
|                                                                                              | n25             | 1855                    | 5              | 25                  | 1935                    | 20       | IMD3              |
|                                                                                              | 46              | 5505                    | 10             | 50                  | 5505                    | 16.1     | IMD3              |
|                                                                                              | 66              | 1750                    | 5              | 25                  | 2150                    | 4        | IMD5              |
|                                                                                              | n25             | 1883.3                  | 5              | 25                  | 1963.3                  | N/A      | N/A               |
|                                                                                              | 46              | 5505                    | 10             | 50                  | 5505                    | 16.1     | IMD3              |
|                                                                                              | 66              | 1712.5                  | 5              | 25                  | 2112.5                  | 23       | IMD3              |
| DC_48A-66A_n12A                                                                              | n25             | 1912.5                  | 5              | 25                  | 1992.5                  | N/A      | N/A               |
|                                                                                              | 48              | 3580                    | 5              | 25                  | 3580                    | N/A      | N/A               |
|                                                                                              | 66              | 1760                    | 5              | 25                  | 2160                    | 17.1     | IMD3              |
| DC_48A-66A_n71A                                                                              | n12             | 710                     | 5              | 25                  | 740                     | N/A      | N/A               |
|                                                                                              | 48              | 3560                    | 5              | 25                  | 3560                    | N/A      | N/A               |
|                                                                                              | 66              | 1774                    | 5              | 25                  | 2174                    | 15.8     | IMD3              |
|                                                                                              | n71             | 693                     | 5              | 25                  | 647                     | N/A      | N/A               |
|                                                                                              | 48              | 3697.5                  | 5              | 25                  | 3697.5                  | 13.0     | IMD4              |
|                                                                                              | 66              | 1712.5                  | 5              | 25                  | 2112.5                  | N/A      | N/A               |
| DC_66A_n7A-n78A,<br>DC_66A-66A_n7A-n78<br>DC_66A_n7(2A)-n78A                                 | n71             | 665.5                   | 5              | 25                  | 619.5                   | N/A      | N/A               |
|                                                                                              | 66              | 1730                    | 5              | 25                  | 2130                    | N/A      | N/A               |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                                                                                                                                                                       |                 |                         |                |                                 |                         |                   |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------------------|-------------------------|-------------------|-----------|
| EN-DC Configuration                                                                                                                                                                                                                                     | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub>             | DL F <sub>c</sub> (MHz) | MSD (dB)          | IMD order |
| DC_66A-66A_n7(2A)-n78A<br>DC_66A_n7A-n78(2A)<br>DC_66A-66A_n7A-n78(2A)<br>DC_66A-66A_n7(2A)-n78(2A)                                                                                                                                                     |                 |                         |                |                                 |                         |                   |           |
|                                                                                                                                                                                                                                                         | n7              | 2560                    | 5              | 25                              | 2680                    | N/A               | N/A       |
|                                                                                                                                                                                                                                                         | n78             | 3390                    | 10             | 50                              | 3390                    | 16.1              | IMD3      |
| DC_66A_n25A-n41A                                                                                                                                                                                                                                        | 66              | 1715                    | 5              | 25                              | 2115                    | N/A               | N/A       |
|                                                                                                                                                                                                                                                         | n41             | 2685                    | 10             | 50                              | 2685                    | N/A               | N/A       |
|                                                                                                                                                                                                                                                         | n25             | 1860                    | 5              | 25                              | 1940                    | 5                 | 11.0      |
| DC_66A_n38A-n78A                                                                                                                                                                                                                                        | 66              | 1760                    | 5              | 25                              | 2160                    | N/A               | N/A       |
|                                                                                                                                                                                                                                                         | n38             | 2610                    | 10             | 50                              | 2610                    | N/A               | N/A       |
|                                                                                                                                                                                                                                                         | n78             | 3460                    | 10             | 50                              | 3460                    | 15.0              | IMD3      |
| DC_66A_n66A-n78A                                                                                                                                                                                                                                        | 66              | 1775                    | 5              | 25                              | 2175                    | N/A               | N/A       |
|                                                                                                                                                                                                                                                         | n66             | 1725                    | 5              | 25                              | 2125                    | 2.8               | IMD5      |
|                                                                                                                                                                                                                                                         | n78             | 3725                    | 10             | 50                              | 3725                    | N/A               | N/A       |
| NOTE 1: This band is subject to IMD3 also which MSD is not specified.                                                                                                                                                                                   |                 |                         |                |                                 |                         |                   |           |
| NOTE 2: For DC_3A_n3A-n77A, DC_3A_n3A-n78A paired with UL_DC_3A_n3A, the 3rd DL bands n77/n78 are subject to IMD2 which MSD is not specified                                                                                                            |                 |                         |                |                                 |                         |                   |           |
| NOTE 3: This MSD requirement apply with both IMD2 and IMD3 products should be generated.                                                                                                                                                                |                 |                         |                |                                 |                         |                   |           |
| NOTE 4: This band is subject to IMD5 also which MSD is not specified.                                                                                                                                                                                   |                 |                         |                |                                 |                         |                   |           |
| NOTE 5: When Band 46 have self-interference problems by dual uplink CA/EN-DC, then the requirements do not apply in exclusion zone which is frequency range within (harmonics frequency region + ΔF <sub>HD</sub> ) and IMD frequency region as follow. |                 |                         |                |                                 |                         |                   |           |
| IMD frequency range                                                                                                                                                                                                                                     |                 |                         |                |                                 |                         |                   |           |
| DL_CA configuration                                                                                                                                                                                                                                     |                 | UL_CA configuration     |                | Exclusion zone center frequency |                         | Exclusion zone BW |           |
| DC_2A-46A_n66A                                                                                                                                                                                                                                          |                 | DC_2A_n66A              |                | 2*fc_2A + fc_n66A               |                         | 2*BW_2A + BW_n66A |           |
| DC_2A-46A_n66A                                                                                                                                                                                                                                          |                 | DC_2A_n66A              |                | fc_2A + 2*fc_n66A               |                         | BW_2A + 2*BW_n66A |           |
| NOTE 6: For NR band, UL/DL BW and UL L <sub>CRB</sub> can be adjusted according to the supported BW and lowest SCS supported by the UE.                                                                                                                 |                 |                         |                |                                 |                         |                   |           |
| NOTE 7: E-UTRA carrier shall be set to min(+20 dBm, P <sub>CMAX_L,E-UTRA,C</sub> ) and NR carrier shall be set to min(+20 dBm, P <sub>CMAX_L,f,c,NR</sub> ) as defined in clause 6.2B.4.1.3.                                                            |                 |                         |                |                                 |                         |                   |           |

7.3B.2.3.5.3 Void

7.3B.2.3.5.4 MSD test points for intermodulation interference due to dual uplink operation for EN-DC in NR FR1 involving four bands

**Table 7.3B.2.3.5.4-1: MSD test points for Scell due to dual uplink operation for EN-DC in NR FR1 (four bands)**

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |                 |                         |                |                     |                         |          |           |
|---------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                               | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_1A-7A_n7A-n78A                                 | 1               | 1950                    | 5              | 25                  | 2140                    | 8.7      | IMD4      |
|                                                   | 7, n7           | 2510                    | 10             | 50                  | 2630                    | N/A      | N/A       |
|                                                   | n78             | 3580                    | 10             | 50                  | 3580                    | N/A      | N/A       |
|                                                   | 1               | 1977.5                  | 5              | 25                  | 2167.5                  | N/A      | N/A       |
|                                                   | 7, n7           | 2507.5                  | 5              | 25                  | 2627.5                  | 9.1      | IMD4      |
|                                                   | n78             | 3305                    | 10             | 50                  | 3305                    | N/A      | N/A       |
|                                                   | 1               | 1970                    | 5              | 25                  | 2160                    | N/A      | N/A       |
|                                                   | 7, n7           | 2520                    | 5              | 25                  | 2640                    | N/A      | N/A       |
|                                                   | n78             | 3390                    | 10             | 50                  | 3390                    | 10.1     | IMD4      |

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD                                                                                                                                            |                 |                         |                |                     |                         |          |           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------|----------------|---------------------|-------------------------|----------|-----------|
| EN-DC Configuration                                                                                                                                                                          | EUTRA / NR band | UL F <sub>c</sub> (MHz) | UL/DL BW (MHz) | UL L <sub>CRB</sub> | DL F <sub>c</sub> (MHz) | MSD (dB) | IMD order |
| DC_3A-7A_n7A-n78A<br>DC_3A-3A-7A_n7A-n78A<br>DC_3C-7A_n7A-n78A                                                                                                                               | 3               | 1725                    | 5              | 25                  | 1820                    | 17.6     | IMD3      |
|                                                                                                                                                                                              | 7, n7           | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                              | n78             | 3310                    | 10             | 50                  | 3310                    | N/A      | N/A       |
|                                                                                                                                                                                              | 3               | 1725                    | 5              | 25                  | 1820                    | 8.6      | IMD4      |
|                                                                                                                                                                                              | 7, n7           | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                              | n78             | 3475                    | 10             | 50                  | 3475                    | N/A      | N/A       |
|                                                                                                                                                                                              | 3               | 1730                    | 5              | 25                  | 1825                    | N/A      | N/A       |
|                                                                                                                                                                                              | n7, n7          | 2560                    | 5              | 25                  | 2680                    | N/A      | N/A       |
| DC_7A-28A_n7A-n78A                                                                                                                                                                           | n78             | 3390                    | 10             | 50                  | 3390                    | 16.1     | IMD3      |
|                                                                                                                                                                                              | 7, n7           | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                              | 28              | 745                     | 5              | 25                  | 800                     | 28.8     | IMD2      |
|                                                                                                                                                                                              | n78             | 3365                    | 10             | 50                  | 3365                    | N/A      | N/A       |
|                                                                                                                                                                                              | 7, n7           | 2570                    | 5              | 25                  | 2670                    | N/A      | N/A       |
|                                                                                                                                                                                              | 28              | 720                     | 5              | 25                  | 790                     | 3.0      | IMD5      |
|                                                                                                                                                                                              | n78             | 3460                    | 10             | 50                  | 3421                    | N/A      | N/A       |
|                                                                                                                                                                                              | 7, n7           | 2570                    | 5              | 25                  | 2650                    | 30.5     | IMD2      |
|                                                                                                                                                                                              | 28              | 740                     | 5              | 25                  | 768                     | N/A      | N/A       |
|                                                                                                                                                                                              | n78             | 3390                    | 10             | 50                  | 3421                    | N/A      | N/A       |
|                                                                                                                                                                                              | 7, n7           | 2565                    | 5              | 25                  | 2685                    | N/A      | N/A       |
|                                                                                                                                                                                              | 28              | 745                     | 5              | 25                  | 800                     | N/A      | N/A       |
|                                                                                                                                                                                              | n78             | 3310                    | 10             | 50                  | 3310                    | 29.7     | IMD2      |
| NOTE 1: For NR band, UL/DL BW and UL L <sub>CRB</sub> can be adjusted according to the supported BW and lowest SCS supported by the UE.                                                      |                 |                         |                |                     |                         |          |           |
| NOTE 2: E-UTRA carrier shall be set to min(+20 dBm, P <sub>CMAX,L,E-UTRA,c</sub> ) and NR carrier shall be set to min(+20 dBm, P <sub>CMAX,L,f,c,NR</sub> ) as defined in clause 6.2B.4.1.3. |                 |                         |                |                     |                         |          |           |

### 7.3B.2.3.6 Reference sensitivity exceptions due to Tx non-linearity interference in 1<sup>st</sup> or 2<sup>nd</sup> adjacent channel of UL band for EN-DC in NR FR1

Sensitivity degradation is allowed for a band if it is impacted by Tx non-linearity interference in 1<sup>st</sup> or 2<sup>nd</sup> adjacent channel from another UL band part of the same EN-DC configuration. Reference sensitivity exceptions for the victim band (DL band) are specified in Table 7.3B.2.3.6-1 with uplink configuration of the aggressor band (UL band) specified in Table 7.3B.2.3.6-1.

**Table 7.3B.2.3.6-1: Reference sensitivity exceptions (MSD) due to Tx non-linearity interference in 1<sup>st</sup> or 2<sup>nd</sup> adjacent channel of UL band for EN-DC in NR FR1**

| UL band                                                                                                                                                                                                                                                                                                                                                                                                                             | DL band | SCS of UL band (kHz) | L <sub>CRB</sub> of UL band | Applicable UL BW(MHz) | MSD value of DL band (dB) | The adjacent channel of UL band  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----------------------|-----------------------------|-----------------------|---------------------------|----------------------------------|
| n1                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3       | 15                   | 25                          | ≥ 25                  | 4.5                       | 2 <sup>nd</sup> adjacent channel |
| n1                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3       | 15                   | 25                          | 50                    | 17                        | 1 <sup>st</sup> adjacent channel |
| n5                                                                                                                                                                                                                                                                                                                                                                                                                                  | 28      | 15                   | 6                           | ≥ 15                  | 7.9                       | 2 <sup>nd</sup> adjacent channel |
| n40                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1       | 30                   | 25                          | ≥ 70                  | 21.5                      | 2 <sup>nd</sup> adjacent channel |
| NOTE 1: For interference in 2 <sup>nd</sup> adjacent channel, the MSD exceptions are applicable to the case that interference in 2 <sup>nd</sup> adjacent channel of UL band falls into the DL channels. (The victim frequency of DL band can be expressed as $f_{DL} = F_{c,UL} + 5(f_{UL} - F_{c,UL})$ , where $F_{c,UL}$ is the centre frequency of UL channel and $f_{UL}$ is the allocated transmission frequency of UL band). |         |                      |                             |                       |                           |                                  |
| NOTE 2: For interference in 1 <sup>st</sup> adjacent channel, the MSD exceptions are applicable to the case that interference in 1 <sup>st</sup> adjacent channel of UL band falls into the DL channels. (The victim frequency of DL band can be expressed as $f_{DL} = F_{c,UL} - 3(f_{UL} - F_{c,UL})$ , where $F_{c,UL}$ is the centre frequency of UL channel and $f_{UL}$ is the allocated transmission frequency of UL band). |         |                      |                             |                       |                           |                                  |

### 7.3B.2.3a Inter-band NE-DC within FR1

#### 7.3B.2.3a.0 General

Reference sensitivity exceptions are specified for the condition when there is uplink transmission only in the aggressor band. This clause addresses directly only NE-DC configurations that don't have a corresponding specified EN-DC configuration or specific NE-DC exceptions.

#### 7.3B.2.3a.1 Reference sensitivity exceptions due to UL harmonic interference for NE-DC in NR FR1

Sensitivity degradation is allowed for a band if it is impacted by UL harmonic interference from another band part of the same NE-DC configuration. For the NE-DC configurations that have an EN-DC defined configuration, the reference sensitivity exceptions for the victim band (high) are specified in Table 7.3B.2.3.1-1 with uplink configuration of the aggressor band (low) specified in Table 7.3B.2.3.1-2 are applicable.

### 7.3B.2.4 Inter-band EN-DC including FR2

#### 7.3B.2.4.1 Void

### 7.3B.2.5 Inter-band EN-DC including both FR1 and FR2

#### 7.3B.2.5.1 Reference sensitivity exceptions due to UL harmonic interference for EN-DC including both FR1 and FR2

For inter-band EN-DC of E-UTRA and NR in both FR1 and FR2, the UE is allowed to apply each sensitivity degradation for EN-DC in FR1 specified in clause 7.3B.2.3 TS 38.101-3 and for EN-DC including FR2 specified in clause 7.3B.2.3 of TS 38.101-3 independently.

## 7.3B.3 $\Delta R_{IB,c}$ , $\Delta R_{IBNC}$ for DC

### 7.3B.3.0 General

For the UE which supports inter-band EN-DC or NE-DC configuration, the minimum requirement for reference sensitivity in Table 7.3.1-1 and Table 7.3.1-1a in TS 36.101 [4], clause 7.3.2, 7.3A.2, 7.3C.2 in TS 38.101-1 [2] and clause 7.3.2, 7.3A.2 in TS 38.101-2 [3] shall be increased by the amount given in  $\Delta R_{IB,c}$ ,  $\Delta R_{IBNC}$  in Tables below where unless otherwise stated, the same  $\Delta R_{IB,c}$ ,  $\Delta R_{IBNC}$  are applicable to NR band(s) part for DC configurations which have the same NR operating band combination. Unless otherwise stated,  $\Delta R_{IB,c}$  or  $\Delta R_{IBNC}$  is set to zero.

In case the UE supports more than one of band combinations for CA, SUL or DC, and an operating band belongs to more than one band combinations then

- When the operating band frequency range is  $\leq 1$  GHz, the applicable additional  $\Delta R_{IB,c}$  shall be the average value for all band combinations defined in clause 7.3A, 7.3B, 7.3C in TS 38.101-1 [2] and 7.3A, 7.3B in this specification, truncated to one decimal place that apply for that operating band among the supported band combinations. In case there is a harmonic relation between low band UL and high band DL, then the maximum  $\Delta R_{IB,c}$  among the different supported band combinations involving such band shall be applied
- When the operating band frequency range is  $> 1$  GHz, the applicable additional  $\Delta R_{IB,c}$  shall be the maximum value for all band combinations defined in clause 7.3A, 7.3B, 7.3C in TS 38.101-1 [2] and 7.3A, 7.3B in this specification for the applicable operating bands.

Unless  $\Delta R_{IB,c}$  is specified for the NE-DC configuration, the specified  $\Delta R_{IB,c}$  for the EN-DC configuration including same bands as the corresponding NE-DC configuration is applicable for the NE-DC configuration.

## 7.3B.3.1 Intra-band contiguous EN-DC

## 7.3B.3.2 Intra-band non-contiguous EN-DC

**Table 7.3B.3.2-1: Intra-band non-contiguous EN-DC with one uplink configuration on E-UTRA for reference sensitivity (E-UTRA uplink carrier is closer to the NR downlink carrier than it is to the E-UTRA downlink carrier)**

| DC configuration | Aggregated channel bandwidth |        | $W_{\text{gap}}$ / (MHz)          | UL E-UTRA allocation (LCRB)   | $\Delta R_{\text{BNC}}$ (dB) | Duplex mode |
|------------------|------------------------------|--------|-----------------------------------|-------------------------------|------------------------------|-------------|
|                  | E-UTRA                       | NR     |                                   |                               |                              |             |
| DC_3A_n3A        | 5 MHz                        | 5 MHz  | $45.0 < W_{\text{gap}} \leq 65.0$ | 12 <sup>1</sup>               | 4.7                          | FDD         |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 45.0$  | 25 <sup>1</sup>               | 0                            |             |
|                  | 5 MHz                        | 10 MHz | $40.0 < W_{\text{gap}} \leq 60.0$ | 12 <sup>1</sup>               | 3.8                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 40.0$  | 25 <sup>1</sup>               | 0                            |             |
|                  | 5 MHz                        | 15 MHz | $35.0 < W_{\text{gap}} \leq 55.0$ | 12 <sup>1</sup>               | 3.6                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 35.0$  | 25 <sup>1</sup>               | 0                            |             |
|                  | 5 MHz                        | 20 MHz | $30.0 < W_{\text{gap}} \leq 50.0$ | 12 <sup>1</sup>               | 3.4                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 30.0$  | 25 <sup>1</sup>               | 0                            |             |
|                  | 5 MHz                        | 25 MHz | $25.0 < W_{\text{gap}} \leq 45.0$ | 12 <sup>1</sup>               | 3.2                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 25.0$  | 25 <sup>1</sup>               | 0                            |             |
|                  | 5 MHz                        | 30 MHz | $20.0 < W_{\text{gap}} \leq 40.0$ | 12 <sup>1</sup>               | 3.0                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 20.0$  | 25 <sup>1</sup>               | 0                            |             |
|                  | 10 MHz                       | 5 MHz  | $30.0 < W_{\text{gap}} \leq 60.0$ | 12 (RB <sub>start</sub> = 25) | 5.1                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 30.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 10 MHz                       | 10MHz  | $25.0 < W_{\text{gap}} \leq 55.0$ | 12 (RB <sub>start</sub> = 25) | 4.3                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 25.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 10 MHz                       | 15 MHz | $20.0 < W_{\text{gap}} \leq 50.0$ | 12 (RB <sub>start</sub> = 25) | 3.8                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 20.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 10 MHz                       | 20 MHz | $15.0 < W_{\text{gap}} \leq 45.0$ | 12 (RB <sub>start</sub> = 25) | 3.5                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 15.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 10 MHz                       | 25 MHz | $10.0 < W_{\text{gap}} \leq 40.0$ | 12 (RB <sub>start</sub> = 25) | 3.2                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 10.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 10 MHz                       | 30 MHz | $5.0 < W_{\text{gap}} \leq 35.0$  | 12 (RB <sub>start</sub> = 25) | 2.8                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 5.0$   | 32 <sup>1</sup>               | 0                            |             |
|                  | 15 MHz                       | 5 MHz  | $25.0 < W_{\text{gap}} \leq 55.0$ | 12 (RB <sub>start</sub> = 35) | 6.0                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 25.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 15 MHz                       | 10 MHz | $20.0 < W_{\text{gap}} \leq 50.0$ | 12 (RB <sub>start</sub> = 35) | 4.7                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 20.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 15 MHz                       | 15 MHz | $15.0 < W_{\text{gap}} \leq 45.0$ | 12 (RB <sub>start</sub> = 35) | 4.2                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 15.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 15 MHz                       | 20 MHz | $10.0 < W_{\text{gap}} \leq 40.0$ | 12 (RB <sub>start</sub> = 35) | 3.8                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 10.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 15 MHz                       | 25 MHz | $5.0 < W_{\text{gap}} \leq 35.0$  | 12 (RB <sub>start</sub> = 35) | 3.5                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 5.0$   | 32 <sup>1</sup>               | 0                            |             |
|                  | 15 MHz                       | 30 MHz | $0.0 < W_{\text{gap}} \leq 30.0$  | 12 (RB <sub>start</sub> = 35) | 3.3                          |             |
|                  | 20 MHz                       | 5 MHz  | $15.0 < W_{\text{gap}} \leq 50.0$ | 16 (RB <sub>start</sub> = 50) | 6.5                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 15.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 20 MHz                       | 10 MHz | $10.0 < W_{\text{gap}} \leq 45.0$ | 16 (RB <sub>start</sub> = 50) | 5.1                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 10.0$  | 32 <sup>1</sup>               | 0                            |             |
|                  | 20 MHz                       | 15 MHz | $5.0 < W_{\text{gap}} \leq 40.0$  | 16 (RB <sub>start</sub> = 50) | 4.5                          |             |
|                  |                              |        | $0.0 < W_{\text{gap}} \leq 5.0$   | 32 <sup>1</sup>               | 0                            |             |
|                  | 20 MHz                       | 20 MHz | $0.0 < W_{\text{gap}} \leq 35.0$  | 16 (RB <sub>start</sub> = 50) | 4.1                          |             |
|                  | 20 MHz                       | 25 MHz | $0.0 < W_{\text{gap}} \leq 30.0$  | 16 (RB <sub>start</sub> = 50) | 3.8                          |             |
|                  | 20 MHz                       | 30 MHz | $0.0 < W_{\text{gap}} \leq 25.0$  | 16 (RB <sub>start</sub> = 50) | 3.6                          |             |
| DC_66A_n66A      | NOTE 4                       |        | NOTE 8                            | NOTE 9                        | 0                            | FDD         |

NOTE 1: UL resource blocks shall be located as close as possible to the downlink operating band but confined within the transmission.  
NOTE 2:  $W_{\text{gap}}$  is the sub-block gap between the two sub-blocks.  
NOTE 3: The E-UTRA uplink carrier is the aggressor and the  $\Delta R_{\text{BNC}}$  applies to the NR DL carrier only. The E-UTRA uplink carrier shall be located as close as possible to the NR downlink carrier centre frequency.  
NOTE 4: All combinations of channel bandwidths defined in Table 5.3B.1.3-1.  
NOTE 5: Void.  
NOTE 6: Void.  
NOTE 7: Void.

| DC configuration | Aggregated channel bandwidth |    | $W_{\text{gap}}$ / (MHz) | UL E-UTRA allocation (LCRB) | $\Delta R_{\text{IBNC}}$ (dB) | Duplex mode |
|------------------|------------------------------|----|--------------------------|-----------------------------|-------------------------------|-------------|
|                  | E-UTRA                       | NR |                          |                             |                               |             |

NOTE 8: All applicable sub-block gap sizes.

NOTE 9: The UL LTE allocation is same as Transmission bandwidth configuration  $N_{\text{RB}}$  as defined in Table 5.6-1 in TS 36.101 [4].

**Table 7.3B.3.2-2: Intra-band non-contiguous EN-DC with one uplink configuration on NR for reference sensitivity (NR uplink carrier is closer to the E-UTRA downlink carrier than it is to the NR downlink carrier)**

| DC configuration | Aggregated bandwidth |        | $W_{\text{gap}}$ / (MHz)          | UL NR allocation (LCRB)       | $\Delta R_{\text{IBNC}}$ (dB) | Duplex mode |
|------------------|----------------------|--------|-----------------------------------|-------------------------------|-------------------------------|-------------|
|                  | NR                   | E-UTRA |                                   |                               |                               |             |
| DC_2A_n2A        | 5MHz                 | 5MHz   | $30.0 < W_{\text{gap}} \leq 50.0$ | 12 <sup>1</sup>               | 5.3                           | FDD         |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 30.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 5MHz                 | 10MHz  | $25.0 < W_{\text{gap}} \leq 45.0$ | 12 <sup>1</sup>               | 4.4                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 25.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 5MHz                 | 15MHz  | $20.0 < W_{\text{gap}} \leq 40.0$ | 12 <sup>1</sup>               | 4.2                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 20.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 5MHz                 | 20MHz  | $15.0 < W_{\text{gap}} \leq 35.0$ | 12 <sup>1</sup>               | 3.8                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 15.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 5MHz   | $15.0 < W_{\text{gap}} \leq 45.0$ | 12 <sup>1</sup>               | 5.9                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 15.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 10MHz  | $10.0 < W_{\text{gap}} \leq 40.0$ | 12 <sup>1</sup>               | 4.6                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 10.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 15MHz  | $5.0 < W_{\text{gap}} \leq 35.0$  | 12 <sup>1</sup>               | 4.1                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 5.0$   | 32 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 20MHz  | $0.0 < W_{\text{gap}} \leq 30.0$  | 12 <sup>1</sup>               | 4.0                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 30.0$  | 12 (RB <sub>start</sub> = 39) | 6.7                           |             |
|                  | 15MHz                | 5MHz   | $10.0 < W_{\text{gap}} \leq 40.0$ | 36 <sup>1</sup>               | 0                             |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 10.0$  | 12 (RB <sub>start</sub> = 39) | 5.4                           |             |
|                  | 15MHz                | 10MHz  | $5.0 < W_{\text{gap}} \leq 35.0$  | 36 <sup>1</sup>               | 0                             |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 5.0$   | 12 (RB <sub>start</sub> = 39) | 4.6                           |             |
|                  | 15MHz                | 20MHz  | $0.0 < W_{\text{gap}} \leq 25.0$  | 12 (RB <sub>start</sub> = 39) | 4.2                           |             |
|                  | 20MHz                | 5MHz   | $0.0 < W_{\text{gap}} \leq 35.0$  | 16 (RB <sub>start</sub> = 57) | 7.2                           |             |
|                  | 20MHz                | 10MHz  | $0.0 < W_{\text{gap}} \leq 30.0$  | 16 (RB <sub>start</sub> = 57) | 5.8                           |             |
|                  | 20MHz                | 15MHz  | $0.0 < W_{\text{gap}} \leq 25.0$  | 16 (RB <sub>start</sub> = 57) | 5.0                           |             |
|                  | 20MHz                | 20MHz  | $0.0 < W_{\text{gap}} \leq 20.0$  | 16 (RB <sub>start</sub> = 57) | 4.6                           |             |
| DC_3A_n3A        | 5MHz                 | 5MHz   | $45.0 < W_{\text{gap}} \leq 65.0$ | 12 <sup>1</sup>               | 4.7                           | FDD         |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 45.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 5MHz                 | 10MHz  | $40.0 < W_{\text{gap}} \leq 60.0$ | 12 <sup>1</sup>               | 3.8                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 40.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 5MHz                 | 15MHz  | $35.0 < W_{\text{gap}} \leq 55.0$ | 12 <sup>1</sup>               | 3.6                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 35.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 5MHz                 | 20MHz  | $30.0 < W_{\text{gap}} \leq 50.0$ | 12 <sup>1</sup>               | 3.4                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 30.0$  | 25 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 5MHz   | $30.0 < W_{\text{gap}} \leq 60.0$ | 12 (RB <sub>start</sub> = 25) | 5.1                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 30.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 10MHz  | $25.0 < W_{\text{gap}} \leq 55.0$ | 12 (RB <sub>start</sub> = 25) | 4.3                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 25.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 15MHz  | $20.0 < W_{\text{gap}} \leq 50.0$ | 12 (RB <sub>start</sub> = 25) | 3.8                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 20.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 10MHz                | 20MHz  | $15.0 < W_{\text{gap}} \leq 45.0$ | 12 (RB <sub>start</sub> = 25) | 3.5                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 15.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 15MHz                | 5MHz   | $25.0 < W_{\text{gap}} \leq 55.0$ | 12 (RB <sub>start</sub> = 35) | 6.0                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 25.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 15MHz                | 10MHz  | $20.0 < W_{\text{gap}} \leq 50.0$ | 12 (RB <sub>start</sub> = 35) | 4.7                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 20.0$  | 32 <sup>1</sup>               | 0                             |             |
|                  | 15MHz                | 15MHz  | $15.0 < W_{\text{gap}} \leq 45.0$ | 12 (RB <sub>start</sub> = 35) | 4.2                           |             |
|                  |                      |        | $0.0 < W_{\text{gap}} \leq 15.0$  | 32 <sup>1</sup>               | 0                             |             |

| DC configuration                                                                                                                                                                                                                                                                                                                        | Aggregated bandwidth |                                  | $W_{\text{gap}}$ / (MHz)          | UL NR allocation (L <sub>CRB</sub> ) | $\Delta R_{\text{IBNC}}$ (dB) | Duplex mode |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------------------|-----------------------------------|--------------------------------------|-------------------------------|-------------|
|                                                                                                                                                                                                                                                                                                                                         | NR                   | E-UTRA                           |                                   |                                      |                               |             |
|                                                                                                                                                                                                                                                                                                                                         | 15MHz                | 20MHz                            | $10.0 < W_{\text{gap}} \leq 40.0$ | 12 (RB <sub>start</sub> = 35)        | 3.8                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 10.0$  | 32 <sup>1</sup>                      | 0                             |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 5MHz                             | $15.0 < W_{\text{gap}} \leq 50.0$ | 16 (RB <sub>start</sub> = 50)        | 6.5                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 15.0$  | 32 <sup>1</sup>                      | 0                             |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 10MHz                            | $10.0 < W_{\text{gap}} \leq 45.0$ | 16 (RB <sub>start</sub> = 50)        | 5.1                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 10.0$  | 32 <sup>1</sup>                      | 0                             |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 15MHz                            | $5.0 < W_{\text{gap}} \leq 40.0$  | 16 (RB <sub>start</sub> = 50)        | 4.5                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 5.0$   | 32 <sup>1</sup>                      | 0                             |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 20MHz                            | $0.0 < W_{\text{gap}} \leq 35.0$  | 16 (RB <sub>start</sub> = 50)        | 4.1                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 25MHz                | 5MHz                             | $10.0 < W_{\text{gap}} \leq 45.0$ | 16 (RB <sub>start</sub> = 60)        | 7.4                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 10.0$  | 32 <sup>1</sup>                      | 0                             |             |
|                                                                                                                                                                                                                                                                                                                                         | 25MHz                | 10MHz                            | $5.0 < W_{\text{gap}} \leq 40.0$  | 16 (RB <sub>start</sub> = 60)        | 5.5                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 5.0$   | 32 <sup>1</sup>                      | 0                             |             |
|                                                                                                                                                                                                                                                                                                                                         | 25MHz                | 15MHz                            | $0.0 < W_{\text{gap}} \leq 35.0$  | 16 (RB <sub>start</sub> = 60)        | 4.9                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 25MHz                | 20MHz                            | $0.0 < W_{\text{gap}} \leq 30.0$  | 16 (RB <sub>start</sub> = 60)        | 4.6                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 30MHz                | 5MHz                             | $5.0 < W_{\text{gap}} \leq 40.0$  | 16 (RB <sub>start</sub> = 75)        | 8.3                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 5.0$   | 32 <sup>1</sup>                      | 0                             |             |
|                                                                                                                                                                                                                                                                                                                                         | 30MHz                | 10MHz                            | $0.0 < W_{\text{gap}} \leq 35.0$  | 16 (RB <sub>start</sub> = 75)        | 5.9                           |             |
| 30MHz                                                                                                                                                                                                                                                                                                                                   | 15MHz                | $0.0 < W_{\text{gap}} \leq 30.0$ | 16 (RB <sub>start</sub> = 75)     | 5.5                                  |                               |             |
| 30MHz                                                                                                                                                                                                                                                                                                                                   | 20MHz                | $0.0 < W_{\text{gap}} \leq 25.0$ | 16 (RB <sub>start</sub> = 75)     | 4.9                                  |                               |             |
| DC_5A_n5A                                                                                                                                                                                                                                                                                                                               | 5 MHz                | 5 MHz                            | NOTE 10                           | 12 <sup>1</sup>                      | 5.3                           | FDD         |
|                                                                                                                                                                                                                                                                                                                                         | 10 MHz               | 5 MHz                            |                                   |                                      | 4.4                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 15 MHz               | 5 MHz                            |                                   |                                      | 6.1                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 5 MHz                | 10 MHz                           |                                   |                                      | 5.9                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 10 MHz               | 10 MHz                           |                                   |                                      | 4.6                           |             |
| DC_7A_n7A                                                                                                                                                                                                                                                                                                                               | 5MHz                 | 5MHz                             | $0 < W_{\text{gap}} \leq 60$      | 25                                   | 0.0                           | FDD         |
|                                                                                                                                                                                                                                                                                                                                         | 5MHz                 | 10MHz                            | $0 < W_{\text{gap}} \leq 55$      | 25                                   | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 5MHz                 | 15MHz                            | $0 < W_{\text{gap}} \leq 50$      | 25                                   | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 5MHz                 | 20MHz                            | $0 < W_{\text{gap}} \leq 45$      | 25                                   | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 10MHz                | 5MHz                             | $30 < W_{\text{gap}} \leq 55$     | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0 < W_{\text{gap}} \leq 30$      | 50                                   | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 10MHz                | 10MHz                            | $25.0 < W_{\text{gap}} \leq 50.0$ | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 25.0$  | 50                                   | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 10MHz                | 15MHz                            | $20 < W_{\text{gap}} \leq 45$     | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0 < W_{\text{gap}} \leq 20$      | 50                                   | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 10MHz                | 20MHz                            | $15 < W_{\text{gap}} \leq 40$     | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0 < W_{\text{gap}} \leq 15$      | 50                                   | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 15MHz                | 5MHz                             | $20.0 < W_{\text{gap}} \leq 50.0$ | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 20.0$  | 50 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 15MHz                | 10MHz                            | $20.0 < W_{\text{gap}} \leq 45.0$ | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 20.0$  | 50 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 15MHz                | 15MHz                            | $15.0 < W_{\text{gap}} \leq 40.0$ | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 15.0$  | 50 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 15MHz                | 20MHz                            | $10 < W_{\text{gap}} \leq 35$     | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0 < W_{\text{gap}} \leq 10$      | 50 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 5MHz                             | $25 < W_{\text{gap}} \leq 45$     | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0 < W_{\text{gap}} \leq 25$      | 45 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 10MHz                            | $20 < W_{\text{gap}} \leq 40$     | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0 < W_{\text{gap}} \leq 20$      | 45 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 15MHz                            | $15.0 < W_{\text{gap}} \leq 35.0$ | 36 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 15.0$  | 50 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         | 20MHz                | 20MHz                            | $15.0 < W_{\text{gap}} \leq 30.0$ | 32 <sup>1</sup>                      | 0.0                           |             |
|                                                                                                                                                                                                                                                                                                                                         |                      |                                  | $0.0 < W_{\text{gap}} \leq 15.0$  | 45 <sup>1</sup>                      | 0.0                           |             |
| NOTE 1: <sup>1</sup> refers to the UL resource blocks shall be located as close as possible to the downlink operating band but confined within the transmission.                                                                                                                                                                        |                      |                                  |                                   |                                      |                               |             |
| NOTE 2: $W_{\text{gap}}$ is the sub-block gap between the two sub-blocks.                                                                                                                                                                                                                                                               |                      |                                  |                                   |                                      |                               |             |
| NOTE 3: The NR uplink carrier is the aggressor and the $\Delta R_{\text{IBNC}}$ applies to the E-UTRA DL carrier only. The NR uplink carrier shall be located as close as possible to the E-UTRA downlink carrier center frequency. The NR SCS should be the smallest SCS that is compatible with the highest uplink channel bandwidth. |                      |                                  |                                   |                                      |                               |             |

| DC configuration                                                                                                                                                                                                                                     | Aggregated bandwidth |        | $W_{\text{gap}}$ / (MHz) | UL NR allocation ( $L_{\text{CRB}}$ ) | $\Delta R_{\text{IBNC}}$ (dB) | Duplex mode |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------|--------------------------|---------------------------------------|-------------------------------|-------------|
|                                                                                                                                                                                                                                                      | NR                   | E-UTRA |                          |                                       |                               |             |
| NOTE 4: All combinations of channel bandwidths defined in Table 5.3B.1.3-1.<br>NOTE 5: Void.<br>NOTE 6: Void.<br>NOTE 7: Void.<br>NOTE 8: Void.<br>NOTE 9: Void.<br>NOTE 10: All applicable sub-block gap sizes.<br>NOTE 11: Void.<br>NOTE 12: Void. |                      |        |                          |                                       |                               |             |

### 7.3B.3.3 Inter-band EN-DC within FR1

#### 7.3B.3.3.1 $\Delta R_{\text{IB,c}}$ for EN-DC in two bands

**Table 7.3B.3.3.1-1:  $\Delta R_{\text{IB,c}}$  due to EN-DC(two bands)**

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{\text{IB,c}}$ (dB) |
|--------------------------------|-------------------|-------------------------------|
| DC_1_n28                       | n28               | 0.2                           |
| DC_1_n51                       | n51               | 0.1                           |
| DC_1_n77                       | 1                 | 0.2                           |
|                                | n77               | 0.5                           |
| DC_1_n78                       | n78               | 0.5                           |
| DC_2_n48                       | 2                 | 0.2                           |
|                                | n48               | 0.5                           |
| DC_2_n66, DC_2-2_n66           | 2                 | 0.3                           |
|                                | n66               | 0.3                           |
| DC_2_n78, DC_2-2_n78           | 2                 | 0.2                           |
|                                | n78               | 0.5                           |
| DC_3_n41                       | n41               | 0 <sup>3</sup>                |
|                                |                   | 0.5 <sup>4</sup>              |
| DC_3_n51                       | 3                 | 0.2                           |
|                                | n51               | 0.2                           |
| DC_3_n77, DC_3-3_n77           | 3                 | 0.2                           |
|                                | n77               | 0.5                           |
| DC_3_n78, DC_3-3_n78           | 3                 | 0.2                           |
|                                | n78               | 0.5                           |
| DC_4_n38                       | 4                 | 0.5                           |
|                                | n38               | 0.5                           |
| DC_4_n41                       | 4                 | 0.5                           |
|                                | n41               | 0.5 <sup>1</sup>              |
| DC_4_n78                       | 4                 | 0.2                           |
|                                | n78               | 0.5                           |
| DC_5_n12                       | 5                 | 0.5                           |
|                                | n12               | 0.3                           |
| DC_5_n78                       | 5                 | 0.2                           |
|                                | n78               | 0.5                           |
| DC_7_n8                        | n8                | 0.2                           |
| DC_7_n40                       | n40               | 0.5                           |
| DC_7_n51                       | n51               | 0.2                           |
| DC_7_n66, DC_7-7_n66           | 7                 | 0.5                           |
|                                | n66               | 0.5                           |
| DC_7_n71                       | n71               | 0.2                           |
| DC_7_n77, DC_7-7_n77           | n77               | 0.5                           |
| DC_7_n78, DC_7-7_n78           | n78               | 0.5                           |
| DC_8_n28                       | 8                 | 0.2                           |
|                                | n28               | 0.1                           |
| DC_8_n77                       | 8                 | 0.2                           |
|                                | n77               | 0.5                           |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_8_n78                       | 8                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_11_n3                       | 11                | 0.3                    |
|                                | n3                | 0.5                    |
| DC_11_n28                      | n28               | 0.2                    |
| DC_11_n77                      | n77               | 0.5                    |
| DC_11_n78                      | n78               | 0.5                    |
| DC_12_n5                       | 12                | 0.3                    |
|                                | n5                | 0.5                    |
| DC_12_n66                      | 12                | 0.5                    |
| DC_12_n78                      | 12                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_13_n7                       | 13                | 0.5                    |
|                                | n7                | 0.5                    |
| DC_13_n78                      | 13                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_18_n77                      | n77               | 0.5                    |
| DC_19_n77                      | n77               | 0.5                    |
| DC_19_n78                      | n78               | 0.5                    |
| DC_20_n38                      | 20                | 0.2                    |
| DC_20_n51                      | n51               | 0.2                    |
| DC_20_n77                      | n77               | 0.5                    |
| DC_20_n78                      | n78               | 0.5                    |
| DC_21_n77                      | n77               | 0.5                    |
| DC_21_n78                      | n78               | 0.5                    |
| DC_25_n41,<br>DC_25-25_n41     | n41               | 0 <sup>1</sup>         |
|                                |                   | 0.5 <sup>2</sup>       |
| DC_26_n77                      | n77               | 0.5                    |
| DC_26_n78                      | n78               | 0.5                    |
| DC_28_n8                       | 28                | 0.1                    |
|                                | n8                | 0.2                    |
| DC_28_n51                      | n51               | 0.2                    |
| DC_28_n77                      | 28                | 0.2                    |
|                                | n77               | 0.5                    |
| DC_28_n78                      | 28                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_30_n66                      | 30                | 0.5                    |
|                                | n66               | 0.4                    |
| DC_38_n78                      | 38                | 0.4                    |
|                                | n78               | 0.5                    |
| DC_39_n40                      | 39                | 0.3                    |
|                                | n40               | 0.3                    |
| DC_39_n41                      | 39                | 0.2                    |
|                                | n41               | 0.2                    |
| DC_39_n78                      | n78               | 0.5                    |
| DC_39_n79                      | n79               | 0.5                    |
| DC_40_n77                      | 40                | 0.4                    |
|                                | n77               | 0.5                    |
| DC_40_n78                      | 40                | 0.4 <sup>5</sup>       |
|                                | n78               | 0.5 <sup>5</sup>       |
| DC_40_n79                      | n79               | 0.5                    |
| DC_41_n3                       | 41                | 0 <sup>3</sup>         |
|                                |                   | 0.5 <sup>4</sup>       |
| DC_41_n77                      | n77               | 0.5                    |
| DC_41_n78                      | n78               | 0.5                    |
| DC_41_n79                      | n79               | 0.5                    |
| DC_42_n28                      | 42                | 0.2                    |
|                                | n28               | 0.5                    |
| DC_42_n51                      | n51               | 0.2                    |
| DC_48_n46                      | 48                | 0.5                    |
| DC_48_n66                      | 48                | 0.5                    |
|                                | n66               | 0.2                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_66_n2,<br>DC_66-66_n2       | 66                | 0.3                    |
|                                | n2                | 0.3                    |
| DC_66_n7,<br>DC_66-66_n7       | 66                | 0.5                    |
|                                | n7                | 0.5                    |
| DC_66_n12                      | 66                | 0.5                    |
| DC_66_n25                      | 66                | 0.3                    |
|                                | n25               | 0.3                    |
| DC_66_n38,<br>DC_66-66_n38     | 66                | 0.5                    |
|                                | n38               | 0.5                    |
| DC_66_n41                      | 66                | 0.5                    |
|                                | n41               | 0.5 <sup>1</sup>       |
|                                |                   | 1 <sup>2</sup>         |
| DC_66_n48,<br>DC_66-66_n48     | 66                | 0.2                    |
|                                | n48               | 0.5                    |
| DC_66_n78,<br>DC_66-66_n78     | 66                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_71_n38                      | 71                | 0.2                    |
| DC_71_n78                      | 71                | 0.2                    |
|                                | n78               | 0.5                    |

NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 – 2690 MHz.  
NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 – 2545 MHz.  
NOTE 3: Applicable for the frequency range of 2515 – 2690 MHz.  
NOTE 4: Applicable for the frequency range of 2496 – 2515 MHz.  
NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx.

### 7.3B.3.3.2 $\Delta R_{IB,c}$ for EN-DC three bands

**Table 7.3B.3.3.2-1:  $\Delta R_{IB,c}$  due to EN-DC (three bands)**

| Inter-band EN-DC configuration            | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|-------------------------------------------|-------------------|------------------------|
| DC_1-3_n28                                | n28               | 0.2                    |
| DC_1_n3-n28                               | n28               | 0.2                    |
| DC_1-3_n41                                | n41               | 0 <sup>3</sup>         |
|                                           |                   | 0.5 <sup>4</sup>       |
| DC_1-3_n77                                | 1                 | 0.2                    |
|                                           | 3                 | 0.2                    |
|                                           | n77               | 0.5                    |
| DC_1-3_n78                                | 1                 | 0.2                    |
|                                           | 3                 | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_1_n3-n78                               | 1                 | 0.2                    |
|                                           | n3                | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_1-5_n78                                | 1                 | 0.2                    |
|                                           | 5                 | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_1-7_n8                                 | n8                | 0.2                    |
| DC_1-7_n28                                | n28               | 0.2                    |
| DC_1-7_n40                                | 7                 | 0.3                    |
|                                           | n40               | 0.8                    |
| DC_1-7_n78<br>DC_1-7-7_n78<br>DC_1_n7-n78 | 1                 | 0.2                    |
|                                           | 7 or n7           | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_1-8_n28                                | 8                 | 0.2                    |
|                                           | n28               | 0.2                    |
| DC_1_n8-n40                               | n8                | 0.2                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
|                                | n40               | 0.5                    |
| DC_1-8_n77                     | 8                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1-8_n78                     | 8                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1_n8-n78                    | 1                 | 0.2                    |
|                                | n8                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-11_n3                     | 11                | 0.3                    |
|                                | n3                | 0.5                    |
| DC_1-11_n77                    | 1                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1-11_n78                    | n78               | 0.5                    |
| DC_1-18_n77                    | n77               | 0.5                    |
| DC_1-18_n78                    | n78               | 0.5                    |
| DC_1-19_n77                    | n77               | 0.5                    |
| DC_1-19_n78                    | n78               | 0.5                    |
| DC_1-19_n79                    | 1                 | 0.3                    |
|                                | 19                | 0.3                    |
| DC_1-20_n28                    | 20                | 0.2                    |
|                                | n28               | 0.2                    |
| DC_1-20_n38                    | 20                | 0.2                    |
| DC_1-20_n78                    | n78               | 0.5                    |
| DC_1-21_n77                    | n77               | 0.5                    |
| DC_1-21_n78                    | 1                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-28-n3                     | 28                | 0.2                    |
| DC_1-28_n7                     | 28                | 0.2                    |
| DC_1_n28-n40                   | n28               | 0.2                    |
| DC_1-28_n40                    | 28                | 0.2                    |
| DC_1-28_n77                    | 28                | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1_n28-n77                   | 1                 | 0.2                    |
|                                | n28               | 0.2                    |
|                                | n77               | 0.5                    |
|                                | n77               | 0.5                    |
| DC_1-28_n78<br>DC_1_n28-n78    | 28 or n28         | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1_n28-n79                   | 1                 | 0.3                    |
|                                | 28                | 0.3                    |
| DC_1-32_n78                    | n78               | 0.5                    |
| DC_1-41_n3                     | 41                | 0.3/0.5 <sup>4</sup>   |
| DC_1-41_n28                    | n28               | 0.2                    |
| DC_1-41_n77                    | n77               | 0.5                    |
| DC_1-41_n78<br>DC_1_n41-n78    | n78               | 0.5                    |
| DC_1-42_n28                    | 42                | 0.5                    |
|                                | n28               | 0.5                    |
| DC_1-42_n77                    | 1                 | 0.2                    |
|                                | 42                | 0.5                    |
|                                | n77               | 0.5                    |
| DC_1-42_n78                    | 1                 | 0.2                    |
|                                | 42                | 0.5                    |
|                                | n78               | 0.5                    |
| DC_1-42_n79                    | 42                | 0.5                    |
| DC_1_n75-n78                   | n78               | 0.5                    |
| DC_1_n77-n79                   | 1                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1_SUL_n77-n80               | 1                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1_SUL_n77-n84               | 1                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1_n78-n79                   | n78               | 0.5                    |

| Inter-band EN-DC configuration              | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|---------------------------------------------|-------------------|------------------------|
| DC_1_SUL_n78-n80                            | 1                 | 0.2                    |
|                                             | n78               | 0.5                    |
| DC_1-SUL_n78-n84                            | n78               | 0.5                    |
| DC_2-4_n38                                  | 2                 | 0.3                    |
|                                             | 4                 | 0.5                    |
|                                             | n38               | 0.5                    |
| DC_2-4_n41                                  | 2                 | 0.3                    |
|                                             | 4                 | 0.5                    |
|                                             | n41               | 0.5                    |
| DC_2-5_n66<br>DC_2-5-5_n66                  | 2                 | 0.3                    |
|                                             | n66               | 0.3                    |
| DC_2-7_n38<br>DC_2-2-7_n38                  | n38               | 0.2                    |
|                                             |                   |                        |
| DC_2-7_n66<br>DC_2-7-7_n66                  | 2                 | 0.3                    |
|                                             | 7                 | 0.5                    |
|                                             | n66               | 0.5                    |
| DC_2-7_n71                                  | n71               | 0.2                    |
| DC_2_n7-n78                                 | 2                 | 0.2                    |
|                                             | n7                | 0.5                    |
|                                             | n78               | 0.5                    |
| DC_2-12_n66, DC_2-2-12_n66                  | 2                 | 0.3                    |
|                                             | 12                | 0.5                    |
|                                             | n66               | 0.3                    |
| DC_2-13_n66<br>DC_2-2-13_n66                | 2                 | 0.3                    |
|                                             | n66               | 0.3                    |
| DC_2-14_n66<br>DC_2-2-14_n66                | 2                 | 0.3                    |
|                                             | n66               | 0.3                    |
| DC_2-29_n66<br>DC_2-2-29_n66                | 2                 | 0.3                    |
|                                             | n66               | 0.3                    |
| DC_2-30_n2                                  | 2                 | 0.5                    |
|                                             | 30                | 0.3                    |
|                                             | n2                | 0.5                    |
| DC_2-30_n5, DC_2-2-30_n5                    | 2                 | 0.4                    |
|                                             | 30                | 0.5                    |
| DC_2-30_n66, DC_2-2-30_n66                  | 2                 | 0.4                    |
|                                             | 30                | 0.5                    |
|                                             | n66               | 0.4                    |
| DC_2_n38-n78                                | 2                 | 0.5                    |
|                                             | n7                | 0.5                    |
|                                             | n78               | 0.5                    |
| DC_2_n41-n66                                | 2                 | 0.3                    |
|                                             | n41               | 0.5                    |
|                                             | n66               | 0.5                    |
| DC_2-48_n12                                 | 2                 | 0.2                    |
|                                             | 48                | 0.5                    |
| DC_2-48_n66                                 | 2                 | 0.3                    |
|                                             | 48                | 0.5                    |
|                                             | n66               | 0.3                    |
| DC_2-48_n71                                 | 2                 | 0.2                    |
|                                             | 48                | 0.5                    |
| DC_2-66_n2                                  | 2                 | 0.3                    |
|                                             | 66                | 0.3                    |
|                                             | n2                | 0.3                    |
| DC_2-66_n5<br>DC_2-2-66_n5<br>DC_2-66-66_n5 | 2                 | 0.3                    |

| Inter-band EN-DC configuration                               | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------------------------------------|-------------------|------------------------|
| DC_2-2-66-66_n5<br>DC_2-66-66-66_n5                          |                   |                        |
|                                                              | 66                | 0.3                    |
| DC_2-66_n12                                                  | 2                 | 0.3                    |
|                                                              | 66                | 0.3                    |
|                                                              | n12               | 0.5                    |
| DC_2-66_n25                                                  | 2                 | 0.3                    |
|                                                              | 66                | 0.3                    |
|                                                              | n25               | 0.3                    |
| DC_2-66_n38<br>DC_2-2-66_n38<br>DC_2-66-66_n38               | 2                 | 0.3                    |
|                                                              | 66                | 0.5                    |
|                                                              | n38               | 0.5                    |
| DC_2-66_n41                                                  | 2                 | 0.3                    |
|                                                              | 66                | 0.5                    |
|                                                              | n41               | 0.5 <sup>1</sup>       |
|                                                              |                   | 1 <sup>2</sup>         |
| DC_2-66_n48<br>DC_2-66-66_n48                                | 2                 | 0.3                    |
|                                                              | 66                | 0.3                    |
|                                                              | n48               | 0.5                    |
| DC_2-66_n66                                                  | 2                 | 0.3                    |
|                                                              | 66                | 0.3                    |
|                                                              | n66               | 0.3                    |
| DC_2-66_n71<br>DC_2_n66-n71                                  | 2                 | 0.3                    |
|                                                              | 66                | 0.3                    |
| DC_2-66_n78<br>DC_2-66-66_n78<br>DC_2_n66-n78                | 2                 | 0.3                    |
|                                                              | 66                | 0.3                    |
|                                                              | n78               | 0.5                    |
| DC_2-71_n66<br>DC_2-2-71_n66                                 | 2                 | 0.3                    |
|                                                              | n66               | 0.3                    |
| DC_2-71_n78<br>DC_2-2-71_n78                                 | 2                 | 0.2                    |
|                                                              | 71                | 0.2                    |
|                                                              | n78               | 0.5                    |
| DC_3_n1-n28                                                  | n28               | 0.2                    |
| DC_3_n1-n77                                                  | 3                 | 0.2                    |
|                                                              | n1                | 0.2                    |
|                                                              | n77               | 0.5                    |
| DC_3_n1-n78                                                  | 3                 | 0.2                    |
|                                                              | n1                | 0.2                    |
|                                                              | n78               | 0.5                    |
| DC_3_n3-n77                                                  | 3                 | 0.2                    |
|                                                              | n3                | 0.2                    |
|                                                              | n77               | 0.5                    |
| DC_3_n3-n78                                                  | 3                 | 0.2                    |
|                                                              | n3                | 0.2                    |
|                                                              | n78               | 0.5                    |
| DC_3-5_n78                                                   | 3                 | 0.2                    |
|                                                              | 5                 | 0.2                    |
|                                                              | n78               | 0.5                    |
| DC_3-7_n40                                                   | 7                 | 0.3                    |
|                                                              | n40               | 0.8                    |
| DC_3-7_n77<br>DC_3-3-7_n77<br>DC_3-7-7_n77<br>DC_3-3-7-7_n77 | 3                 | 0.2                    |
|                                                              | 7                 | 0.2                    |
|                                                              | n77               | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_3-7_n8                      | n8                | 0.2                    |
| DC_3-7_n78                     | 3                 | 0.2                    |
| DC_3-7-7_n78                   |                   |                        |
| DC_3-3-7_n78                   |                   |                        |
| DC_3-3-7-7_n78                 |                   |                        |
| DC_3_n7-n78                    |                   |                        |
|                                | 7 or n7           | 0.2                    |
|                                | n78               | 0.5                    |
| DC_3-8_n28                     | 8                 | 0.2                    |
|                                | n28               | 0.1                    |
| DC_3-8_n77                     | 3                 | 0.2                    |
|                                | 8                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_3-8_n78                     | 3                 | 0.2                    |
| DC_3-3-8_n78                   |                   |                        |
| DC_3_n8-n78                    |                   |                        |
|                                | 8 or n8           | 0.2                    |
|                                | n78               | 0.5                    |
| DC_3-18-n77                    | 3                 | 0.2                    |
|                                | 18                | 0                      |
|                                | n77               | 0.5                    |
| DC_3-18-n78                    | 3                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_3-19_n77                    | 3                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_3-19_n78                    | 3                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_3-20_n28                    | 20                | 0.1                    |
|                                | n28               | 0.1                    |
| DC_3-20_n38                    | 20                | 0.2                    |
| DC_3-20_n78                    | 3                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_3_n20-n78                   | 3                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_3-21_n77                    | 3                 | 0.3                    |
|                                | 21                | 0.5                    |
|                                | n77               | 0.5                    |
| DC_3-21_n78                    | 3                 | 0.3                    |
|                                | 21                | 0.5                    |
|                                | n78               | 0.5                    |
| DC_3-21_n79                    | 3                 | 0.3                    |
|                                | 21                | 0.5                    |
| DC_3-28_n5                     | 28                | 0.1                    |
|                                | n5                | 0.1                    |
| DC_3-28_n41                    | n41               | $0^3/0.5^4$            |
| DC_3-28_n77                    | 3                 | 0.2                    |
| DC_3_n28-n77                   |                   |                        |
|                                | 28 or n28         | 0.2                    |
|                                | n77               | 0.5                    |
| DC_3-28_n78                    | 3                 | 0.2                    |
| DC_3_n28-n78                   |                   |                        |
|                                | n78               | 0.5                    |
| DC_3-32_n78                    | 3                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_3-38_n78                    | 3                 | 0.2                    |
|                                | 38                | 0.4                    |
|                                | n78               | 0.5                    |
| DC_3_n40-n41                   | n41               | $0^3$                  |
|                                |                   | $0.5^4$                |
| DC_3-41_n28                    | 3                 | 0                      |
|                                | 41                | $0^3/0.5^4$            |
|                                | n28               | 0                      |
| DC_3-41_n41                    | 41                | $0^3$                  |
|                                |                   | $0.5^4$                |

| Inter-band EN-DC configuration                                 | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|----------------------------------------------------------------|-------------------|----------------------------------|
| DC_3-(n)41                                                     | n41               | 0 <sup>3</sup>                   |
|                                                                |                   | 0.5 <sup>4</sup>                 |
|                                                                | 41                | 0 <sup>3</sup>                   |
|                                                                |                   | 0.5 <sup>4</sup>                 |
| DC_3-41-n77                                                    | n41               | 0 <sup>3</sup>                   |
|                                                                |                   | 0.5 <sup>4</sup>                 |
|                                                                | 3                 | 0.2                              |
|                                                                |                   | 0 <sup>3</sup>                   |
| DC_3-41-n78<br>DC_3_n41-n78                                    | 41                | 0.5 <sup>4</sup>                 |
|                                                                |                   | 0 <sup>3</sup>                   |
|                                                                | n77               | 0.5                              |
|                                                                |                   | 0.2                              |
| DC_3-41-n79,<br>DC_3_n41-n79                                   | 3                 | 0.2                              |
|                                                                |                   | 0 <sup>3</sup>                   |
|                                                                | 41 or n41         | 0.5 <sup>4</sup>                 |
|                                                                |                   | 0 <sup>3</sup>                   |
| DC_3_SUL_n41-n80                                               | n41               | 0 <sup>3</sup> /0.5 <sup>4</sup> |
| DC_3-42_n28                                                    | 3                 | 0.2                              |
|                                                                | 42                | 0.5                              |
|                                                                | n28               | 0.5                              |
| DC_3-42_n77                                                    | 3                 | 0.2                              |
|                                                                | 42                | 0.5                              |
|                                                                | n77               | 0.5                              |
| DC_3-42_n78                                                    | 3                 | 0.2                              |
|                                                                | 42                | 0.5                              |
|                                                                | n78               | 0.5                              |
| DC_3-42_n79                                                    | 3                 | 0.2                              |
|                                                                | 42                | 0.5                              |
| DC_3_n75-n78                                                   | 3                 | 0.2                              |
|                                                                | n78               | 0.5                              |
| DC_3_n77-n79                                                   | 3                 | 0.2                              |
|                                                                | n77               | 0.5                              |
| DC_3_SUL_n77-n80                                               | 3                 | 0.2                              |
|                                                                | n77               | 0.5                              |
| DC_3_SUL_n77-n84                                               | 3                 | 0.2                              |
|                                                                | n77               | 0.5                              |
| DC_3_n78-n79                                                   | 3                 | 0.2                              |
|                                                                | n78               | 0.5                              |
| DC_3-SUL_n78-n80                                               | 3                 | 0.2                              |
|                                                                | n78               | 0.5                              |
| DC_3-SUL_n78-n82                                               | 3                 | 0.2                              |
|                                                                | n78               | 0.5                              |
| DC_3_SUL_n78-n84                                               | 3                 | 0.2                              |
|                                                                | n78               | 0.5                              |
| DC_5-7_n71                                                     | n71               | 0.2                              |
| DC_5-7_n78, DC_5-7-<br>7_n78 , DC_5_n7-n78                     | 5                 | 0.2                              |
|                                                                | 7 or n7           | 0.2                              |
|                                                                | n78               | 0.5                              |
| DC_5_(n)12                                                     | 5                 | 0.5                              |
|                                                                | 12                | 0.3                              |
|                                                                | n12               | 0.3                              |
|                                                                |                   | 0.3                              |
| DC_5_30_n66                                                    | 30                | 0.5                              |
|                                                                | n66               | 0.4                              |
| DC_5-66_n2<br>DC_5-5-66_n2<br>DC_5-66-66_n2<br>DC_5-5-66-66_n2 | 66                | 0.3                              |
|                                                                | n2                | 0.3                              |
| DC_5-66_n78                                                    | 5                 | 0.2                              |
|                                                                | 66                | 0.2                              |

| Inter-band EN-DC configuration            | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|-------------------------------------------|-------------------|------------------------|
|                                           | n78               | 0.5                    |
| DC_7_n1-n78                               | 7                 | 0.2                    |
|                                           | n1                | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_7_n3-n78                               | 7                 | 0.2                    |
|                                           | n3                | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_7_n7-n78                               | 7                 | 0.5                    |
|                                           | n7                | 0.5                    |
|                                           | n78               | 0.5                    |
| DC_7-8_n1<br>DC_7-7-8_n1                  | 8                 | 0.2                    |
| DC_7_n8-n40                               | n8                | 0.2                    |
|                                           | n40               | 0.5                    |
| DC_7-8_n3                                 | 8                 | 0.2                    |
| DC_7-8_n77                                | 8                 | 0.2                    |
|                                           | n77               | 0.5                    |
| DC_7-8_n78<br>DC_7-7-8_n78<br>DC_7_n8-n78 | 8 or n8           | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_7-13_n66                               | 7                 | 0.5                    |
|                                           | n66               | 0.5                    |
| DC_7-20_n28                               | 20                | 0.2                    |
|                                           | n28               | 0.2                    |
| DC_7-20_n78                               | n78               | 0.5                    |
| DC_7_n28-n40                              | n40               | 0.5                    |
| DC_7-28_n40                               | n40               | 0.5                    |
| DC_7-28_n78                               | n78               | 0.5                    |
| DC_7_n28-n78                              | n78               | 0.5                    |
| DC_7-40_n1<br>DC_7_n1-n40                 | 7                 | 0.3                    |
|                                           | 40 or n40         | 0.8                    |
| DC_7-46_n78                               | n78               | 0.5                    |
| DC_7-66_n38                               | n38               | 0.2                    |
| DC_7-66_n66<br>DC_7-7-66_n66              | 7                 | 0.5                    |
|                                           | 66                | 0.5                    |
|                                           | n66               | 0.5                    |
| DC_7_n66-n78<br>DC_7-7_n66-n78            | 7                 | 0.5                    |
|                                           | n66               | 0.5                    |
|                                           | n78               | 0.5                    |
| DC_7-66_n71<br>DC_7-66-66_n71             | 7                 | 0.5                    |
|                                           | 66                | 0.5                    |
|                                           | n71               | 0.1                    |
| DC_7_SUL_n78-n80                          | 7                 | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_8_n1-n78                               | 8                 | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_8_n3-n28                               | 8                 | 0.2                    |
|                                           | n28               | 0.1                    |
| DC_8-11_n3                                | 11                | 0.3                    |
|                                           | n3                | 0.5                    |
| DC_8-11_n77                               | 8                 | 0.2                    |
|                                           | n77               | 0.5                    |
| DC_8-11_n78                               | 8                 | 0.2                    |
|                                           | n78               | 0.2                    |
| DC_8-20_n78                               | 8                 | 0.2                    |
|                                           | n78               | 0.5                    |
| DC_8-42_n28                               | 8                 | 0.2                    |
|                                           | 42                | 0.5                    |
|                                           | n28               | 0.5                    |

| Inter-band EN-DC configuration  | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|---------------------------------|-------------------|----------------------------------|
| DC_8-42_n77                     | 8                 | 0.2                              |
|                                 | 42                | 0.5                              |
|                                 | n77               | 0.5                              |
| DC_8_SUL_n78-n80                | 8                 | 0.2                              |
|                                 | n78               | 0.5                              |
| DC_8_n28-n77                    | 8                 | 0.2                              |
|                                 | n28               | 0.2                              |
|                                 | n77               | 0.5                              |
| DC_8A-SUL_n78-n81               | 8                 | 0.2                              |
|                                 | n78               | 0.2                              |
| DC_11-18_n77                    | n77               | 0.5                              |
| DC_11-18_n78                    | n78               | 0.5                              |
| DC_12_(n)5                      | 5                 | 0.5                              |
|                                 | 12                | 0.3                              |
|                                 | n5                | 0.5                              |
| DC_12_n7-n78                    | 12                | 0.2                              |
|                                 | n7                | 0.5                              |
|                                 | n78               | 0.5                              |
| DC_12-30_n2                     | 30                | 0.5                              |
|                                 | n2                | 0.4                              |
| DC_12-30_n66                    | 12                | 0.5                              |
|                                 | 30                | 0.5                              |
|                                 | n66               | 0.4                              |
| DC_12-66_n2                     | 12                | 0.5                              |
|                                 | 66                | 0.3                              |
|                                 | n2                | 0.3                              |
| DC_12-66_n25                    | 12                | 0.5                              |
|                                 | 66                | 0.3                              |
|                                 | n25               | 0.3                              |
| DC_13-48_n2                     | 48                | 0.5                              |
|                                 | n2                | 0.2                              |
| DC_13-48_n66                    | 48                | 0.5                              |
|                                 | n66               | 0.2                              |
| DC_13-66_n2<br>DC_13-66-66_n2   | 66                | 0.3                              |
|                                 | n2                | 0.3                              |
| DC_13-66_n48<br>DC_13-66-66_n48 | 66                | 0.2                              |
|                                 | n48               | 0.5                              |
| DC_14-66_n2<br>DC_14-66-66_n2   | 66                | 0.3                              |
|                                 | n2                | 0.3                              |
| DC_18_n3-n77                    | n3                | 0.2                              |
|                                 | n77               | 0.5                              |
| DC_18_n3-n78                    | 18                | 0                                |
|                                 | n3                | 0.2                              |
|                                 | n78               | 0.5                              |
| DC_18-28_n77                    | n77               | 0.5                              |
| DC_18-28_n78                    | n78               | 0.5                              |
| DC_18-41_n3                     | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
| DC_18-41_n77                    | n77               | 0.5                              |
| DC_18-41_n78                    | n78               | 0.5                              |
| DC_18-42_n77                    | 42                | 0.5                              |
|                                 | n77               | 0.5                              |
| DC_18-42_n78                    | 42                | 0.5                              |
|                                 | n78               | 0.5                              |
| DC_18-42_n79                    | 42                | 0.5                              |
| DC_19-21_n77                    | n77               | 0.5                              |
| DC_19-21_n78                    | n78               | 0.5                              |
| DC_19-42_n77                    | 42                | 0.5                              |
|                                 | n77               | 0.5                              |
| DC_19-42_n78                    | 42                | 0.5                              |
|                                 | n78               | 0.5                              |
|                                 | 42                | 0.5                              |
| DC_19-42_n79                    | 42                | 0.5                              |

| Inter-band EN-DC configuration                                   | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|------------------------------------------------------------------|-------------------|------------------------|
| DC_19_n77-n79                                                    | n77               | 0.5                    |
| DC_19_n78-n79                                                    | n78               | 0.5                    |
| DC_20_n1-n28                                                     | n1                | 0.2                    |
|                                                                  | n28               | 0.2                    |
| DC_20_n1-n78                                                     | n78               | 0.5                    |
| DC_20_n3-n78                                                     | n3                | 0.2                    |
|                                                                  | n78               | 0.5                    |
| DC_20_n7-n28                                                     | 20                | 0.2                    |
|                                                                  | n28               | 0.2                    |
| DC_20_n28-n75                                                    | n28               | 0.2                    |
| DC_20_n28-n78                                                    | 20                | 0.2                    |
|                                                                  | n28               | 0.2                    |
|                                                                  | n78               | 0.5                    |
| DC_20-32_n78                                                     | n78               | 0.5                    |
| DC_20-38_n78                                                     | 38                | 0.4                    |
|                                                                  | n78               | 0.5                    |
| DC_20_n41-n78                                                    | n78               | 0.5                    |
| DC_20-(n)41                                                      | 20                | 0.3                    |
|                                                                  | 41                | 0.3                    |
|                                                                  | n41               | 0.3                    |
| DC_20_n75-n78                                                    | n78               | 0.5                    |
| DC_20_n76-n78                                                    | n78               | 0.5                    |
| DC_20_SUL_n78-n80                                                | n78               | 0.5                    |
| DC_20_SUL_n78-n82                                                | n78               | 0.5                    |
| DC_20_SUL_n78-n83                                                | 20                | 0.2                    |
|                                                                  | n78               | 0.5                    |
| DC_20_n78-n92                                                    | n78               | 0.5                    |
| DC_21-42_n77                                                     | 42                | 0.5                    |
|                                                                  | n77               | 0.5                    |
| DC_21-42_n78                                                     | 42                | 0.5                    |
|                                                                  | n78               | 0.5                    |
| DC_21-42_n79                                                     | 42                | 0.5                    |
| DC_21_n77-n79                                                    | n77               | 0.5                    |
| DC_21_n78-n79                                                    | n78               | 0.5                    |
| DC_25-41_n41<br>DC_25_(n)41<br>DC_25-25-41_n41<br>DC_25-25_(n)41 | 41                | 0 <sup>1</sup>         |
|                                                                  |                   | 0.5 <sup>2</sup>       |
|                                                                  |                   | 0 <sup>1</sup>         |
|                                                                  | n41               | 0.5 <sup>2</sup>       |
| DC_28-SUL_n78-n83                                                | 28                | 0.2                    |
|                                                                  | n78               | 0.5                    |
| DC_28_n3-n77                                                     | 28                | 0.2                    |
|                                                                  | n3                | 0.2                    |
|                                                                  | n77               | 0.5                    |
| DC_28_n3-n78                                                     | 28                | 0                      |
|                                                                  | n3                | 0.2                    |
|                                                                  | n78               | 0.5                    |
| DC_28_n7-n78                                                     | n78               | 0.5                    |
| DC_28_n40-n78                                                    | 28                | 0.2                    |
|                                                                  | n40               | 0.4 <sup>5</sup>       |
|                                                                  | n78               | 0.5 <sup>5</sup>       |
| DC_28-41_n77                                                     | 28                | 0.2                    |
|                                                                  | n77               | 0.5                    |
| DC_28-41_n78                                                     | 28                | 0.2                    |
|                                                                  | n78               | 0.5                    |
| DC_28-41_n79                                                     | n79               | 0.5                    |
| DC_28-42_n77                                                     | 28                | 0.2                    |
|                                                                  | 42                | 0.5                    |
|                                                                  | n77               | 0.5                    |
| DC_28-42_n78                                                     | 28                | 0.2                    |
|                                                                  | 42                | 0.5                    |
|                                                                  | n78               | 0.5                    |

| Inter-band EN-DC configuration                     | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|----------------------------------------------------|-------------------|------------------------|
| DC_28-42_n79                                       | 28                | 0.2                    |
|                                                    | 42                | 0.5                    |
| DC_29-30_n2                                        | 30                | 0.3                    |
|                                                    | n2                | 0.5                    |
| DC_29-30_n66                                       | 30                | 0.5                    |
|                                                    | n66               | 0.4                    |
| DC_29-66_n2<br>DC_29-66-66_n2                      | 66                | 0.3                    |
|                                                    | n2                | 0.3                    |
| DC_30-66_n2                                        | 30                | 0.5                    |
|                                                    | 66                | 0.4                    |
|                                                    | n2                | 0.4                    |
| DC_30-66_n5<br>DC_30-66-66_n5<br>DC_30-66-66-66_n5 | 66                | 0.4                    |
|                                                    | n5                | 0.5                    |
| DC_30-66_n66                                       | 30                | 0.5                    |
|                                                    | 66                | 0.5                    |
|                                                    | n66               | 0.4                    |
| DC_39_n40-n79                                      | 39                | 0.3                    |
|                                                    | n40               | 0.3                    |
|                                                    | n79               | 0.5                    |
| DC_39_n41-n79                                      | 39                | 0.2                    |
|                                                    | n41               | 0.2                    |
|                                                    | n79               | 0.5                    |
| DC_41_n3-n77                                       | 41                | $0^3/0.5^4$            |
|                                                    | n3                | 0.2                    |
|                                                    | n77               | 0.5                    |
| DC_41_n3-n78                                       | 41                | $0^3/0.5^4$            |
|                                                    | n3                | 0.2                    |
|                                                    | n78               | 0.5                    |
| DC_41_n28-n77                                      | n28               | 0.2                    |
|                                                    | n77               | 0.5                    |
| DC_41_n28-n78                                      | n28               | 0.2                    |
|                                                    | n78               | 0.5                    |
| DC_(n)41-n78                                       | n78               | 0.5                    |
| DC_41-42_n77                                       | 42                | 0.5                    |
|                                                    | n77               | 0.5                    |
| DC_41-42_n78                                       | 42                | 0.5                    |
|                                                    | n78               | 0.5                    |
| DC_41-42_n79                                       | 42                | 0.5                    |
| DC_42_n28-n77                                      | 42                | 0.2                    |
|                                                    | n28               | 0.5                    |
|                                                    | n77               | 0.5                    |
| DC_46-66_n41                                       | 66                | 0.5                    |
|                                                    | n41               | $0.5^1$                |
|                                                    |                   | $1^2$                  |
| DC_48-66_n5                                        | 48                | 0.5                    |
|                                                    | 66                | 0.2                    |
| DC_48-66_n12                                       | 48                | 0.5                    |
|                                                    | 66                | 0.2                    |
| DC_48-66_n71                                       | 48                | 0.5                    |
|                                                    | 66                | 0.2                    |
| DC_66_n7-n78                                       | 66                | 0.2                    |
|                                                    | n7                | 0.5                    |
|                                                    | n78               | 0.5                    |
| DC_66_n25-n41                                      | 66                | 0.5                    |
|                                                    | n25               | 0.5                    |
|                                                    | n41               | $0.5^1$                |
|                                                    |                   | $1^2$                  |
| DC_66_n25-n71                                      | 66                | 0.3                    |
|                                                    | n25               | 0.5                    |
| DC_66_n38-n78                                      | 66                | 0.5                    |
|                                                    | n38               | 0.5                    |

| Inter-band EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
| DC_66_n41-n71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | n78               | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 66                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n41               | 0.5 <sup>1</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   | 1 <sup>2</sup>         |
| DC_66_n66-n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | n71               | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 66                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n66               | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n78               | 0.5                    |
| DC_66-71_n38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 66                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 71                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n38               | 0.5                    |
| DC_66-71_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 66                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 71                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n78               | 0.5                    |
| DC_66-SUL_n78-n86                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 66                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | n78               | 0.5                    |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 – 2690 MHz.<br>NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 – 2545 MHz.<br>NOTE 3: The requirement is applied for UE transmitting on the frequency range of 2515 - 2690 MHz.<br>NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.<br>NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one NR band and without simultaneous Rx/Tx. |                   |                        |

### 7.3B.3.3.3 $\Delta R_{IB,c}$ for EN-DC four bands

**Table 7.3B.3.3.3-1:  $\Delta R_{IB,c}$  due to EN-DC (four bands)**

| Inter-band EN-DC configuration                  | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|-------------------------------------------------|-------------------|------------------------|
| DC_1-3-5_n78                                    | 1                 | 0.2                    |
|                                                 | 3                 | 0.2                    |
|                                                 | n78               | 0.5                    |
| DC_1-3-7_n28                                    | n28               | 0.2                    |
| DC_1-3-7_n40                                    | 7                 | 0.3                    |
|                                                 | n40               | 0.8                    |
| DC_1-3-7_n78<br>DC_1-3-7-7_n78<br>DC_1-3_n7-n78 | 1                 | 0.3                    |
|                                                 | 3                 | 0.3                    |
|                                                 | 7 or n7           | 0.3                    |
|                                                 | n78               | 0.5                    |
| DC_1-3-8_n28                                    | 8                 | 0.2                    |
|                                                 | n28               | 0.2                    |
| DC_1-3-8_n77                                    | 1                 | 0.2                    |
|                                                 | 3                 | 0.2                    |
|                                                 | 8                 | 0.2                    |
|                                                 | n77               | 0.5                    |
| DC_1-3-8_n78                                    | 1                 | 0.2                    |
|                                                 | 3                 | 0.2                    |
|                                                 | 8                 | 0.2                    |
|                                                 | n78               | 0.5                    |
| DC_1-3-18_n77                                   | 1                 | 0.2                    |
|                                                 | 3                 | 0.2                    |
|                                                 | n77               | 0.5                    |
| DC_1-3-18_n78                                   | 1                 | 0.2                    |
|                                                 | 3                 | 0.2                    |
|                                                 | n78               | 0.5                    |
| DC_1-3-19_n78                                   | 1                 | 0.2                    |

| Inter-band EN-DC configuration  | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|---------------------------------|-------------------|----------------------------------|
|                                 | 3                 | 0.2                              |
|                                 | n78               | 0.5                              |
| DC_1-3-20_n28                   | 20                | 0.2                              |
|                                 | n28               | 0.2                              |
| DC_1-3-20_n41                   | n41               | 0 <sup>3</sup>                   |
|                                 |                   | 0.5 <sup>4</sup>                 |
| DC_1-3-20_n78                   | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | n78               | 0.5                              |
| DC_1-3-21_n77                   | 1                 | 0.2                              |
|                                 | 3                 | 0.3                              |
|                                 | 21                | 0.5                              |
|                                 | n77               | 0.5                              |
| DC_1-3-21_n78                   | 1                 | 0.2                              |
|                                 | 3                 | 0.3                              |
|                                 | 21                | 0.5                              |
|                                 | n78               | 0.5                              |
| DC_1-3-21_n79                   | 3                 | 0.3                              |
|                                 | 21                | 0.5                              |
| DC_1-3-28_n5                    | 28                | 0.2                              |
|                                 | n5                | 0.2                              |
| DC_1-3-28_n7                    | 28                | 0.2                              |
| DC_1-3-28_n40                   | 28                | 0.2                              |
| DC_1-3-28_n77<br>DC_1-3_n28-n77 | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | 28 or n28         | 0.2                              |
|                                 | n77               | 0.5                              |
| DC_1-3-28_n78<br>DC_1-3_n28-n78 | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | 28 or n28         | 0.2                              |
|                                 | n78               | 0.5                              |
| DC_1-3-28_n79                   | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | 28                | 0.2                              |
| DC_1-3-32_n78                   | n78               | 0.5                              |
| DC_1-3_n38-n78                  | 3                 | 0.2                              |
|                                 | n78               | 0.5                              |
| DC_1-3_n40-n78                  | 3                 | 0.2                              |
|                                 | n40               | 0.4 <sup>5</sup>                 |
|                                 | n78               | 0.5 <sup>5</sup>                 |
| DC_1-3-41_n28                   | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                 | n28               | 0.2                              |
| DC_1-3-41_n77                   | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | n77               | 0.5                              |
| DC_1-3-41_n78<br>DC_1-3_n41-n78 | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | n78               | 0.5                              |
| DC_1-3-41_n79                   | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
| DC_1-3-42_n77                   | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | 42                | 0.5                              |
|                                 | n77               | 0.5                              |
| DC_1-3-42_n78                   | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | 42                | 0.5                              |
|                                 | n78               | 0.5                              |
| DC_1-3-42_n79                   | 1                 | 0.2                              |
|                                 | 3                 | 0.2                              |
|                                 | 42                | 0.5                              |
| DC_1-3_n77-n79                  | 1                 | 0.2                              |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
|                                | 3                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1-3_n78-n79                 | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-3_SUL_n78-n80             | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-5-7_n78<br>DC_1-5-7-7_n78 | 1                 | 0.2                    |
|                                | 5                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-7_n3-n78                  | n78               | 0.5                    |
| DC_1-7_n7-n78                  | 1                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | n7                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-7-8_n78                   | 1                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | 8                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-7-20_n28                  | 20                | 0.2                    |
|                                | n28               | 0.2                    |
| DC_1-7-20_n78                  | 1                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | 20                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-7-28_n5                   | 28                | 0.2                    |
|                                | n5                | 0.2                    |
| DC_1-7-28_n7                   | 28                | 0.2                    |
| DC_1-7-28_n40                  | 7                 | 0.3                    |
|                                | 28                | 0.2                    |
|                                | n40               | 0.8                    |
| DC_1-7-28_n78                  | 1                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | 28                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-7_n28-n78                 | 1                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | n28               | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-8_n3-n28                  | 8                 | 0.2                    |
|                                | n28               | 0.2                    |
| DC_1-8-11_n77                  | 1                 | 0.2                    |
|                                | 8                 | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1-8-11_n78                  | 8                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-8-20_n78                  | 8                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-8_n28-n77                 | 1                 | 0.2                    |
|                                | 8                 | 0.2                    |
|                                | n28               | 0.2                    |
|                                | n77               | 0.5                    |
| DC_1-8-42_n77                  | 1                 | 0.2                    |
|                                | 8                 | 0.2                    |
|                                | 42                | 0.5                    |
|                                | n77               | 0.5                    |
|                                |                   |                        |
|                                |                   |                        |
|                                |                   |                        |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|--------------------------------|-------------------|----------------------------------|
|                                |                   |                                  |
|                                |                   |                                  |
| DC_1-11-18_n77                 | 1                 | 0.2                              |
|                                | n77               | 0.5                              |
| DC_1-11-18_n78                 | n78               | 0.5                              |
| DC_1-18_n3-n77                 | 1                 | 0.2                              |
|                                | n3                | 0.2                              |
|                                | n77               | 0.5                              |
| DC_1-18_n3-n78                 | 1                 | 0.2                              |
|                                | n3                | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-18-28_n77                 | n77               | 0.5                              |
| DC_1-18-28_n78                 | n78               | 0.5                              |
| DC_1-18-41_n3                  | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
| DC_1-18-41_n77                 | 1                 | 0.2                              |
|                                | n77               | 0.5                              |
| DC_1-18-41_n78                 | n78               | 0.5                              |
| DC_1-18-42_n77                 | 42                | 0.5                              |
|                                | n77               | 0.5                              |
| DC_1-18-42_n78                 | 42                | 0.5                              |
|                                | n78               | 0.5                              |
| DC_1-18-42_n79                 | 42                | 0.5                              |
| DC_1-19-42_n77                 | 1                 | 0.2                              |
|                                | 42                | 0.5                              |
|                                | n77               | 0.5                              |
| DC_1-19-42_n78                 | 42                | 0.5                              |
|                                | n78               | 0.5                              |
| DC_1-19-42_n79                 | 42                | 0.5                              |
| DC_1-19_n77-n79                | 1                 | 0.3                              |
|                                | 19                | 0.3                              |
|                                | n77               | 0.5                              |
| DC_1-19_n78-n79                | 1                 | 0.3                              |
|                                | 19                | 0.3                              |
|                                | n78               | 0.5                              |
| DC_1-20_n3-n78                 | n78               | 0.5                              |
| DC_1-20_n28-n78                | 20                | 0.2                              |
|                                | n28               | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-20-38_n78                 | 38                | 0.4                              |
|                                | n78               | 0.5                              |
| DC_1-20_n41-n78                | n78               | 0.5                              |
| DC_1-21-42_n77                 | 1                 | 0.2                              |
|                                | 42                | 0.5                              |
|                                | n77               | 0.5                              |
| DC_1-21-42_n78                 | 42                | 0.5                              |
|                                | n78               | 0.5                              |
| DC_1-21-42_n79                 | 42                | 0.5                              |
| DC_1-21_n77-n79                | n77               | 0.5                              |
| DC_1-21_n78-n79                | n78               | 0.5                              |
| DC_1-28_n3-n77                 | 1                 | 0.2                              |
|                                | 28                | 0.2                              |
|                                | n3                | 0.2                              |
|                                | n77               | 0.5                              |
| DC_1-28_n3-n78                 | 1                 | 0.2                              |
|                                | 28                | 0.2                              |
|                                | n3                | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-28_n7-n78                 | 1                 | 0.2                              |
|                                | 28                | 0.2                              |
|                                | n7                | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-28_n40-n78                | 28                | 0.2                              |
|                                | n40               | 0.4 <sup>5</sup>                 |

| Inter-band EN-DC configuration     | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|------------------------------------|-------------------|----------------------------------|
| DC_1-28-42_n77                     | n78               | 0.5 <sup>5</sup>                 |
|                                    | 1                 | 0.2                              |
|                                    | 28                | 0.2                              |
|                                    | 42                | 0.5                              |
| DC_1-28-42_n78                     | n77               | 0.5                              |
|                                    | 28                | 0.2                              |
|                                    | 42                | 0.5                              |
| DC_1-28-42_n79                     | n78               | 0.5                              |
|                                    | 28                | 0.2                              |
| DC_1-41_n3-n77                     | 42                | 0.5                              |
|                                    | 1                 | 0.2                              |
|                                    | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                    | n3                | 0.2                              |
| DC_1-41_n3-n78                     | n77               | 0.5                              |
|                                    | 1                 | 0.2                              |
|                                    | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                    | n3                | 0.2                              |
| DC_1-41_n28-n77                    | n78               | 0.5                              |
|                                    | 1                 | 0.2                              |
|                                    | n28               | 0.2                              |
| DC_1-41_n28-n78                    | n77               | 0.5                              |
|                                    | n28               | 0.2                              |
| DC_1-41-42_n77                     | n78               | 0.5                              |
|                                    | 42                | 0.5                              |
| DC_1-41-42_n78                     | n77               | 0.5                              |
|                                    | 42                | 0.5                              |
| DC_1-41-42_n79                     | n78               | 0.5                              |
|                                    | 42                | 0.5                              |
| DC_1-42_n77-n79                    | 1                 | 0.2                              |
|                                    | 42                | 0.5                              |
|                                    | n77               | 0.5                              |
| DC_1-42_n78-n79                    | 1                 | 0.2                              |
|                                    | 42                | 0.5                              |
|                                    | n78               | 0.5                              |
| DC_2-5_(n)12                       | 5                 | 0.5                              |
|                                    | 12                | 0.3                              |
|                                    | n12               | 0.3                              |
| DC_2-5-48_n12                      | 2                 | 0.2                              |
|                                    | 5                 | 0.5                              |
|                                    | 48                | 0.5                              |
|                                    | n12               | 0.3                              |
| DC_2-5-48_n71                      | 2                 | 0.2                              |
|                                    | 48                | 0.5                              |
| DC_2-5-66_n2                       | 2                 | 0.3                              |
|                                    | 66                | 0.3                              |
|                                    | n2                | 0.3                              |
| DC_2-5-66_n5                       | 2                 | 0.3                              |
|                                    | 66                | 0.3                              |
| DC_2-5-66_n12                      | 2                 | 0.2                              |
|                                    | 5                 | 0.5                              |
|                                    | 66                | 0.5                              |
|                                    | n12               | 0.3                              |
| DC_2-5-66_n66                      | 2                 | 0.3                              |
|                                    | 66                | 0.3                              |
|                                    | n66               | 0.3                              |
| DC_2-5-66_n71                      | 2                 | 0.3                              |
|                                    | 66                | 0.3                              |
| DC_2-7-13_n66                      | 2                 | 0.3                              |
|                                    | 7                 | 0.5                              |
|                                    | n66               | 0.5                              |
| DC_2-7_n38-n78<br>DC_2-7-7_n38-n78 | 2                 | 0.2                              |
|                                    | n78               | 0.5                              |

| Inter-band EN-DC configuration                                             | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|----------------------------------------------------------------------------|-------------------|------------------------|
| DC_2-7-66_n38<br>DC_2-2-7-66_n38                                           | 2                 | 0.3                    |
|                                                                            | 7                 | 0.5                    |
|                                                                            | 66                | 0.5                    |
|                                                                            | n38               | 0.5                    |
| DC_2-7-66_n66, DC_2-7-7-66_n66                                             | 2                 | 0.3                    |
|                                                                            | 7                 | 0.5                    |
|                                                                            | 66                | 0.5                    |
|                                                                            | n66               | 0.5                    |
| DC_2-7-66_n71                                                              | 2                 | 0.3                    |
|                                                                            | 7                 | 0.5                    |
|                                                                            | 66                | 0.5                    |
| DC_2-7-66_n78<br>DC_2-7-7-66_n78<br>DC_2-7-66-66_n78<br>DC_2-7-7-66-66_n78 | 2                 | 0.3                    |
|                                                                            | 66                | 0.3                    |
|                                                                            | n78               | 0.5                    |
| DC_2-7_n66-n78<br>DC_2-7-7_n66-n78                                         | 2                 | 0.3                    |
|                                                                            | 7                 | 0.5                    |
|                                                                            | n66               | 0.5                    |
|                                                                            | n78               | 0.5                    |
| DC_2-12_(n)5                                                               | 5                 | 0.5                    |
|                                                                            | 12                | 0.5                    |
| DC_2-12-30_n2                                                              | 2                 | 0.4                    |
|                                                                            | 30                | 0.5                    |
|                                                                            | n2                | 0.4                    |
| DC_2-12-30_n66                                                             | 2                 | 0.4                    |
|                                                                            | 12                | 0.5                    |
|                                                                            | 30                | 0.5                    |
|                                                                            | n66               | 0.4                    |
| DC_2-12-48_n5                                                              | 2                 | 0.3                    |
|                                                                            | 12                | 0.3                    |
|                                                                            | 48                | 0.5                    |
|                                                                            | n5                | 0.5                    |
| DC_2-12-66_n5                                                              | 2                 | 0.3                    |
|                                                                            | 12                | 0.5                    |
|                                                                            | 66                | 0.5                    |
|                                                                            | n5                | 0.3                    |
| DC_2-12-66_n2                                                              | 2                 | 0.3                    |
|                                                                            | 12                | 0.5                    |
|                                                                            | 66                | 0.3                    |
|                                                                            | n2                | 0.3                    |
| DC_2-12-66_n66                                                             | 2                 | 0.3                    |
|                                                                            | 12                | 0.5                    |
|                                                                            | 66                | 0.3                    |
|                                                                            | n66               | 0.3                    |
| DC_2-13-66_n2                                                              | 2                 | 0.3                    |
|                                                                            | 66                | 0.3                    |
|                                                                            | n2                | 0.3                    |
| DC_2-13-66_n5                                                              | 2                 | 0.3                    |
|                                                                            | 66                | 0.3                    |
| DC_2-13-66_n48                                                             | 2                 | 0.3                    |
|                                                                            | 66                | 0.3                    |
|                                                                            | n48               | 0.5                    |
| DC_2-13-66_n66                                                             | 2                 | 0.3                    |
|                                                                            | 66                | 0.3                    |
|                                                                            | n66               | 0.3                    |
| DC_2-14-66_n2<br>DC_2-14-66-66_n2                                          | 2                 | 0.3                    |
|                                                                            | 66                | 0.3                    |
|                                                                            | n2                | 0.3                    |

| Inter-band EN-DC configuration     | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|------------------------------------|-------------------|------------------------|
| DC_2-14-66_n66<br>DC_2-2-14-66_n66 | 2                 | 0.3                    |
|                                    | 66                | 0.3                    |
|                                    | n66               | 0.3                    |
| DC_2-29-30_n2                      | 2                 | 0.4                    |
|                                    | 30                | 0.5                    |
|                                    | n2                | 0.4                    |
| DC_2-29-66_n2<br>DC_2-29-66-66_n2  | 2                 | 0.3                    |
|                                    | 66                | 0.3                    |
|                                    | n2                | 0.3                    |
| DC_2-29-66_n66                     | 2                 | 0.3                    |
|                                    | 66                | 0.3                    |
|                                    | n66               | 0.3                    |
| DC_2-30-66_n2<br>DC_2-30-66-66_n2  | 2                 | 0.4                    |
|                                    | 30                | 0.5                    |
|                                    | 66                | 0.4                    |
|                                    | n2                | 0.4                    |
| DC_2-30-66_n5                      | 2                 | 0.4                    |
|                                    | 30                | 0.5                    |
|                                    | 66                | 0.4                    |
| DC_2-30-66_n66                     | 2                 | 0.4                    |
|                                    | 30                | 0.5                    |
|                                    | 66                | 0.4                    |
|                                    | n66               | 0.4                    |
| DC_2-46_n41-n66                    | 2                 | 0.3                    |
|                                    | n41               | 0.5                    |
|                                    | n66               | 0.5                    |
| DC_2-46_n41-n71                    | n71               | 0.2                    |
| DC_2-46-48_n5                      | 2                 | 0.2                    |
|                                    | 48                | 0.5                    |
| DC_2-46-48_n66                     | 2                 | 0.3                    |
|                                    | 48                | 0.5                    |
|                                    | n66               | 0.3                    |
| DC_2-46-66_n41                     | 2                 | 0.3                    |
|                                    | 66                | 0.5                    |
|                                    | n41               | 0.5 <sup>1</sup>       |
| DC_2-48_(n)5                       | 2                 | 0.2                    |
|                                    | 48                | 0.5                    |
| DC_2-48-66_n5                      | 2                 | 0.3                    |
|                                    | 48                | 0.5                    |
|                                    | 66                | 0.3                    |
| DC_2-48-66_n12                     | 2                 | 0.3                    |
|                                    | 48                | 0.5                    |
|                                    | 66                | 0.3                    |
| DC_2-48-66_n71                     | 2                 | 0.3                    |
|                                    | 48                | 0.5                    |
|                                    | 66                | 0.3                    |
| DC_2-66_(n)5                       | 2                 | 0.3                    |
|                                    | 66                | 0.3                    |
| DC_2-66_n38-n78                    | 2                 | 0.5                    |
|                                    | 66                | 0.5                    |
|                                    | n38               | 0.5                    |
|                                    | n78               | 0.5                    |
| DC_2-66_n41-n71                    | 2                 | 0.3                    |
|                                    | 66                | 0.3                    |
|                                    | n41               | 0.5 <sup>1</sup>       |
|                                    | n71               | 0.5                    |
| DC_2-66-71_n38<br>DC_2-2-66-71_n38 | 2                 | 0.3                    |
|                                    | 66                | 0.5                    |

| Inter-band EN-DC configuration                                       | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|----------------------------------------------------------------------|-------------------|----------------------------------|
| DC_2-66-71_n66                                                       | n38               | 0.5                              |
|                                                                      | 2                 | 0.3                              |
|                                                                      | 66                | 0.3                              |
|                                                                      | n66               | 0.3                              |
| DC_2-66-71_n78<br>DC_2-2-66-71_n78                                   | 2                 | 0.3                              |
|                                                                      | 66                | 0.5                              |
|                                                                      | n78               | 0.5                              |
| DC_2-66-(n)71                                                        | 2                 | 0.3                              |
|                                                                      | 66                | 0.3                              |
| DC_2-66_n66-n78                                                      | 2                 | 0.3                              |
|                                                                      | 66                | 0.3                              |
|                                                                      | n66               | 0.3                              |
|                                                                      | n78               | 0.5                              |
| DC_3-5-7_n78<br>DC_3-5-7-7_n78                                       | 3                 | 0.2                              |
|                                                                      | 5                 | 0.2                              |
|                                                                      | 7                 | 0.2                              |
|                                                                      | n78               | 0.5                              |
| DC_3-5-41_n79                                                        | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
| DC_3-7_n1-n78                                                        | 3                 | 0.3                              |
|                                                                      | 7                 | 0.3                              |
|                                                                      | n1                | 0.3                              |
|                                                                      | n78               | 0.5                              |
| DC_3-7-7_n78<br>DC_3-7_n7-n78                                        | 3                 | 0.2                              |
|                                                                      | 7 or n7           | 0.2                              |
|                                                                      | n78               | 0.5                              |
| DC_3-7-8_n1<br>DC_3-3-7-8_n1<br>DC_3-7-7-8_n1<br>DC_3-3-7-7-8_n1     | 8                 | 0.2                              |
| DC_3-7-8_n77                                                         | 3                 | 0.2                              |
|                                                                      | 7                 | 0.2                              |
|                                                                      | 8                 | 0.2                              |
|                                                                      | n77               | 0.5                              |
| DC_3-7-8_n78<br>DC_3-3-7-8_n78<br>DC_3-7-7-8_n78<br>DC_3-3-7-7-8_n78 | 3                 | 0.2                              |
|                                                                      | 7                 | 0.2                              |
|                                                                      | 8                 | 0.2                              |
|                                                                      | n78               | 0.5                              |
| DC_3-7-20_n28                                                        | 20                | 0.2                              |
|                                                                      | n28               | 0.1                              |
| DC_3-7-20_n78                                                        | 3                 | 0.2                              |
|                                                                      | 7                 | 0.2                              |
|                                                                      | n78               | 0.5                              |
| DC_3-7-28_n40                                                        | 7                 | 0.3                              |
|                                                                      | n40               | 0.8                              |
| DC_3-7-28_n78<br>DC_3-7_n28-n78                                      | 3                 | 0.2                              |
|                                                                      | 7                 | 0.2                              |
|                                                                      | 28 or n28         | 0.2                              |
|                                                                      | n78               | 0.5                              |
| DC_3-7-40_n1                                                         | 7                 | 0.3                              |
|                                                                      | 40                | 0.8                              |
| DC_3-7_SUL_n78-n80                                                   | 7                 | 0.2                              |
|                                                                      | 3                 | 0.2                              |
|                                                                      | n78               | 0.5                              |
| DC_3-8_n1-n78<br>DC_3-3-8_n1-n78                                     | 3                 | 0.2                              |
|                                                                      | 8                 | 0.2                              |
|                                                                      | n1                | 0.2                              |

| Inter-band EN-DC configuration    | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|-----------------------------------|-------------------|------------------------|
|                                   | n78               | 0.5                    |
| DC_3-8-20_n78                     | 3                 | 0.2                    |
|                                   | 8                 | 0.2                    |
|                                   | n78               | 0.5                    |
| DC_3-8_n28-n77                    | 3                 | 0.2                    |
|                                   | 8                 | 0.2                    |
|                                   | n28               | 0.2                    |
|                                   | n77               | 0.5                    |
| DC_3-8-42_n77                     | 3                 | 0.2                    |
|                                   | 8                 | 0.2                    |
|                                   | 42                | 0.5                    |
|                                   | n77               | 0.5                    |
| DC_3-8_SUL_n78-n80                | 3                 | 0.2                    |
|                                   | 8                 | 0.2                    |
|                                   | n78               | 0.5                    |
| DC_3-18-42_n77                    | 42                | 0.5                    |
|                                   | n77               | 0.5                    |
| DC_3-18-42_n78                    | 42                | 0.5                    |
|                                   | n78               | 0.5                    |
| DC_3-18-42_n79                    | 3                 | 0.2                    |
|                                   | 42                | 0.5                    |
| DC_3-19-21_n77                    | 3                 | 0.3                    |
|                                   | 21                | 0.5                    |
|                                   | n77               | 0.5                    |
| DC_3-19-21_n78                    | 3                 | 0.3                    |
|                                   | 21                | 0.5                    |
|                                   | n78               | 0.5                    |
| DC_3-19-21_n79                    | 3                 | 0.3                    |
|                                   | 21                | 0.5                    |
| DC_3-19-42_n77                    | 3                 | 0.2                    |
|                                   | 42                | 0.5                    |
|                                   | n77               | 0.5                    |
| DC_3-19-42_n78                    | 3                 | 0.2                    |
|                                   | 42                | 0.5                    |
|                                   | n78               | 0.5                    |
| DC_3-19-42_n79                    | 3                 | 0.2                    |
|                                   | 42                | 0.5                    |
| DC_3-19_n77-n79                   | 3                 | 0.2                    |
|                                   | n77               | 0.5                    |
| DC_3-19_n78-n79                   | 3                 | 0.2                    |
|                                   | n78               | 0.5                    |
| DC_3-20_n1-n28                    | n1                | 0.2                    |
|                                   | n28               | 0.2                    |
| DC_3-20_n7-n28                    | 20                | 0.1                    |
|                                   | n28               | 0.1                    |
| DC_3-20_n28-n78                   | 3                 | 0.2                    |
|                                   | 20                | 0.2                    |
|                                   | n28               | 0.2                    |
|                                   | n78               | 0.5                    |
| DC_3-20-38_n78<br>DC_3-20_n38-n78 | 3                 | 0.2                    |
|                                   | 20                | 0.2                    |
|                                   | 38 or n38         | 0.4                    |
|                                   | n78               | 0.5                    |
| DC_3-20_n41-n78                   | n78               | 0.5                    |
| DC_3-20_SUL_n78-n80               | 3                 | 0.2                    |
|                                   | n78               | 0.5                    |
| DC_3-21-42_n77                    | 3                 | 0.3                    |
|                                   | 21                | 0.5                    |
|                                   | 42                | 0.5                    |
|                                   | n77               | 0.5                    |
| DC_3-21-42_n78                    | 3                 | 0.3                    |
|                                   | 21                | 0.5                    |

| Inter-band EN-DC configuration     | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)             |
|------------------------------------|-------------------|------------------------------------|
|                                    | 42                | 0.5                                |
|                                    | n78               | 0.5                                |
| DC_3-21-42_n79                     | 3                 | 0.3                                |
|                                    | 21                | 0.5                                |
|                                    | 42                | 0.5                                |
| DC_3-21_n77-n79                    | 3                 | 0.3                                |
|                                    | 21                | 0.5                                |
|                                    | n77               | 0.5                                |
| DC_3-21_n78-n79                    | 3                 | 0.3                                |
|                                    | 21                | 0.5                                |
|                                    | n78               | 0.5                                |
| DC_3-28_n7-n78<br>DC_3-3-28_n7-n78 | 3                 | 0.5                                |
|                                    | 28                | 0.2                                |
|                                    | n7                | 0.4                                |
|                                    | n78               | 0.5                                |
| DC_3-28_n40-n78                    | 3                 | 0.2                                |
|                                    | 28                | 0.2                                |
|                                    | n40               | 0.4 <sup>5</sup>                   |
|                                    | n78               | 0.5 <sup>5</sup>                   |
| DC_3-28-41_n78                     | 3                 | 0.5                                |
|                                    | 28                | 0.2                                |
|                                    | 41                | 0.4 <sup>3</sup> /0.5 <sup>4</sup> |
|                                    | n78               | 0.5                                |
| DC_3-28-42_n77                     | 3                 | 0.2                                |
|                                    | 28                | 0.2                                |
|                                    | 42                | 0.5                                |
|                                    | n77               | 0.5                                |
| DC_3-28-42_n78                     | 3                 | 0.2                                |
|                                    | 28                | 0.2                                |
|                                    | 42                | 0.5                                |
|                                    | n78               | 0.5                                |
| DC_3-28-42_n79                     | 3                 | 0.2                                |
|                                    | 28                | 0.2                                |
|                                    | 42                | 0.5                                |
| DC_3-41_n28-n77                    | 3                 | 0.2                                |
|                                    | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup>   |
|                                    | n28               | 0.2                                |
|                                    | n77               | 0.5                                |
| DC_3-41_n28-n78                    | 3                 | 0.5                                |
|                                    | 41                | 0.4 <sup>3</sup> /0.5 <sup>4</sup> |
|                                    | n28               | 0.2                                |
|                                    | n78               | 0.5                                |
| DC_3-41-42_n77                     | 3                 | 0.5                                |
|                                    | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup>   |
|                                    | 42                | 0.5                                |
|                                    | n77               | 0.5                                |
| DC_3-41-42_n78                     | 3                 | 0.5                                |
|                                    | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup>   |
|                                    | 42                | 0.5                                |
|                                    | n78               | 0.5                                |
| DC_3-41-42_n79                     | 3                 | 0.5                                |
|                                    | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup>   |
|                                    | 42                | 0.5                                |
| DC_3-42_n77-n79                    | 3                 | 0.2                                |
|                                    | 42                | 0.5                                |
|                                    | n77               | 0.5                                |
| DC_3-42_n78-n79                    | 3                 | 0.2                                |
|                                    | 42                | 0.5                                |
|                                    | n78               | 0.5                                |
| DC_5-7-7_n78                       | 5                 | 0.2                                |
|                                    | 7                 | 0.2                                |
|                                    | n78               | 0.5                                |

| Inter-band EN-DC configuration       | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|--------------------------------------|-------------------|----------------------------------|
| DC_5-48_(n)12                        | 5                 | 0.5                              |
|                                      | 12                | 0.3                              |
|                                      | n12               | 0.5                              |
| DC_5-48-66_n12                       | 5                 | 0.5                              |
|                                      | 48                | 0.5                              |
|                                      | 66                | 0.2                              |
|                                      | n12               | 0.3                              |
| DC_5-48-66_n71                       | 48                | 0.5                              |
|                                      | 66                | 0.2                              |
| DC_5-66_(n)12                        | 12                | 0.5                              |
|                                      | 66                | 0.5                              |
|                                      | n12               | 0.5                              |
| DC_7-8_n1-n78<br>DC_7-7-8_n1-n78     | 7                 | 0.2                              |
|                                      | 8                 | 0.2                              |
|                                      | n1                | 0.2                              |
|                                      | n78               | 0.5                              |
| DC_7-13-66_n66                       | 7                 | 0.5                              |
|                                      | 66                | 0.5                              |
|                                      | n66               |                                  |
| DC_7-20_n3-n78                       | n78               | 0.5                              |
| DC_7-20_n28-n78                      | 20                | 0.2                              |
|                                      | n28               | 0.2                              |
|                                      | n78               | 0.5                              |
| DC_7-28_n3-n78                       | 7                 | 0.5                              |
|                                      | 28                | 0.2                              |
|                                      | n3                | 0.5                              |
|                                      | n78               | 0.5                              |
| DC_7-28_n7-n78                       | n78               | 0.5                              |
| DC_7-66_n66-n78<br>DC_7-7-66_n66-n78 | 7                 | 0.5                              |
|                                      | 66                | 0.5                              |
|                                      | n66               | 0.5                              |
|                                      | n78               | 0.5                              |
| DC_12-30-66_n2                       | 12                | 0.5                              |
|                                      | 30                | 0.5                              |
|                                      | 66                | 0.4                              |
|                                      | n2                | 0.4                              |
| DC_12-30-66_n66                      | 12                | 0.5                              |
|                                      | 30                | 0.5                              |
|                                      | 66                | 0.4                              |
|                                      | n66               | 0.4                              |
| DC_12-48_(n)5                        | 5                 | 0.5                              |
|                                      | 12                | 0.3                              |
|                                      | n5                | 0.5                              |
| DC_12-48-66_n5                       | 2                 | 0.5                              |
|                                      | 48                | 0.5                              |
|                                      | 66                | 0.5                              |
| DC_12-66_(n)5                        | 12                | 0.5                              |
|                                      | 66                | 0.5                              |
| DC_18-41_n3-n77                      | 18                | 0.2                              |
|                                      | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                      | n3                | 0.2                              |
|                                      | n77               | 0.5                              |
| DC_18-41_n3-n78                      | 18                | 0.2                              |
|                                      | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                      | n3                | 0.2                              |
|                                      | n78               | 0.5                              |
| DC_19-21-42_n77                      | 42                | 0.5                              |
|                                      | n77               | 0.5                              |
| DC_19-21-42_n78                      | 42                | 0.5                              |
|                                      | n78               | 0.5                              |
| DC_19-21-42_n79                      | 42                | 0.5                              |

| Inter-band EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
| DC_19-21_n77-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | n77               | 0.5                    |
| DC_19-21_n78-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | n78               | 0.5                    |
| DC_19-42_n77-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n77               | 0.5                    |
| DC_19-42_n78-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n78               | 0.5                    |
| DC_21-28-42_n77                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 28                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n77               | 0.5                    |
| DC_21-28-42_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 28                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n78               | 0.5                    |
| DC_21-28-42_n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 28                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 42                | 0.5                    |
| DC_21-42_n77-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n77               | 0.5                    |
| DC_21-42_n78-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n78               | 0.5                    |
| DC_28-41-42_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 28                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 41                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n78               | 0.5                    |
| DC_29-30-66_n2<br>DC_29-30-66-66_n2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 30                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 66                | 0.4                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n2                | 0.4                    |
| DC_29-30-66_n66                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 30                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 66                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n66               | 0.3                    |
| DC_46-66_n25-n41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 66                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n25               | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n41               | 0.5 <sup>1</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   | 1 <sup>2</sup>         |
| DC_46-66_n41-n71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 66                | 0.3                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n41               | 0.5 <sup>1</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                   | 1 <sup>2</sup>         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | n71               | 0.2                    |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 - 2690 MHz.<br>NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 - 2545 MHz.<br>NOTE 3: The requirement is applied for UE transmitting on the frequency range of 2515 - 2690 MHz.<br>NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.<br>NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx.<br>NOTE 6: Void.<br>NOTE 7: Void. |                   |                        |

#### 7.3B.3.3.4 $\Delta R_{IB,c}$ for EN-DC five bands

**Table 7.3B.3.3.4-1:  $\Delta R_{IB,c}$  due to EN-DC (five bands)**

| Inter-band EN-DC configuration      | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|-------------------------------------|-------------------|------------------------|
| DC_1-3-5-7_n78,<br>DC_1-3-5-7-7_n78 | 1                 | 0.2                    |
|                                     | 3                 | 0.2                    |
|                                     | 5                 | 0.2                    |
|                                     | 7                 | 0.2                    |
|                                     | n78               | 0.5                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-3-5-41_n79                | 41                | 0 <sup>3</sup>         |
|                                |                   | 0.5 <sup>4</sup>       |
| DC_1-3-7_n7-n78                | 1                 | 0.3                    |
|                                | 3                 | 0.3                    |
|                                | 7                 | 0.3                    |
|                                | n7                | 0.3                    |
|                                | n78               | 0.5                    |
| DC_1-3-7-8_n78                 | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | 8                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-3-7-20_n28                | 20                | 0.2                    |
|                                | n28               | 0.2                    |
| DC_1-3-7-20_n78                | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-3-7-28_n5                 | 28                | 0.2                    |
|                                | n5                | 0.2                    |
| DC_1-3-7-28_n7                 | 28                | 0.2                    |
| DC_1-3-7-28_n40                | 7                 | 0.3                    |
|                                | 28                | 0.2                    |
|                                | n40               | 0.8                    |
| DC_1-3-7-28_n78                | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | 28                | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-3-7_n28-n78               | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | n28               | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-3-8-42_n77                | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 8                 | 0.2                    |
|                                | 42                | 0.5                    |
|                                | n77               | 0.5                    |
| DC_1-3-18-42_n77               | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 42                | 0.5                    |
|                                | n77               | 0.5                    |
| DC_1-3-18-42_n78               | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 42                | 0.5                    |
|                                | n78               | 0.5                    |
| DC_1-3-18-42_n79               | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 42                | 0.5                    |
| DC_1-3-19-21_n77               | 1                 | 0.2                    |
|                                | 3                 | 0.3                    |
|                                | 21                | 0.5                    |
|                                | n77               | 0.5                    |
| DC_1-3-19-21_n78               | 1                 | 0.2                    |
|                                | 3                 | 0.3                    |
|                                | 21                | 0.5                    |
|                                | n78               | 0.5                    |
| DC_1-3-19-21_n79               | 3                 | 0.3                    |
|                                | 21                | 0.5                    |
| DC_1-3-19-42_n77               | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 42                | 0.5                    |

| Inter-band EN-DC configuration        | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|---------------------------------------|-------------------|------------------------|
| DC_1-3-19-42_n78                      | n77               | 0.5                    |
|                                       | 1                 | 0.2                    |
|                                       | 3                 | 0.2                    |
|                                       | 42                | 0.5                    |
|                                       | n78               | 0.5                    |
| DC_1-3-19-42_n79                      | 1                 | 0.2                    |
|                                       | 3                 | 0.2                    |
|                                       | 42                | 0.5                    |
|                                       | n78               | 0.5                    |
| DC_1-3-20_n28-n78                     | 1                 | 0.2                    |
|                                       | 3                 | 0.2                    |
|                                       | 20                | 0.2                    |
|                                       | n28               | 0.2                    |
|                                       | n78               | 0.5                    |
| DC_1-3-20-38_n78<br>DC_1-3-20_n38-n78 | 3                 | 0.2                    |
|                                       | 20                | 0.2                    |
|                                       | 38 or n38         | 0.4                    |
|                                       | n78               | 0.5                    |
| DC_1-3-20_n41-n78                     | n78               | 0.5                    |
| DC_1-3-21-42_n77                      | 1                 | 0.2                    |
|                                       | 3                 | 0.3                    |
|                                       | 21                | 0.5                    |
|                                       | 42                | 0.5                    |
|                                       | n77               | 0.2                    |
| DC_1-3-21-42_n78                      | 1                 | 0.2                    |
|                                       | 3                 | 0.3                    |
|                                       | 21                | 0.5                    |
|                                       | 42                | 0.5                    |
|                                       | n78               | 0.2                    |
| DC_1-3-21-42_n79                      | 1                 | 0.2                    |
|                                       | 3                 | 0.3                    |
|                                       | 21                | 0.5                    |
|                                       | 42                | 0.5                    |
| DC_1-3-21_n77-n79                     | 1                 | 0.2                    |
|                                       | 3                 | 0.3                    |
|                                       | 21                | 0.5                    |
|                                       | n77               | 0.5                    |
| DC_1-3-21_n78-n79                     | 1                 | 0.2                    |
|                                       | 3                 | 0.3                    |
|                                       | 21                | 0.5                    |
|                                       | n78               | 0.5                    |
| DC_1-3-28_n7-n78                      | 1                 | 0.2                    |
|                                       | 3                 | 0.2                    |
|                                       | 28                | 0.2                    |
|                                       | n7                | 0.2                    |
|                                       | n78               | 0.5                    |
| DC_1-3-28_n40-n78                     | 3                 | 0.2                    |
|                                       | 28                | 0.2                    |
|                                       | n40               | 0.4 <sup>5</sup>       |
|                                       | n78               | 0.5 <sup>5</sup>       |
| DC_1-3-28-42_n77                      | 1                 | 0.2                    |
|                                       | 3                 | 0.2                    |
|                                       | 28                | 0.2                    |
|                                       | 42                | 0.5                    |
|                                       | n77               | 0.5                    |
| DC_1-3-28-42_n78                      | 1                 | 0.2                    |
|                                       | 3                 | 0.2                    |
|                                       | 28                | 0.2                    |
|                                       | 42                | 0.5                    |
|                                       | n78               | 0.5                    |
| DC_1-3-28-42_n79                      | 1                 | 0.2                    |
|                                       | 3                 | 0.2                    |
|                                       | 28                | 0.2                    |

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB)           |
|--------------------------------|-------------------|----------------------------------|
| DC_1-3-41_n28-n77              | 42                | 0.5                              |
|                                | 1                 | 0.2                              |
|                                | 3                 | 0.2                              |
|                                | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                | n28               | 0.2                              |
| DC_1-3-41_n28-n78              | n77               | 0.5                              |
|                                | 3                 | 0.2                              |
|                                | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                | n28               | 0.2                              |
| DC_1-3-41-42_n77               | n78               | 0.5                              |
|                                | 1                 | 0.2                              |
|                                | 3                 | 0.2                              |
|                                | 42                | 0.5                              |
| DC_1-3-41-42_n78               | n77               | 0.5                              |
|                                | 1                 | 0.2                              |
|                                | 3                 | 0.2                              |
|                                | 42                | 0.5                              |
| DC_1-3-41-42_n79               | n78               | 0.5                              |
|                                | 1                 | 0.2                              |
|                                | 3                 | 0.2                              |
|                                | 42                | 0.5                              |
| DC_1-7-20_n3-n78               | n78               | 0.5                              |
| DC_1-7-20_n28-n78              | 1                 | 0.2                              |
|                                | 7                 | 0.2                              |
|                                | 20                | 0.2                              |
|                                | n28               | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-7-28_n7-n78               | 1                 | 0.2                              |
|                                | 7                 | 0.2                              |
|                                | 28                | 0.2                              |
|                                | n7                | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-18-41_n3-n77              | 1                 | 0.2                              |
|                                | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                | n3                | 0.2                              |
|                                | n77               | 0.5                              |
| DC_1-18-41_n3-n78              | 1                 | 0.2                              |
|                                | 41                | 0 <sup>3</sup> /0.5 <sup>4</sup> |
|                                | n3                | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-19-21-42_n77              | 1                 | 0.2                              |
|                                | 42                | 0.5                              |
|                                | n77               | 0.5                              |
| DC_1-19-21-42_n78              | 42                | 0.5                              |
|                                | n78               | 0.5                              |
| DC_1-19-21-42_n79              | 42                | 0.5                              |
| DC_1-19-42_n77-n79             | 1                 | 0.2                              |
|                                | 42                | 0.5                              |
|                                | n77               | 0.5                              |
| DC_1-19-42_n78-n79             | 42                | 0.5                              |
|                                | n78               | 0.5                              |
| DC_1-20-38_n3-n78              | n3                | 0.2                              |
|                                | n78               | 0.5                              |
| DC_1-21-28-42_n77              | 1                 | 0.2                              |
|                                | 28                | 0.2                              |
|                                | 42                | 0.5                              |
|                                | n77               | 0.5                              |
| DC_1-21-28-42_n78              | 28                | 0.2                              |
|                                | 42                | 0.5                              |
|                                | n78               | 0.5                              |
| DC_1-21-28-42_n79              | 28                | 0.2                              |
|                                | 42                | 0.5                              |
| DC_1-21-42_n77-n79             | 1                 | 0.2                              |

| Inter-band EN-DC configuration                                                     | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|------------------------------------------------------------------------------------|-------------------|------------------------|
|                                                                                    | 21                | 0.2                    |
|                                                                                    | 42                | 0.5                    |
|                                                                                    | n77               | 0.5                    |
| DC_1-21-42_n78-n79                                                                 | 21                | 0.2                    |
|                                                                                    | 42                | 0.5                    |
|                                                                                    | n78               | 0.5                    |
| DC_2-7-13-66_n66                                                                   | 2                 | 0.3                    |
|                                                                                    | 7                 | 0.5                    |
|                                                                                    | 66                | 0.5                    |
|                                                                                    | n66               | 0.5                    |
| DC_2-7-66_n66-n78<br>DC_2-7-7-66_n66-n78                                           | 2                 | 0.3                    |
|                                                                                    | 7                 | 0.5                    |
|                                                                                    | 66                | 0.5                    |
|                                                                                    | n66               | 0.5                    |
|                                                                                    | n78               | 0.5                    |
| DC_2-12-30-66_n2                                                                   | 2                 | 0.4                    |
|                                                                                    | 12                | 0.5                    |
|                                                                                    | 30                | 0.5                    |
|                                                                                    | 66                | 0.4                    |
|                                                                                    | n2                | 0.4                    |
| DC_2-12-30-66_n66                                                                  | 2                 | 0.4                    |
|                                                                                    | 12                | 0.5                    |
|                                                                                    | 30                | 0.5                    |
|                                                                                    | 66                | 0.4                    |
|                                                                                    | n66               | 0.4                    |
| DC_2-29-30-66_n2                                                                   | 2                 | 0.4                    |
|                                                                                    | 30                | 0.5                    |
|                                                                                    | 66                | 0.4                    |
|                                                                                    | n2                | 0.4                    |
| DC_2-46-66_n41-n71                                                                 | 2                 | 0.3                    |
|                                                                                    | 66                | 0.3                    |
|                                                                                    | n41               | 0.5 <sup>1</sup>       |
|                                                                                    |                   | 1 <sup>2</sup>         |
|                                                                                    | n71               | 0.5                    |
| DC_3-7-8_n1-n78<br>DC_3-3-7-8_n1-n78,<br>DC_3-7-7-8_n1-n78,<br>DC_3-3-7-7-8_n1-n78 | 3                 | 0.2                    |
|                                                                                    | 7                 | 0.2                    |
|                                                                                    | 8                 | 0.2                    |
|                                                                                    | n1                | 0.2                    |
|                                                                                    | n78               | 0.5                    |
| DC_3-7-20_n28-n78                                                                  | 3                 | 0.2                    |
|                                                                                    | 7                 | 0.2                    |
|                                                                                    | 20                | 0.2                    |
|                                                                                    | n28               | 0.2                    |
| DC_3-7-28_n7-n78                                                                   | 3                 | 0.2                    |
|                                                                                    | 7                 | 0.2                    |
|                                                                                    | 28                | 0.2                    |
|                                                                                    | n7                | 0.2                    |
|                                                                                    | n78               | 0.5                    |
| DC_3-19-21-42_n77                                                                  | 3                 | 0.3                    |
|                                                                                    | 21                | 0.5                    |
|                                                                                    | 42                | 0.5                    |
|                                                                                    | n77               | 0.5                    |
| DC_3-19-21-42_n78                                                                  | 3                 | 0.3                    |
|                                                                                    | 21                | 0.5                    |
|                                                                                    | 42                | 0.5                    |
|                                                                                    | n78               | 0.5                    |
| DC_3-19-21-42_n79                                                                  | 3                 | 0.3                    |
|                                                                                    | 21                | 0.5                    |
|                                                                                    | 42                | 0.5                    |
| DC_3-28-41-42_n78                                                                  | 3                 | 0.5                    |

| Inter-band EN-DC configuration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 28                | 0.2                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 41                | 0.4 <sup>3</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | 0.5 <sup>4</sup>       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n78               | 0.5                    |
| DC_19-21-42_n77-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n77               | 0.5                    |
| DC_19-21-42_n78-n79                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 42                | 0.5                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n78               | 0.5                    |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 – 2690 MHz.<br>NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 – 2545 MHz.<br>NOTE 3: The requirement is applied for UE transmitting on the frequency range of 2515 - 2690 MHz<br>NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.<br>NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. |                   |                        |

### 7.3B.3.3.5 $\Delta R_{IB,c}$ for EN-DC six bands

**Table 7.3B.3.3.5-1:  $\Delta R_{IB,c}$  due to EN-DC (six bands)**

| Inter-band EN-DC configuration | E-UTRA or NR Band | $\Delta R_{IB,c}$ (dB) |
|--------------------------------|-------------------|------------------------|
| DC_1-3-7-20_n28-n78            | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | 20                | 0.2                    |
|                                | n28               | 0.2                    |
|                                | n78               | 0.5                    |
| DC_1-3-7-28_n7-n78             | 1                 | 0.2                    |
|                                | 3                 | 0.2                    |
|                                | 7                 | 0.2                    |
|                                | 28                | 0.2                    |
|                                | n7                | 0.2                    |
|                                | n78               | 0.5                    |

### 7.3B.3.3a (Void)

### 7.3B.3.4 Inter-band EN-DC including FR2

#### 7.3B.3.4.1 $\Delta R_{IB,c}$ for EN-DC in two bands

Unless otherwise stated,  $\Delta R_{IB,c}$  for E-UTRA and FR2 NR bands of inter-band EN-DC combinations defined in table 5.5B.5.1-1 is set to zero.

**Table 7.3B.3.4.1-1: Void**

#### 7.3B.3.4.2 $\Delta R_{IB,c}$ for EN-DC three bands

Unless otherwise stated,  $\Delta R_{IB,c}$  for FR2 NR bands is set to zero, and  $\Delta R_{IB,c}$  for constituent E-UTRA bands for inter-band EN-DC defined in table 5.5B.5.3-1 is the same as those for the corresponding E-UTRA CA configuration specified in TS 36.101 [4], without the FR2 NR bands.

**Table 7.3B.3.4.2-1: Void****7.3B.3.4.3  $\Delta R_{IB,c}$  for EN-DC four bands**

Unless otherwise stated,  $\Delta R_{IB,c}$  for FR2 NR bands is set to zero, and  $\Delta R_{IB,c}$  for constituent E-UTRA bands for inter-band EN-DC defined in table 5.5B.5.3-1 is the same as those for the corresponding E-UTRA CA configuration specified in TS 36.101 [4], without the FR2 NR bands.

**Table 7.3B.3.4.3-1: Void****7.3B.3.4.4  $\Delta R_{IB,c}$  for EN-DC five bands**

Unless otherwise stated,  $\Delta R_{IB,c}$  for FR2 NR bands is set to zero, and  $\Delta R_{IB,c}$  for constituent E-UTRA bands for inter-band EN-DC defined in table 5.5B.5.4-1 is the same as those for the corresponding E-UTRA CA configuration specified in TS 36.101 [4], without the FR2 NR bands.

**Table 7.3B.3.4.4-1: Void****7.3B.3.4.5 Void****7.3B.3.5 Inter-band EN-DC including both FR1 and FR2****7.3B.3.5.2  $\Delta R_{IB,c}$  for EN-DC three bands**

Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.6.2-1,  $\Delta R_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta R_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 7.3B.3.3.

**Table 7.3B.3.5.2-1: Void****7.3B.3.5.3  $\Delta R_{IB,c}$  for EN-DC four bands**

Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.6.3-1,  $\Delta R_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta R_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 7.3B.3.3.

**7.3B.3.5.4  $\Delta R_{IB,c}$  for EN-DC five bands**

Unless otherwise stated, for a certain inter-band EN-DC configurations defined in table 5.5B.6.4-1,  $\Delta R_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta R_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 7.3B.3.3.

**7.3B.3.5.5  $\Delta R_{IB,c}$  for EN-DC six bands**

Unless otherwise stated, for inter-band EN-DC configurations defined in table 5.5B.6.5-1,  $\Delta R_{IB,c}$  for constituent FR2 NR bands is set to zero, and  $\Delta R_{IB,c}$  for constituent E-UTRA and FR1 NR bands is the same as those for the corresponding inter band EN-DC configuration without the FR2 bands specified in 7.3B.3.3.

**7.3E Reference sensitivity for V2X operation in FR1****7.3E.1 General**

For V2X operation, REFSENS requirements defined in TS 38.101-1 [2] and TS 36.101 [4] apply to all downlink bands of V2X configurations listed in clause 5.5E, unless sensitivity degradation exception is allowed in this clause of this specification, clause 7.3E in TS 38.101-1 [2] or clause 7.3.1G in TS 36.101 [4].

## 7.3E.2 Reference sensitivity for V2X

### 7.3E.2.1 Intra-band contiguous V2X

For intra-band contiguous V2X listed in Table 5.5E.2-1, the each REFSENS requirements specified in clause 7.3.1G of TS 36.101 [4] and clause 7.3E.2 of TS 38.101-1 [2] apply when all SL reception CCs are activated at same time.

### 7.3E.2.2 Intra-band non-contiguous V2X

For intra-band non-contiguous V2X listed in Table 5.5E.3-1, the each REFSENS requirements specified in clause 7.3.1G of TS 36.101 [4] and clause 7.3E.2 of TS 38.101-1 [2] apply when all SL reception CCs are activated at same time.

### 7.3E.2.3 Inter-band V2X con-current operation

#### 7.3E.2.3.0 General

When UE is configured for NR V2X reception on V2X carrier con-current with E-UTRA uplink and downlink, NR V2X sidelink throughput for the carrier shall be  $\geq 95\%$  of the maximum throughput of the reference measurement channels as specified in Annexes A.7.2. Also the E-UTRA downlink throughput shall be  $\geq 95\%$  of the maximum throughput of the reference measurement channels as specified in Annexes A.3.

The reference sensitivity requirements for inter-band con-current V2X UE reception without any self-interference problem are in Table 7.3E.2.3.0-1.

**Table 7.3E.2.3.0-1: Reference sensitivity for V2X QPSK  $P_{\text{REFSENS}}$**

| Inter-band V2X reception |                            | Channel bandwidth |           |             |              |              |              |              |              |             |
|--------------------------|----------------------------|-------------------|-----------|-------------|--------------|--------------|--------------|--------------|--------------|-------------|
| V2X Band                 | E-UTRA or NR V2X band (Uu) | E-UTRA or NR Band | SCS (kHz) | 5 MHz (dBm) | 10 MHz (dBm) | 15 MHz (dBm) | 20 MHz (dBm) | 30 MHz (dBm) | 40 MHz (dBm) | Duplex Mode |
| n38                      | 20                         | 20                | 15        | -97         | -94          | -91.2        | -90          |              |              | FDD         |
|                          |                            | n38               | 15        |             | -96.5        |              | -93.2        | -91.4        | -90.1        | HD          |
|                          |                            |                   | 30        |             | -96.1        |              | -93.4        | -91.7        | -90.2        |             |
|                          |                            |                   | 60        |             | -96.9        |              | -93.1        | -91.9        | -90.4        |             |
| 47                       | n71                        | 47                | 15        |             | -90.4        |              | -87.5        |              |              | HD          |
|                          |                            | n71               | 15        | -97.2       | -94.0        | -91.6        | -86.0        |              |              | FDD         |
|                          |                            |                   | 30        |             | -94.3        | -91.9        | -87.4        |              |              |             |
|                          |                            |                   | 60        |             |              |              |              |              |              |             |

Table 7.3E.2.3.0-2 specifies the additional Rx insertion loss according to different RF architecture with DC/CA UE with same band combinations to reduce the self interference problem based on specific self desense analysis according to specific NR V2X inter-band con-current operation.

**Table 7.3E.2.3.0-2:  $\Delta R_{\text{IB,V2X}}$  (two bands)**

| V2X inter-band con-current band Combination                                                                                                                                                          | V2X operating Band | $\Delta R_{\text{IB,V2X}}$ [dB] |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------|
| V2X_20_n38                                                                                                                                                                                           | 20                 | 0.0 <sup>1</sup>                |
| Note 1: The $\Delta R_{\text{IB,V2X}}$ is applied on top of $\Delta R_{\text{IB,c}}$ of DC_20_n38 UE that is considered harmonic trap filter to reduce 3 <sup>rd</sup> harmonic impact from Band 20. |                    |                                 |

The reference sensitivity is defined to be met with Uu uplink assigned to one band (that differs from the V2X operating band) and all E-UTRA downlink carriers active. The Uu uplink resource blocks as defined in Table 7.3E.2.3.0-3 and Table 7.3E.2.3.0-4 shall be located as close as possible to V2X operating band but confined within the transmission bandwidth configuration for the channel.

**Table 7.3E.2.3.0-3: Uplink configuration for reference sensitivity of V2X UE (PC5)**

| Inter-band V2X con-current band configuration |              | E-UTRA or NR UL band / Channel BW / N <sub>RB</sub> / Duplex mode |                         |           |                 |             |
|-----------------------------------------------|--------------|-------------------------------------------------------------------|-------------------------|-----------|-----------------|-------------|
| V2X band (PC5)                                | Uu band (Uu) | UL band                                                           | Channel Bandwidth (MHz) | SCS (kHz) | N <sub>RB</sub> | Duplex Mode |
| n38                                           | 20           | 20                                                                | 10                      | 15        | 50              | FDD         |
| 47                                            | n71          | n71                                                               | 10                      | 15        | 52              | FDD         |
|                                               |              |                                                                   |                         | 30        | 24              |             |

**Table 7.3E.2.3.0-4: SL Tx configuration for reference sensitivity of V2X UE (Uu)**

| Inter-band V2X con-current band configuration |              | E-UTRA or NR UL band / Channel BW / N <sub>RB</sub> / Duplex mode |                         |           |                 |             |
|-----------------------------------------------|--------------|-------------------------------------------------------------------|-------------------------|-----------|-----------------|-------------|
| V2X band (PC5)                                | Uu band (Uu) | V2X band (PC5)                                                    | Channel Bandwidth (MHz) | SCS (kHz) | N <sub>RB</sub> | Duplex Mode |
| n38                                           | 20           | n38                                                               | 10                      | 15        | 50              | HD          |
|                                               |              |                                                                   |                         | 30        | 24              |             |
|                                               |              |                                                                   |                         | 60        | 10              |             |
| 47                                            | n71          | 47                                                                | 10                      | 15        | 50              | HD          |

### 7.3E.2.3.1 Reference sensitivity exception due to UL harmonic problem

Sensitivity degradation is allowed for a band if it is impacted by UL harmonic interference from another band part of the inter-band con-current V2X UE. Reference sensitivity exceptions (MSD) for the victim band (high) are specified in Table 7.3E.2.3.1-1 with uplink configuration of the aggressor band (low) specified in Table 7.3E.2.3.1-2.

**Table 7.3E.2.3.1-1: Reference sensitivity exceptions (MSD) due to UL harmonic for inter-band con-current operation**

| V2X inter-band con-current band combinations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Operating Bands / Channel bandwidth of the affected DL band / MSD |              |             |             |             |             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--------------|-------------|-------------|-------------|-------------|
| V2X_20_n38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | UL band                                                           | SL operation | 10 MHz (dB) | 20 MHz (dB) | 30 MHz (dB) | 40 MHz (dB) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 20                                                                | n38          | 10.7        | 7.7         | 5.8         | 4.7         |
| <p>NOTE 1: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (lower) for which the 3rd transmitter harmonic is within the sidelink transmission bandwidth of a victim (higher) band.</p> <p>NOTE 2: The requirements should be verified for UL EARFCN of the aggressor (lower) band (superscript LB such that <math>f_{UL}^{LB} = \lfloor f_{DL}^{HB} / 0.3 \rfloor \cdot 0.1</math> in MHz and <math>F_{UL\_low}^{LB} + BW_{Channel}^{LB} / 2 \leq f_{UL}^{LB} \leq F_{UL\_high}^{LB} - BW_{Channel}^{LB} / 2</math> with <math>f_{DL}^{HB}</math> the carrier frequency in the victim (higher) band in MHz and <math>BW_{Channel}^{LB}</math> the channel bandwidth configured in the low band.</p> <p>NOTE 3: The MSD level applied to all supported SCSs in victim band.</p> |                                                                   |              |             |             |             |             |

**Table 7.3E.2.3.1-2: Uplink configuration for reference sensitivity exceptions due to UL harmonic interference for inter-band con-current V2X in NR FR1**

| E-UTRA or NR Band / Channel bandwidth of the affected DL band / UL RB allocation of the aggressor band                                                                                                                                                                                                                                                                 |              |               |               |               |               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------|---------------|---------------|---------------|
| UL band                                                                                                                                                                                                                                                                                                                                                                | SL operation | 10 MHz (LCRB) | 20 MHz (LCRB) | 30 MHz (LCRB) | 40 MHz (LCRB) |
| 20                                                                                                                                                                                                                                                                                                                                                                     | n38          | 25            | 50            | 50            | 50            |
| <p>NOTE 1: The UL configuration applies regardless of the channel bandwidth of the UL band unless the UL resource blocks exceed that specified in Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2] for the uplink bandwidth in which case the allocation according to Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2] applies</p> |              |               |               |               |               |

## 7.4 Void

### 7.4A Maximum input level for CA

For inter-band NR CA between FR1 and FR2, the maximum input level specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for FR1 and FR2 respectively.

### 7.4B Maximum input level for DC in FR1

#### 7.4B.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC maximum input level requirement and parameters are defined in Table 7.4B.1-1.

**Table 7.4B.1-1: Maximum Input**

| Power in Largest CC, E-UTRA or NR, dBm                                                                                                   | $X^1$                                             |
|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Power in each other CC, dBm                                                                                                              | $X^1 - 10 \cdot \log_{10}(N_x SCS_x / N_y SCS_y)$ |
| NOTE 1: Power in Largest E-UTRA or NR bandwidth CC, listed in Table 7.4-1 [2]                                                            |                                                   |
| NOTE 2: $N_x$ , $SCS_x$ is the number of RB's and Sub carrier spacing in the largest carrier bandwidth and could be E-UTRA or NR carrier |                                                   |
| NOTE 3: $N_y$ , $SCS_y$ is the number of RB's in any other carrier.                                                                      |                                                   |
| NOTE 4: Void.                                                                                                                            |                                                   |
| NOTE 5: Void.                                                                                                                            |                                                   |

#### 7.4B.2 Intra-band non-contiguous EN-DC in FR1

For the E-UTRA sub-block containing one or multiple CC's, the requirement is defined in clause 7.4.1 for single carrier operation and in clause 7.4.1A for CA in TS 36.101 [4].

For the NR sub-block, the requirement is defined in clause 7.4 in TS 38.101-1 [2].

#### 7.4B.3 Inter-band EN-DC within FR1

Maximum input level requirement for E-UTRA single carrier and CA operation specified in clauses 7.4.1 and 7.4.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.4 and 7.4A of TS 38.101-1 [2] apply.

#### 7.4B.3a (Void)

#### 7.4B.4 Inter-band EN-DC including FR2

Maximum input level requirement for E-UTRA single carrier and CA operation specified in clauses 7.4.1 and 7.4.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.4, 7.4A and 7.4B of TS 38.101-2 [3] apply.

#### 7.4B.5 Inter-band EN-DC including both FR1 and FR2

Maximum input level requirement for E-UTRA single carrier and CA operation specified in clauses 7.4.1 and 7.4.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.4, 7.4A and 7.4B of TS 38.101-1 [2] and TS 38.101-2 [3] apply.

### 7.4E Maximum input level for V2X operation in FR1

For intra-band V2X UE, the maximum input requirements specified in clause 7.4.1G of TS 36.101 [4] and clause 7.4E.2 of TS 38.101-1 [2] apply when all SL reception CCs are activated at same time.

For the inter-band con-current NR V2X operation, the maximum input level requirements shall be applied per each component carrier. The requirements specified in subclause 7.4E.1 of TS 38.101-1 [2] shall apply for the NR sidelink reception and the requirements specified in subclause 7.4.1 of TS 36.101 [4] shall apply for the E-UTRA downlink reception in licensed band while all downlink carriers are active. The requirements specified in subclause 7.4.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink reception and the requirements specified in subclause 7.4 of TS 38.101-1 [2] shall apply for the NR downlink reception while all downlink carriers are active.

## 7.5 Void

### 7.5A Adjacent channel selectivity for CA

For inter-band NR CA between FR1 and FR2, the adjacent channel selectivity specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for FR1 and FR2 respectively.

### 7.5B Adjacent channel selectivity for DC in FR1

#### 7.5B.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC ACS requirement and parameters are defined for test case 1 in Table 7.5B.1-1 and for test case 2 in Table 7.5B.1-2.

**Table 7.5B.1-1: ACS test case 1**

| EN-DC Aggregated Bandwidth, MHz                                                                                                                               | <=100                       | >100,<br><=120             | >120,<br><=140           | >140,<br><=160             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------|--------------------------|----------------------------|
| ACS, dB                                                                                                                                                       | X <sup>1</sup>              | 19.2                       | 18.5                     | 17.9                       |
| P <sub>interferer</sub> , dBm                                                                                                                                 | P <sub>i</sub> <sup>2</sup> | Aggregated power + 17.7 dB | Aggregated power + 17 dB | Aggregate d power + 16.4dB |
| P <sub>w</sub> in Transmission BW configuration, per CC, dBm                                                                                                  | REFSENS +14dB               |                            |                          |                            |
| NOTE 1: X is ACS level at the specified EN-DC aggregated bandwidth from Table 7.5.1A-1 in TS 36.101 [4]                                                       |                             |                            |                          |                            |
| NOTE 2: P <sub>i</sub> is from Table 7.5.1A-2 in TS 36.101 [4]                                                                                                |                             |                            |                          |                            |
| NOTE 3: Jammer BW and offset is from Table 7.5.1A-2 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier |                             |                            |                          |                            |
| NOTE 4: Void.                                                                                                                                                 |                             |                            |                          |                            |
| NOTE 5: Void.                                                                                                                                                 |                             |                            |                          |                            |

**Table 7.5B.1-2: ACS test case 2**

| EN-DC Aggregated Bandwidth, ENBW, MHz                                                                                                                         | ≤100                        | >100, ≤120                                                           | >120, ≤140                                                         | >140, ≤160                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------|
| P <sub>w</sub> in Transmission Bandwidth Configuration, perCC, dBm                                                                                            | P <sub>w</sub> <sup>1</sup> | -42.7 +10log <sub>10</sub> (N <sub>RB,c</sub> /N <sub>RB_agg</sub> ) | -42 +10log <sub>10</sub> (N <sub>RB,c</sub> /N <sub>RB_agg</sub> ) | -41.4 +10log <sub>10</sub> (N <sub>RB,c</sub> /N <sub>RB_agg</sub> ) |
| P <sub>interferer</sub> , dBm                                                                                                                                 | -25                         |                                                                      |                                                                    |                                                                      |
| NOTE 1: P <sub>w</sub> is wanted signal power level at the specified EN-DC aggregated Bandwidth from Table 7.5.1A-3 in TS 36.101 [4]                          |                             |                                                                      |                                                                    |                                                                      |
| NOTE 2: Jammer BW and offset is from Table 7.5.1A-3 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier |                             |                                                                      |                                                                    |                                                                      |
| NOTE 3: Void.                                                                                                                                                 |                             |                                                                      |                                                                    |                                                                      |
| NOTE 4: Void.                                                                                                                                                 |                             |                                                                      |                                                                    |                                                                      |

#### 7.5B.2 Intra-band non-contiguous EN-DC in FR1

For the E-UTRA sub-block containing one or multiple CC's, the requirement is defined in clause 7.5.1 for single carrier operation and in clause 7.5.1A for CA in TS 36.101 [4].

For the NR sub-block, the requirement is defined in clause 7.5 in TS 38.101-1 [2].

The blocker configuration is defined in the general clause 7.1.

### 7.5B.3 Inter-band EN-DC within FR1

Adjacent channel selectivity requirement for E-UTRA single carrier and CA operation specified in clauses 7.5.1 and 7.5.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.5 and 7.5A of TS 38.101-1 [2] apply.

#### 7.5B.3a (Void)

### 7.5B.4 Inter-band EN-DC including FR2

Adjacent channel selectivity requirement for E-UTRA single carrier and CA operation specified in clauses 7.5.1 and 7.5.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.5, 7.5A and 7.5B of TS 38.101-2 [3] apply.

### 7.5B.5 Inter-band EN-DC including both FR1 and FR2

Adjacent channel selectivity requirement for E-UTRA single carrier and CA operation specified in clauses 7.5.1 and 7.5.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.5, 7.5A and 7.5B of TS 38.101-1 [2] and TS 38.101-2 [3] apply.

## 7.5E Adjacent channel selectivity for V2X operation in FR1

For intra-band V2X operation, the adjacent channel selectivity specified in clause 7.5.1G in TS 36.101 [4] and specified in clause 7.5E in TS 38.101-1 [2] apply when all SL reception CCs are activated at same time.

For the inter-band con-current NR V2X operation, the adjacent channel selectivity requirements shall be applied per each component carrier. The requirements specified in subclause 7.5E of TS 38.101-1 [2] shall apply for the NR sidelink reception in Band n47 and the requirements specified in subclause 7.5.1 of TS 36.101 [4] shall apply for the E-UTRA downlink reception in licensed band while all downlink carriers are active. The requirements specified in subclause 7.5.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink reception and the requirements specified in subclause 7.5 of TS 38.101-1 [2] shall apply for the NR downlink reception while all downlink carriers are active.

## 7.6 Void

### 7.6A Blocking characteristics for CA

For inter-band NR CA between FR1 and FR2, the in-band blocking characteristics specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for FR1 and FR2 respectively. The narrow band blocking and out-of-band blocking specified in TS 38.101-1 [2] apply for FR1.

### 7.6B Blocking characteristics for DC in FR1

#### 7.6B.1 General

#### 7.6B.2 In-band blocking for DC in FR1

##### 7.6B.2.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC in-band blocking requirement and parameters are defined in Table 7.6B.2.1-1.

**Table 7.6B.2.1-1: In-band blocking**

| EN-DC Aggregated Bandwidth, MHz                                                                                                                                                                                                                                                                                                                                                                                               | ≤100                        | >100, ≤120                                   | >120, ≤140 | >140, ≤160 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------|------------|------------|
| P <sub>w</sub> in Transmission Bandwidth Configuration, perCC, dBm                                                                                                                                                                                                                                                                                                                                                            |                             | REFSENS + Aggregated BW specific value below |            |            |
|                                                                                                                                                                                                                                                                                                                                                                                                                               | P <sub>w</sub> <sup>1</sup> | 16.8                                         | 17.5       | 18         |
| NOTE 1: P <sub>w</sub> is wanted signal power level at the specified EN-DC aggregated Bandwidth from Table 7.6.1.1A-1 in TS 36.101 [4]<br>NOTE 2: Interferer values are specified from Table 7.6.1.1A-2 in TS 36.101 [4]<br>NOTE 3: Jammer BW and offset is from Table 7.6.1.1A-1 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier<br>NOTE 4: Void.<br>NOTE 5: Void. |                             |                                              |            |            |

##### 7.6B.2.2 Intra-band non-contiguous EN-DC in FR1

For the E-TRA sub-block containing one or multiple CC's, the requirement is defined in clause 7.6.1.1 for single carrier operation and in clause 7.6.1.1A for CA in TS 36.101 [4].

For the NR sub-block, the requirement is defined in clause 7.6.2 in TS 38.101-1 [2].

The blocker configuration is defined in the general clause 7.1.

### 7.6B.2.3 Inter-band EN-DC within FR1

Inband blocking requirement for E-UTRA single carrier and CA operation specified in clauses 7.6.1.1 and 7.6.1.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.2 and 7.6A.2 of TS 38.101-1 [2] apply.

#### 7.6B.2.3a (Void)

### 7.6B.2.4 Inter-band EN-DC including FR2

Inband blocking requirement for E-UTRA single carrier and CA operation specified in clauses 7.6.1.1 and 7.6.1.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.2, 7.6A.2 and 7.6B.2 of TS 38.101-2 [3] apply.

### 7.6B.2.5 Inter-band EN-DC including both FR1 and FR2

Inband blocking requirement for E-UTRA single carrier and CA operation specified in clauses 7.6.1.1 and 7.6.1.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.2, 7.6A.2 and 7.6B.2 of TS 38.101-1 [2] and TS 38.101-2 [3] apply.

#### 7.6B.2.6 Void

**Table 7.6B.2.6-1: Void**

**Table 7.6B.2.6-2: Void**

## 7.6B.3 Out-of-band blocking for DC in FR1

### 7.6B.3.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC out-of-band requirement and parameters are defined in Table 7.6B.3.1-1.

**Table 7.6B.3.1-1: Out-of-band blocking**

| EN-DC Aggregated Bandwidth, MHz                                                            | ≤100                                         | >100, ≤120 | >120, ≤140 | >140, ≤160 |
|--------------------------------------------------------------------------------------------|----------------------------------------------|------------|------------|------------|
| Pw in Transmission Bandwidth Configuration, perCC, dBm                                     | REFSENS + Aggregated BW specific value below |            |            |            |
|                                                                                            | 9                                            |            |            |            |
| NOTE 1: Interferer values and offsets are specified from Table 7.6.2.1A-2 in TS 36.101 [4] |                                              |            |            |            |
| NOTE 2: Void.                                                                              |                                              |            |            |            |
| NOTE 3: Void.                                                                              |                                              |            |            |            |

For Table 7.6.2.1A-2 from TS 36.101 [4] in frequency range 1, 2 and 3, up to  $\max(24, 6 \cdot \lceil N_{RB} / 6 \rceil)$  exceptions are allowed for spurious response frequencies in each assigned frequency channel when measured using a 1MHz step size. For these exceptions the requirements of subclause 7.7B.1 Spurious response are applicable.

### 7.6B.3.2 Intra-band non-contiguous EN-DC in FR1

For the E-UTRA sub-block containing one or multiple CC's, the requirement is defined in clause 7.6.2.1 for single carrier operation and in clause 7.6.2.1A for CA in TS 36.101 [4].

For the NR sub-block, the requirement is defined in clause 7.6.3 is [2].

### 7.6B.3.3 Inter-band EN-DC within FR1

Out-of band blocking requirements for E-UTRA single carrier and CA operation specified in clauses 7.6.2.1 and 7.6.2.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.3 and 7.6A.3 of TS 38.101-1 [2] apply for lowest level EN-DC fallbacks (two bands) in clause 5.5B.4.1 with following conditions

one E-UTRA uplink carrier with the output power set to 4 dB below  $P_{\text{CMAX\_L,c}}$  and the NR band whose downlink is being tested has its uplink carrier output power set to 29 dB below  $P_{\text{CMAX\_L,f,c}}$ .

one NR uplink carrier with the output power set to 4 dB below  $P_{\text{CMAX\_L,f,c}}$  on the NR band with both E-UTRA and NR downlinks being tested with E-UTRA output power set to 29 dB below  $P_{\text{CMAX\_L,c}}$ .

If CW interferer falls in a gap between  $F_{\text{DL\_high}}$  of the E-UTRA or NR band and  $F_{\text{DL\_low}}$  of the NR or EUTRA band, where the corresponding OOB ranges 1 and 2 overlap, then the lower level interferer limit of the overlapping OOB ranges applies.

If  $F_{\text{DL\_high}}$  of the lower E-UTRA or NR band is greater than or equal to the  $F_{\text{DL\_low}}$  of the upper NR or E-UTRA band as in overlapping RX frequency ranges, then the OOB range shall start from the  $F_{\text{DL\_low}}$  of the lower E-UTRA or NR band, and from the  $F_{\text{DL\_high}}$  of the upper NR or E-UTRA band.

For EN-DC combination listed in Table 7.6B.3.3-1 under the first test condition above, exceptions to the requirement specified in Table 7.6B.3.3-2 are allowed when the second order intermodulation product of the lower frequency band UL carrier and the CW interfering signal fully or partially overlaps with the higher frequency band DL carrier.

**Table 7.6B.3.3-1: EN-DC combination with exceptions allowed**

| EN-DC combination |
|-------------------|
| DC 5 n78          |
| DC 8 n77          |
| DC 8 n78          |
| DC 8 n79          |
| DC 11 n77         |
| DC 18 n77         |
| DC 18 n78         |
| DC 18 n79         |
| DC 19 n77         |
| DC 19 n78         |
| DC 19 n79         |
| DC 20 n77         |
| DC 20 n78         |
| DC 21 n77         |
| DC 26 n77         |
| DC 26 n78         |
| DC 26 n79         |
| DC 28 n77         |
| DC 28 n78         |
| DC 28 n79         |

| Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Unit | Level            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------|
| $P_{\text{Interferer}} \text{ (CW)}$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | dBm  | -44 <sup>1</sup> |
| NOTE 1: The requirement applies when $ f_{\text{Interferer}} \pm f_{\text{UL}}^{\text{LB}} - f_{\text{DL}}^{\text{HB}}  \leq (BW_{\text{UL}}^{\text{LB}} + BW_{\text{DL}}^{\text{HB}})/2$ , where $f_{\text{UL}}^{\text{LB}}$ and $f_{\text{DL}}^{\text{HB}}$ are the carrier frequencies for lower frequency band UL and higher frequency band DL, respectively. $BW_{\text{UL}}^{\text{LB}}$ and $BW_{\text{DL}}^{\text{HB}}$ are the channel bandwidths configured for lower frequency band UL carrier and higher frequency band DL carrier in MHz, respectively. |      |                  |

For each of the two test cases in clauses 7.6.2.1 and 7.6.2.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.3 and 7.6A.3 of TS 38.101-1 [2] for all interferer frequency ranges a maximum of

$$\lfloor \max\{24,6 \cdot \lceil n \cdot N_{\text{RB}} / 6 \rceil\} / \min\{\lfloor n \cdot N_{\text{RB}} / 10 \rfloor, 5\} \rfloor$$

exceptions are allowed for spurious response frequencies in each assigned frequency channel when measured using a step size of  $\min(\lfloor CBW / 2 \rfloor, 5)$  MHz with  $N_{\text{RB}}$  the number of resource blocks in the downlink transmission bandwidth

configuration, *CBW* the bandwidth of the frequency channel in MHz and  $n = 1, 2, 3$  for  $SCS = 15, 30, 60$  kHz, respectively. For these exceptions, the requirements in clause 7.7 apply.

### 7.6B.3.3a (Void)

### 7.6B.3.4 Inter-band EN-DC including FR2

Out-of band blocking requirements specified for E-UTRA single carrier and CA operation specified in clauses 7.6.2.1 and 7.6.2.1A of TS 36.101 [4] apply for lowest level EN-DC fallbacks (two bands) in clause 5.5B.5.1 with only E-UTRA UL with output power as in TS 36.101 [4] (4 dB below  $P_{CMAX,L}$ ).

### 7.6B.3.5 Inter-band EN-DC including both FR1 and FR2

Out-of band blocking requirements specified for E-UTRA single carrier and CA operation specified in clauses 7.6.2.1 and 7.6.2.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.3 and 7.6A.3 of TS 38.101-1 [2] apply for lowest level EN-DC fallbacks (three bands) in clause 5.5B.6.2 with only E-UTRA UL with output power as in TS 36.101 [4] (4 dB below  $P_{CMAX,L}$ ).

## 7.6B.4 Narrow band blocking for DC in FR1

### 7.6B.4.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC narrow band blocking requirement and parameters are defined in Table 7.6B.4.1-1.

**Table 7.6B.4.1-1: Narrow band blocking parameters**

| EN-DC Aggregated Bandwidth, MHz                        | ≤100                                                                                                                                             | >100, ≤120 | >120, ≤140 | >140, ≤160 |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------|------------|
| Pw in Transmission Bandwidth Configuration, perCC, dBm | REFSENS + Aggregated BW specific value below                                                                                                     |            |            |            |
|                                                        | 16                                                                                                                                               |            |            |            |
| P <sub>UW</sub> , dBm (CW)                             | -55                                                                                                                                              |            |            |            |
| NOTE 1:                                                | Jammer offset is from Table 7.6.3.1A-1 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier |            |            |            |
| NOTE 2:                                                | Void.                                                                                                                                            |            |            |            |
| NOTE 3:                                                | Void.                                                                                                                                            |            |            |            |
| NOTE 4:                                                | If NR carrier BW > 40 MHz, no narrow band blocking requirements apply when blocker is applied at the edge of the NR carrier.                     |            |            |            |

### 7.6B.4.2 Intra-band non-contiguous EN-DC in FR1

For the E-TRA sub-block containing one or multiple CC's, the requirement is defined in clause 7.6.3.1 for single carrier operation and in clause 7.6.3.1A for CA in TS 36.101 [4].

For the NR sub-block, the requirement is defined in clause 7.6.4 in TS 38.101-1 [2].

The blocker configuration is defined in the general clause 7.1.

### 7.6B.4.3 Inter-band EN-DC within FR1

Narrow band blocking requirement for E-UTRA single carrier and CA operation specified in clauses 7.6.3.1 and 7.6.3.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.4 and 7.6A.4 of TS 38.101-1 [2] apply.

### 7.6B.4.3a (Void)

### 7.6B.4.4 Inter-band EN-DC including FR2

Narrow band blocking requirement for E-UTRA single carrier and CA operation specified in clauses 7.6.3.1 and 7.6.3.1A of TS 36.101 [4] apply.

### 7.6B.4.5 Inter-band EN-DC including both FR1 and FR2

Narrow band blocking requirement for E-UTRA single carrier and CA operation specified in clauses 7.6.3.1 and 7.6.3.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.6.4 and 7.6A.4 of TS 38.101-1 [2] apply.

## 7.6E Blocking characteristics for V2X in FR1

For intra-band V2X operation, the blocking characteristics specified in clause 7.6.1.1G in TS 36.101 [4] and specified in clause 7.6E in TS 38.101-1 [2] apply when all SL reception CCs are activated at same time.

For inter-band con-current NR V2X operation, the blocking characteristics requirements shall be applied per each component carrier. The in-band blocking and out of band blocking requirement specified in clause 7.6E in TS 38.101-1 [2] shall apply on NR V2X carrier and the requirement specified in clause 7.6 in TS 36.101 [4] shall apply for the E-UTRA downlink reception in licensed band while all downlink carriers are active. The requirements specified in subclause 7.6.1.1G and 7.6.2.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink reception and the requirements specified in subclause 7.6 of TS 38.101-1 [2] shall apply for the NR downlink reception while all downlink carriers are active.  $P_{\text{Interferer}}$  power is increased by  $\Delta R_{\text{IB,c}}$  in the requirement.

No narrow band blocking requirement applied for NR V2X carrier.

## 7.7 Void

### 7.7A Spurious response for CA

For inter-band NR CA between FR1 and FR2, the spurious response specified in TS 38.101-1 [2] apply for FR1.

### 7.7B Spurious response for DC in FR1

#### 7.7B.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC spurious response requirement and parameters are defined in Table 7.7B.1-1.

**Table 7.7B.1-1: Spurious Response Parameters**

| EN-DC Aggregated Bandwidth, MHz                        | ≤100                                         | >100, ≤120 | >120, ≤140 | >140, ≤160 |
|--------------------------------------------------------|----------------------------------------------|------------|------------|------------|
| Pw in Transmission Bandwidth Configuration, perCC, dBm | REFSENS + Aggregated BW specific value below |            |            |            |
|                                                        | 9                                            |            |            |            |
| Pinterferer, dBm (CW)                                  | -44                                          |            |            |            |
| NOTE 1: Void.                                          |                                              |            |            |            |
| NOTE 2: Void.                                          |                                              |            |            |            |

#### 7.7B.2 Intra-band non-contiguous EN-DC in FR1

For the E-UTRA sub-block containing one or multiple CC's, the requirement is defined in clause 7.7.1 for single carrier operation and in clause 7.7.1A for CA in TS 36.101 [4].

For the NR sub-block, the requirement is defined in clause 7.7 is [2].

### 7.7B.3 Inter-band EN-DC within FR1

Spurious response requirement for E-UTRA single carrier and CA operation specified in clauses 7.7.1 and 7.7.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.7 and 7.7A of TS 38.101-1 [2] apply for lowest level EN-DC fallbacks (two bands) in clause 5.5.B.4.1 with following conditions

- one E-UTRA uplink carrier with the output power set to 4 dB below  $P_{\text{CMAX}_L}$  and the NR band whose downlink is being tested has its uplink carrier output power set to 29 dB below  $P_{\text{CMAX}_{L,f,c}}$ .
- one NR uplink carrier with the output power set to 4 dB below  $P_{\text{CMAX}_{L,f,c}}$  on the NR band with both E-UTRA and NR downlinks being tested with E-UTRA output power set to 29 dB below  $P_{\text{CMAX}_{L,c}}$ .

### 7.7B.3a Inter-band NE-DC within FR1

Spurious response requirement for E-UTRA single carrier and CA operation specified in clauses 7.7.1 and 7.7.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.7 and 7.7A of TS 38.101-1 [2] apply for lowest level NE-DC fallbacks (two bands) in clause 5.5B.4a.1 with following conditions

- one E-UTRA uplink carrier with the output power set to 4 dB below  $P_{\text{CMAX}_{L,c}}$  and the NR band whose downlink is being tested has its uplink carrier output power set to 29 dB below  $P_{\text{CMAX}_{L,f,c}}$ .
- one NR uplink carrier with the output power set to 4 dB below  $P_{\text{CMAX}_{L,f,c}}$  on the NR band with both E-UTRA and NR downlinks being tested with E-UTRA output power set to 29 dB below  $P_{\text{CMAX}_{L,c}}$ .

### 7.7B.4 Inter-band EN-DC including FR2

Spurious response requirement for E-UTRA single carrier and CA operation specified in clauses 7.7.1 and 7.7.1A of TS 36.101 [4] apply for lowest level EN-DC fallbacks (two bands) in clause 5.5B.5.1 with only E-UTRA UL with output power as in TS 36.101 [4] (4 dB below  $P_{\text{CMAX}_L}$ ).

### 7.7B.5 Inter-band EN-DC including both FR1 and FR2

Spurious response requirement for E-UTRA single carrier and CA operation specified in clauses 7.7.1 and 7.7.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.7 and 7.7A of TS 38.101-1 [2] apply for lowest level EN-DC fallbacks (three bands) in clause 5.5B.6.2 with only E-UTRA UL with output power as in TS 36.101 [4] (4 dB below  $P_{\text{CMAX}_L}$ ).

## 7.7E Spurious response for V2X in FR1

For intra-band V2X operation, the spurious response specified in clause 7.7.1G in TS 36.101 [4] and specified in clause 7.7E in TS 38.101-1 [2] apply when all SL reception CCs are activated at same time.

For the inter-band con-current NR V2X operation, the spurious response requirements shall be applied per each component carrier. The requirements specified in subclause 7.7E of TS 38.101-1 [2] shall apply for the NR sidelink reception in Band n47 and the requirements specified in subclause 7.7.1 of TS 36.101 [4] shall apply for the E-UTRA downlink reception in licensed band while all downlink carriers are active. The requirements specified in subclause 7.7.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink reception and the requirements specified in subclause 7.7 of TS 38.101-1 [2] shall apply for the NR downlink reception while all downlink carriers are active.

## 7.8 Void

### 7.8A Intermodulation characteristics for CA

For inter-band NR CA between FR1 and FR2, the intermodulation characteristics specified in TS 38.101-1 [2] apply for FR1.

## 7.8B Intermodulation characteristics for DC in FR1

### 7.8B.1 General

### 7.8B.2 Wide band Intermodulation

#### 7.8B.2.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC wide band intermodulation requirement and parameters are defined in Table 7.8B.2.1-1.

**Table 7.8B.2.1-1: Wide band intermodulation**

| EN-DC Aggregated Bandwidth, MHz                                                                                                                                | <=100                       | >100,<br><=120                               | >120,<br><=140 | >140,<br><=160 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------|----------------|----------------|
| P <sub>w</sub> in Transmission Bandwidth Configuration, perCC, dBm                                                                                             | P <sub>w</sub> <sup>1</sup> | REFSENS + Aggregated BW specific value below |                |                |
|                                                                                                                                                                |                             | 16.8                                         | 17.5           | 18.0           |
| P <sub>interferer 1</sub> , dBm (CW) <sup>2</sup>                                                                                                              | -46                         |                                              |                |                |
| P <sub>interferer 2</sub> , dBm (Modulated) <sup>2</sup>                                                                                                       | -46                         |                                              |                |                |
| NOTE 1: P <sub>w</sub> is wanted signal power level from Table 7.8.1A-1 in TS 36.101 [4]                                                                       |                             |                                              |                |                |
| NOTE 2: Jammer BW and offsets is from Table 7.8.1A-1 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier |                             |                                              |                |                |
| NOTE 3: Void.                                                                                                                                                  |                             |                                              |                |                |
| NOTE 4: Void.                                                                                                                                                  |                             |                                              |                |                |

#### 7.8B.2.2 Intra-band non-contiguous EN-DC in FR1

For the E-UTRA sub-block containing one or multiple CC's, the requirement is defined in clause 7.8.1 for single carrier operation and in clause 7.8.1A for CA in TS 36.101 [4].

For the NR sub-block, the requirement is defined in clause 7.8.2 in TS 38.101-1 [2].

The blocker configuration is defined in the general clause 7.1 and the requirement only apply for out of gap interferers.

#### 7.8B.2.3 Inter-band EN-DC within FR1

Wide band Intermodulation requirement for E-UTRA single carrier and CA operation specified in clauses 7.8.1 and 7.8.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.8.2 and 7.8A.2 of TS 38.101-1 [2] apply.

#### 7.8B.2.3a (Void)

#### 7.8B.2.4 Inter-band EN-DC including FR2

Wide band Intermodulation requirement for E-UTRA single carrier and CA operation specified in clauses 7.8.1 and 7.8.1A of TS 36.101 [4] apply.

#### 7.8B.2.5 Inter-band EN-DC including both FR1 and FR2

Wide band Intermodulation requirement for E-UTRA single carrier and CA operation specified in clauses 7.8.1 and 7.8.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.8.2 and 7.8A.2 of TS 38.101-1 [2] apply.

## 7.8E Intermodulation characteristics for V2X operation in FR1

For intra-band V2X operation, the intermodulation characteristics specified in clause 7.8.1G in TS 36.101 [4] and specified in clause 7.8E in TS 38.101-1 [2] apply when all SL reception CCs are activated at same time.

For inter-band NR V2X con-current operation, the intermodulation characteristics requirements shall be applied per each component carrier. The wideband inter-modulation requirement specified in clause 7.8E in TS 38.101-1 [2] shall apply on NR V2X carrier and the requirement specified in clause 7.8.1 in TS 36.101 [4] shall apply on E-UTRA downlink reception in licensed band while all downlink carriers are active. The requirements specified in subclause 7.8.1G of TS 36.101 [4] shall apply for the E-UTRA sidelink reception and the requirements specified in subclause 7.8 of TS 38.101-1 [2] shall apply for the NR downlink reception while all downlink carriers are active.  $P_{\text{Interferer}}$  power is increased by  $\Delta R_{\text{IB,c}}$  in the requirement.

## 7.9 Void

### 7.9A Spurious emissions for CA

For inter-band NR CA between FR1 and FR2, the spurious emission specified in TS 38.101-1 [2] and TS 38.101-2 [3] apply for FR1 and FR2 respectively.

### 7.9B Spurious emissions for DC in FR1

#### 7.9B.1 Intra-band contiguous EN-DC in FR1

The requirement is defined in clause 7.9A.1 in TS 38.101-1 [2].

#### 7.9B.2 Intra-band non-contiguous EN-DC in FR1

Spurious emissions requirement for E-UTRA single carrier and CA operation specified in clauses 7.9.1 and 7.9.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.9 and 7.9A of TS 38.101-1 [2] apply.

#### 7.9B.3 Inter-band EN-DC within FR1

E-UTRA requirements from TS 36.101 [4] and NR requirements from TS 38.101-1 [2] apply.

#### 7.9B.3a (Void)

#### 7.9B.4 Inter-band EN-DC including FR2

Spurious emissions requirement for E-UTRA single carrier and CA operation specified in clauses 7.9.1 and 7.9.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clause 7.9 of TS 38.101-2 [3] apply.

#### 7.9B.5 Inter-band EN-DC including both FR1 and FR2

Spurious emissions requirement for E-UTRA single carrier and CA operation specified in clauses 7.9.1 and 7.9.1A of TS 36.101 [4] and for NR single carrier and CA operation specified in clauses 7.9 and 7.9A of TS 38.101-1 [2] and TS 38.101-2 [3] apply.

## 7.10 Void

## 7.10A Void

## 7.10B power imbalance for DC

### 7.10B.1 General

Power imbalance requirement is a measure of the receiver's ability to receive a wanted signal (LTE or NR) in the presence of another carrier signal (NR or LTE) with 6~25dB power imbalance at a specific frequency offset from the wanted signal.

Power imbalance requirement in this subclause is only applicable for a UE capable of *interBandMRDC-WithOverlapDL-Bands-r16*.

### 7.10B.2 Void

### 7.10B.3 Inter-band EN-DC within FR1

For these test parameters in table 7.10B.3-1, the throughput shall be  $\geq 95\%$  of the maximum throughput of the reference measurement channels as specified in Annexes A.2.2, A.3.2, and A.3.3 (with one sided dynamic OCNG Pattern OP.1 FDD/TDD for the DL-signal as described in Annex A.5.1.1/A.5.2.1 in 38.101-1).

**Table 7.10B.3-1: Test parameters for FDD-FDD or TDD-TDD inter-band EN-DC operation with overlapping or partially overlapping DL bands**

| Test configurations                                                                                                                                                                                                                                       | Carriers                                         | Rx Power in transmission bandwidth configuration (dBm)                                | channel bandwidth                            | Frequency relationship (Center of BW <sub>another</sub> Relative to edge of BW <sub>wanted</sub> ) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                                                         | Wanted carrier                                   | REFSENS <sup>NOTE 4+ 1</sup>                                                          | BW <sub>wanted</sub> ≤ BW <sub>another</sub> | < max (5/2* BW <sub>another</sub> , 50MHz)                                                         |
|                                                                                                                                                                                                                                                           | Another wanted carrier with overlapping DL bands | Power of wanted carrier + 25                                                          |                                              |                                                                                                    |
| 2                                                                                                                                                                                                                                                         | Wanted carrier                                   | REFSENS <sup>NOTE 4 + 1</sup>                                                         | BW <sub>wanted</sub> > BW <sub>another</sub> |                                                                                                    |
|                                                                                                                                                                                                                                                           | Another wanted carrier with overlapping DL bands | Power of wanted carrier + 25 – 10*log10(BW <sub>wanted</sub> /BW <sub>another</sub> ) |                                              |                                                                                                    |
| 3                                                                                                                                                                                                                                                         | Wanted carrier                                   | REFSENS <sup>NOTE 4 + 1</sup>                                                         | NA                                           | ≥ max (5/2* BW <sub>another</sub> , 50MHz)                                                         |
|                                                                                                                                                                                                                                                           | Another wanted carrier with overlapping DL bands | Power of wanted carrier + 25                                                          |                                              |                                                                                                    |
| NOTE 1: For NR carrier, the transmitter shall be set to 24dB below P <sub>CMAX_L,f,c,NR</sub> at the minimum uplink configuration specified in Table 7.3.2-3 [2] with P <sub>CMAX_L,f,c,NR</sub> as defined in clause 6.2B.4.                             |                                                  |                                                                                       |                                              |                                                                                                    |
| NOTE 2: For E-UTRA carrier, the transmitter shall be set to 24 dB below P <sub>CMAX_L_E-UTRA,c</sub> at the minimum uplink configuration specified in Table 7.3.1-2 [4] with P <sub>CMAX_L_E-UTRA,c</sub> as defined in clause 6.2B.4 for single carrier. |                                                  |                                                                                       |                                              |                                                                                                    |
| NOTE 3: BW <sub>wanted</sub> is the channel bandwidth of wanted carrier. BW <sub>another</sub> is the channel bandwidth of another wanted carrier with overlapping DL bands.                                                                              |                                                  |                                                                                       |                                              |                                                                                                    |
| NOTE 4: REFSENS is the reference sensitivity level for two antenna port in Table 7.3.2-1a or in Table 7.3.2-1b of TS 38 101-1, or in Table 7.3.1-1 of TS 36 101                                                                                           |                                                  |                                                                                       |                                              |                                                                                                    |

NOTE 5: For Inter-band EN-DC configurations with multiple contiguous E-UTRA CCs in one band, REFSENS in this table equals to 5MHz REFSENS+10\*log(aggregated BW(MHz)/5) of all the contiguous E-UTRA CCs of the wanted band. BW<sub>wanted</sub> and BW<sub>another</sub> represent the aggregated BWs of all the CCs of the wanted and another band, respectively. The maximum power spectral density imbalance between the contiguous E-UTRA CCs in one band, is within 6 dB.”

The applicability of these test configurations is shown below:

When the capability *interBandContiguousMRDC* is indicated, test configuration 1 or 2 can be used to verify the RX power imbalance requirement for a UE capable of *interBandMRDC-WithOverlapDL-Bands-r16*.

When the capability *interBandContiguousMRDC* is absent, test configuration 1, 2 or 3 can be used to verify the RX power imbalance requirement for a UE capable of *interBandMRDC-WithOverlapDL-Bands-r16*.

It’s allowed to use one of the test configurations to verify the RX power imbalance requirement for a UE capable of *interBandMRDC-WithOverlapDL-Bands-r16*.

For a UE capable of *interBandMRDC-WithOverlapDL-Bands-r16* for the following EN-DC band combinations in Table 7.10B.3-2, the Rx requirements for two Rx ports are applicable for each band in EN-DC operating mode.

Table 7.10B.3-2: TDD-TDD EN-DC combinations

| EN-DC combination                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------|
| DC 42 n77 <sup>1</sup>                                                                                                                |
| DC 42 n78 <sup>1</sup>                                                                                                                |
| NOTE 1: These combinations are not used alone as a fall-back mode of another band combination in which the UL in Band 42 is not used. |

## Annex A (normative): Measurement channels

### A.1 General

The throughput values defined in the measurement channels specified in Annex A, are calculated and are valid per datastream (codeword). For multi-stream (more than one codeword) transmissions, the throughput referenced in the minimum requirements is the sum of throughputs of all datastreams (codewords).

The UE category entry in the definition of the reference measurement channel in Annex A is only informative and reveals the UE categories, which can support the corresponding measurement channel. Whether the measurement channel is used for testing a certain UE category or not is specified in the individual minimum requirements.

### A.2 UL reference measurement channels for E-UTRA TDD Config 2

#### A.2.1 General

The measurement channels in the following clauses are defined to derive the requirements in clause 6 (Transmitter Characteristics) and clause 7 (Receiver Characteristics). The measurement channels represent example configurations of physical channels for different data rates.

#### A.2.2 Reference measurement channels for E-UTRA

##### A.2.2.1 Full RB allocation

##### A.2.2.1.1 QPSK

**Table A.2.2.1.1-1: Reference Channels for QPSK with full RB allocation**

| Parameter                                    | Unit | Value |      |      |       |       |       |
|----------------------------------------------|------|-------|------|------|-------|-------|-------|
| Channel bandwidth                            | MHz  | 1.4   | 3    | 5    | 10    | 15    | 20    |
| Allocated resource blocks                    |      | 6     | 15   | 25   | 50    | 75    | 100   |
| Uplink-Downlink Configuration (NOTE 2)       |      | 2     | 2    | 2    | 2     | 2     | 2     |
| Special subframe configuration (NOTE 3)      |      | 7     | 7    | 7    | 7     | 7     | 7     |
| DFT-OFDM Symbols per Sub-Frame               |      | 12    | 12   | 12   | 12    | 12    | 12    |
| Modulation                                   |      | QPSK  | QPSK | QPSK | QPSK  | QPSK  | QPSK  |
| Target Coding rate                           |      | 1/3   | 1/3  | 1/3  | 1/3   | 1/5   | 1/6   |
| Payload size                                 |      |       |      |      |       |       |       |
| For Sub-Frame 2,7                            | Bits | 600   | 1544 | 2216 | 5160  | 4392  | 4584  |
| Transport block CRC                          | Bits | 24    | 24   | 24   | 24    | 24    | 24    |
| Number of code blocks per Sub-Frame (NOTE 1) |      |       |      |      |       |       |       |
| For Sub-Frame 2,7                            |      | 1     | 1    | 1    | 1     | 1     | 1     |
| Total number of bits per Sub-Frame           |      |       |      |      |       |       |       |
| For Sub-Frame 2,7                            | Bits | 1728  | 4320 | 7200 | 14400 | 21600 | 28800 |
| Total symbols per Sub-Frame                  |      |       |      |      |       |       |       |
| For Sub-Frame 2,7                            |      | 864   | 2160 | 3600 | 7200  | 10800 | 14400 |
| UE Category                                  |      | ≥ 1   | ≥ 1  | ≥ 1  | ≥ 1   | ≥ 1   | ≥ 1   |

NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit)

NOTE 2: As per Table 4.2-2 in TS 36.211 [7]

NOTE 3: As per Table 4.2-1 in TS 36.211 [7]

### A.2.2.1.2 16-QAM

**Table A.2.2.1.2-1: Reference Channels for 16-QAM with full RB allocation**

| Parameter                                                                                                                                      | Unit | Value |       |       |       |       |       |
|------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|-------|-------|-------|-------|-------|
| Channel bandwidth                                                                                                                              | MHz  | 1.4   | 3     | 5     | 10    | 15    | 20    |
| Allocated resource blocks                                                                                                                      |      | 6     | 15    | 25    | 50    | 75    | 100   |
| Uplink-Downlink Configuration (NOTE 2)                                                                                                         |      | 2     | 2     | 2     | 2     | 2     | 2     |
| Special subframe configuration (NOTE 3)                                                                                                        |      | 7     | 7     | 7     | 7     | 7     | 7     |
| DFT-OFDM Symbols per Sub-Frame                                                                                                                 |      | 12    | 12    | 12    | 12    | 12    | 12    |
| Modulation                                                                                                                                     |      | 16QAM | 16QAM | 16QAM | 16QAM | 16QAM | 16QAM |
| Target Coding rate                                                                                                                             |      | 3/4   | 1/2   | 1/3   | 3/4   | 1/2   | 1/3   |
| Payload size                                                                                                                                   |      |       |       |       |       |       |       |
| For Sub-Frame 2,7                                                                                                                              | Bits | 2600  | 4264  | 4968  | 21384 | 21384 | 19848 |
| Transport block CRC                                                                                                                            | Bits | 24    | 24    | 24    | 24    | 24    | 24    |
| Number of code blocks per Sub-Frame (NOTE 1)                                                                                                   |      |       |       |       |       |       |       |
| For Sub-Frame 2,7                                                                                                                              |      | 1     | 1     | 1     | 4     | 4     | 4     |
| Total number of bits per Sub-Frame                                                                                                             |      |       |       |       |       |       |       |
| For Sub-Frame 2,7                                                                                                                              | Bits | 3456  | 8640  | 14400 | 28800 | 43200 | 57600 |
| Total symbols per Sub-Frame                                                                                                                    |      |       |       |       |       |       |       |
| For Sub-Frame 2,7                                                                                                                              |      | 864   | 2160  | 3600  | 7200  | 10800 | 14400 |
| UE Category                                                                                                                                    |      | ≥ 1   | ≥ 1   | ≥ 1   | ≥ 2   | ≥ 2   | ≥ 2   |
| NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit) |      |       |       |       |       |       |       |
| NOTE 2: As per Table 4.2-2 in TS 36.211 [7]                                                                                                    |      |       |       |       |       |       |       |
| NOTE 3: As per Table 4.2-1 in TS 36.211 [7]                                                                                                    |      |       |       |       |       |       |       |

### A.2.2.1.3 64-QAM

**Table A.2.2.1.3-1: Reference Channels for 64-QAM with full RB allocation**

| Parameter                                    | Unit | Value        |              |              |              |              |              |
|----------------------------------------------|------|--------------|--------------|--------------|--------------|--------------|--------------|
| Channel bandwidth                            | MHz  | 1.4          | 3            | 5            | 10           | 15           | 20           |
| Allocated resource blocks                    |      | 6            | 15           | 25           | 50           | 75           | 100          |
| Uplink-Downlink Configuration (NOTE 2)       |      | 2            | 2            | 2            | 2            | 2            | 2            |
| Special subframe configuration (NOTE 3)      |      | 7            | 7            | 7            | 7            | 7            | 7            |
| DFT-OFDM Symbols per Sub-Frame               |      | 12           | 12           | 12           | 12           | 12           | 12           |
| Modulation                                   |      | 64QAM        | 64QAM        | 64QAM        | 64QAM        | 64QAM        | 64QAM        |
| Target Coding rate                           |      | 3/4          | 3/4          | 3/4          | 3/4          | 3/4          | 3/4          |
| Payload size                                 |      |              |              |              |              |              |              |
| For Sub-Frame 2,7                            | Bits | 3752         | 9528         | 15840        | 31704        | 46888        | 63776        |
| Transport block CRC                          | Bits | 24           | 24           | 24           | 24           | 24           | 24           |
| Number of code blocks per Sub-Frame (NOTE 1) |      |              |              |              |              |              |              |
| For Sub-Frame 2,7                            |      | 1            | 2            | 3            | 6            | 8            | 11           |
| Total number of bits per Sub-Frame           |      |              |              |              |              |              |              |
| For Sub-Frame 2,7                            | Bits | 5184         | 12960        | 21600        | 43200        | 64800        | 86400        |
| Total symbols per Sub-Frame                  |      |              |              |              |              |              |              |
| For Sub-Frame 2,7                            |      | 864          | 2160         | 3600         | 7200         | 10800        | 14400        |
| UE Category (NOTE 4)                         |      | 5, 8         | 5, 8         | 5, 8         | 5, 8         | 5, 8         | 5, 8         |
| UE UL Category (NOTE 4)                      |      | 5, 8, 13, 14 | 5, 8, 13, 14 | 5, 8, 13, 14 | 5, 8, 13, 14 | 5, 8, 13, 14 | 5, 8, 13, 14 |

NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit)

NOTE 2: As per Table 4.2-2 in TS 36.211 [7]

NOTE 3: As per Table 4.2-1 in TS 36.211 [7]

NOTE 4: If UE does not report UE UL category, then the applicability of reference channel is determined by UE category. If UE reports UE UL category, then the applicability of reference channel is determined by UE UL category.

#### A.2.2.1.4 256 QAM

**Table A.2.2.1.4-1: Reference Channels for 256 QAM with full RB allocation**

| Parameter                                                                                                                                      | Unit | Value  |        |        |        |        |        |
|------------------------------------------------------------------------------------------------------------------------------------------------|------|--------|--------|--------|--------|--------|--------|
| Channel bandwidth                                                                                                                              | MHz  | 1.4    | 3      | 5      | 10     | 15     | 20     |
| Allocated resource blocks                                                                                                                      |      | 6      | 15     | 25     | 50     | 75     | 100    |
| Uplink-Downlink Configuration (NOTE 2)                                                                                                         |      | 2      | 2      | 2      | 2      | 2      | 2      |
| Special subframe configuration (NOTE 3)                                                                                                        |      | 7      | 7      | 7      | 7      | 7      | 7      |
| DFT-OFDM Symbols per Sub-Frame                                                                                                                 |      | 12     | 12     | 12     | 12     | 12     | 12     |
| Modulation                                                                                                                                     |      | 256QAM | 256QAM | 256QAM | 256QAM | 256QAM | 256QAM |
| Target Coding rate                                                                                                                             |      | 3/4    | 3/4    | 3/4    | 3/4    | 3/4    | 3/4    |
| Payload size                                                                                                                                   |      |        |        |        |        |        |        |
| For Sub-Frame 2,7                                                                                                                              | Bits | 5160   | 12960  | 21384  | 42368  | 63776  | 84760  |
| Transport block CRC                                                                                                                            | Bits | 24     | 24     | 24     | 24     | 24     | 24     |
| Number of code blocks per Sub-Frame (NOTE 1)                                                                                                   |      |        |        |        |        |        |        |
| For Sub-Frame 2,7                                                                                                                              |      | 1      | 3      | 4      | 8      | 11     | 15     |
| Total number of bits per Sub-Frame                                                                                                             |      |        |        |        |        |        |        |
| For Sub-Frame 2,7                                                                                                                              | Bits | 6912   | 17280  | 28800  | 57600  | 86400  | 115200 |
| Total symbols per Sub-Frame                                                                                                                    |      |        |        |        |        |        |        |
| For Sub-Frame 2,7                                                                                                                              |      | 864    | 2160   | 3600   | 7200   | 10800  | 14400  |
| UE UL Category                                                                                                                                 |      | ≥ 15   | ≥ 15   | ≥ 15   | ≥ 15   | ≥ 15   | ≥ 15   |
| NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit) |      |        |        |        |        |        |        |
| NOTE 2: As per Table 4.2-2 in TS 36.211 [7]                                                                                                    |      |        |        |        |        |        |        |
| NOTE 3: As per Table 4.2-1 in TS 36.211 [7]                                                                                                    |      |        |        |        |        |        |        |

## A.2.2.2 Partial RB allocation

## A.2.2.2.1 QPSK

Table A.2.2.2.1-1: Reference Channels for QPSK with partial RB allocation

| Parameter | Ch BW    | Allocat<br>ed RBs | UL-DL<br>Config<br>uration<br>(NOTE<br>2) | Speci<br>al subfra<br>me config<br>uration<br>(NOTE<br>3) | DFT-<br>OFDM<br>Symb<br>ols<br>per<br>Sub-<br>Frame | Mod'n | Targe<br>t Codi<br>ng<br>rate | Paylo<br>ad size<br>for<br>Sub-<br>Frame<br>2, 7 | Transp<br>ort<br>block<br>CRC | Num<br>ber<br>of<br>code<br>block<br>s per<br>Sub-<br>Frame<br>(NOT<br>E 1) | Total<br>numbe<br>r of<br>bits<br>per<br>Sub-<br>Frame<br>for<br>Sub-<br>Frame<br>2, 7 | Total<br>symbol<br>s per<br>Sub-<br>Frame<br>for<br>Sub-<br>Frame<br>2, 7 | UE<br>Catego<br>ry |
|-----------|----------|-------------------|-------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------|-------|-------------------------------|--------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------|
| Unit      | MHz      |                   |                                           |                                                           |                                                     |       |                               | Bits                                             | Bits                          |                                                                             | Bits                                                                                   |                                                                           |                    |
|           | 1.4 - 20 | 1                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 72                                               | 24                            | 1                                                                           | 288                                                                                    | 144                                                                       | ≥ 1                |
|           | 1.4 - 20 | 2                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 176                                              | 24                            | 1                                                                           | 576                                                                                    | 288                                                                       | ≥ 1                |
|           | 1.4 - 20 | 3                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 256                                              | 24                            | 1                                                                           | 864                                                                                    | 432                                                                       | ≥ 1                |
|           | 1.4 - 20 | 4                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 392                                              | 24                            | 1                                                                           | 1152                                                                                   | 576                                                                       | ≥ 1                |
|           | 1.4 - 20 | 5                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 424                                              | 24                            | 1                                                                           | 1440                                                                                   | 720                                                                       | ≥ 1                |
|           | 3-20     | 6                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 600                                              | 24                            | 1                                                                           | 1728                                                                                   | 864                                                                       | ≥ 1                |
|           | 3-20     | 8                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 808                                              | 24                            | 1                                                                           | 2304                                                                                   | 1152                                                                      | ≥ 1                |
|           | 3-20     | 9                 | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 776                                              | 24                            | 1                                                                           | 2592                                                                                   | 1296                                                                      | ≥ 1                |
|           | 3-20     | 10                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 872                                              | 24                            | 1                                                                           | 2880                                                                                   | 1440                                                                      | ≥ 1                |
|           | 3-20     | 12                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 1224                                             | 24                            | 1                                                                           | 3456                                                                                   | 1728                                                                      | ≥ 1                |
|           | 5-20     | 15                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 1320                                             | 24                            | 1                                                                           | 4320                                                                                   | 2160                                                                      | ≥ 1                |
|           | 5-20     | 16                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 1384                                             | 24                            | 1                                                                           | 4608                                                                                   | 2304                                                                      | ≥ 1                |
|           | 5-20     | 18                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 1864                                             | 24                            | 1                                                                           | 5184                                                                                   | 2592                                                                      | ≥ 1                |
|           | 5-20     | 20                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 1736                                             | 24                            | 1                                                                           | 5760                                                                                   | 2880                                                                      | ≥ 1                |
|           | 5-20     | 24                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 2472                                             | 24                            | 1                                                                           | 6912                                                                                   | 3456                                                                      | ≥ 1                |
|           | 10-20    | 25                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 2216                                             | 24                            | 1                                                                           | 7200                                                                                   | 3600                                                                      | ≥ 1                |
|           | 10-20    | 27                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 2792                                             | 24                            | 1                                                                           | 7776                                                                                   | 3888                                                                      | ≥ 1                |
|           | 10-20    | 30                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 2664                                             | 24                            | 1                                                                           | 8640                                                                                   | 4320                                                                      | ≥ 1                |
|           | 10-20    | 32                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 2792                                             | 24                            | 1                                                                           | 9216                                                                                   | 4608                                                                      | ≥ 1                |
|           | 10-20    | 36                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 3752                                             | 24                            | 1                                                                           | 10368                                                                                  | 5184                                                                      | ≥ 1                |
|           | 10-20    | 40                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 4136                                             | 24                            | 1                                                                           | 11520                                                                                  | 5760                                                                      | ≥ 1                |
|           | 10-20    | 45                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 4008                                             | 24                            | 1                                                                           | 12960                                                                                  | 6480                                                                      | ≥ 1                |
|           | 10-20    | 48                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 4264                                             | 24                            | 1                                                                           | 13824                                                                                  | 6912                                                                      | ≥ 1                |
|           | 15 - 20  | 50                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 5160                                             | 24                            | 1                                                                           | 14400                                                                                  | 7200                                                                      | ≥ 1                |
|           | 15 - 20  | 54                | 2                                         | 7                                                         | 12                                                  | QPSK  | 1/3                           | 4776                                             | 24                            | 1                                                                           | 15552                                                                                  | 7776                                                                      | ≥ 1                |

|                                                                                                                                                |         |    |   |   |    |      |     |      |    |   |       |       |     |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------|----|---|---|----|------|-----|------|----|---|-------|-------|-----|
|                                                                                                                                                | 15 - 20 | 60 | 2 | 7 | 12 | QPSK | 1/4 | 4264 | 24 | 1 | 17280 | 8640  | ≥ 1 |
|                                                                                                                                                | 15 - 20 | 64 | 2 | 7 | 12 | QPSK | 1/4 | 4584 | 24 | 1 | 18432 | 9216  | ≥ 1 |
|                                                                                                                                                | 15 - 20 | 72 | 2 | 7 | 12 | QPSK | 1/4 | 5160 | 24 | 1 | 20736 | 10368 | ≥ 1 |
|                                                                                                                                                | 20      | 75 | 2 | 7 | 12 | QPSK | 1/5 | 4392 | 24 | 1 | 21600 | 10800 | ≥ 1 |
|                                                                                                                                                | 20      | 80 | 2 | 7 | 12 | QPSK | 1/5 | 4776 | 24 | 1 | 23040 | 11520 | ≥ 1 |
|                                                                                                                                                | 20      | 81 | 2 | 7 | 12 | QPSK | 1/5 | 4776 | 24 | 1 | 23328 | 11664 | ≥ 1 |
|                                                                                                                                                | 20      | 90 | 2 | 7 | 12 | QPSK | 1/6 | 4008 | 24 | 1 | 25920 | 12960 | ≥ 1 |
|                                                                                                                                                | 20      | 96 | 2 | 7 | 12 | QPSK | 1/6 | 4264 | 24 | 1 | 27648 | 13824 | ≥ 1 |
| NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit) |         |    |   |   |    |      |     |      |    |   |       |       |     |
| NOTE 2: As per Table 4.2-2 in TS 36.211 [7]                                                                                                    |         |    |   |   |    |      |     |      |    |   |       |       |     |
| NOTE 3: As per Table 4.2-1 in TS 36.211 [7]                                                                                                    |         |    |   |   |    |      |     |      |    |   |       |       |     |

## A.2.2.2.2 16-QAM

Table A.2.2.2-1: Reference Channels for 16QAM with partial RB allocation

| Parameter | Ch BW    | Allocated RBs | UL-DL Configuration (NOTE 2) | Special subframe configuration (NOTE 3) | DFT-OFDM Symbols per Sub-Frame | Mod'n | Target Coding rate | Payload size for Sub-Frame 2, 7 | Transport block CRC | Number of code blocks per Sub-Frame (NOTE 1) | Total number of bits per Sub-Frame for Sub-Frame 2, 7 | Total symbols per Sub-Frame for Sub-Frame 2, 7 | UE Category |
|-----------|----------|---------------|------------------------------|-----------------------------------------|--------------------------------|-------|--------------------|---------------------------------|---------------------|----------------------------------------------|-------------------------------------------------------|------------------------------------------------|-------------|
| Unit      | MHz      |               |                              |                                         |                                |       |                    | Bits                            | Bits                |                                              | Bits                                                  |                                                |             |
|           | 1.4 - 20 | 1             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 408                             | 24                  | 1                                            | 576                                                   | 144                                            | ≥ 1         |
|           | 1.4 - 20 | 2             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 840                             | 24                  | 1                                            | 1152                                                  | 288                                            | ≥ 1         |
|           | 1.4 - 20 | 3             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 1288                            | 24                  | 1                                            | 1728                                                  | 432                                            | ≥ 1         |
|           | 1.4 - 20 | 4             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 1736                            | 24                  | 1                                            | 2304                                                  | 576                                            | ≥ 1         |
|           | 1.4 - 20 | 5             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 2152                            | 24                  | 1                                            | 2880                                                  | 720                                            | ≥ 1         |
|           | 3-20     | 6             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 2600                            | 24                  | 1                                            | 3456                                                  | 864                                            | ≥ 1         |
|           | 3-20     | 8             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 3496                            | 24                  | 1                                            | 4608                                                  | 1152                                           | ≥ 1         |
|           | 3-20     | 9             | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 3880                            | 24                  | 1                                            | 5184                                                  | 1296                                           | ≥ 1         |
|           | 3-20     | 10            | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 4264                            | 24                  | 1                                            | 5760                                                  | 1440                                           | ≥ 1         |
|           | 3-20     | 12            | 2                            | 7                                       | 12                             | 16QAM | 3/4                | 5160                            | 24                  | 1                                            | 6912                                                  | 1728                                           | ≥ 1         |
|           | 5-20     | 15            | 2                            | 7                                       | 12                             | 16QAM | 1/2                | 4264                            | 24                  | 1                                            | 8640                                                  | 2160                                           | ≥ 1         |
|           | 5-20     | 16            | 2                            | 7                                       | 12                             | 16QAM | 1/2                | 4584                            | 24                  | 1                                            | 9216                                                  | 2304                                           | ≥ 1         |
|           | 5-20     | 18            | 2                            | 7                                       | 12                             | 16QAM | 1/2                | 5160                            | 24                  | 1                                            | 10368                                                 | 2592                                           | ≥ 1         |
|           | 5-20     | 20            | 2                            | 7                                       | 12                             | 16QAM | 1/3                | 4008                            | 24                  | 1                                            | 11520                                                 | 2880                                           | ≥ 1         |
|           | 5-20     | 24            | 2                            | 7                                       | 12                             | 16QAM | 1/3                | 4776                            | 24                  | 1                                            | 13824                                                 | 3456                                           | ≥ 1         |

|                                                                                                                                                |         |    |   |   |    |       |     |       |    |   |       |       |     |
|------------------------------------------------------------------------------------------------------------------------------------------------|---------|----|---|---|----|-------|-----|-------|----|---|-------|-------|-----|
|                                                                                                                                                | 10-20   | 25 | 2 | 7 | 12 | 16QAM | 1/3 | 4968  | 24 | 1 | 14400 | 3600  | ≥ 1 |
|                                                                                                                                                | 10-20   | 27 | 2 | 7 | 12 | 16QAM | 1/3 | 4776  | 24 | 1 | 15552 | 3888  | ≥ 1 |
|                                                                                                                                                | 10-20   | 30 | 2 | 7 | 12 | 16QAM | 3/4 | 12960 | 24 | 3 | 17280 | 4320  | ≥ 2 |
|                                                                                                                                                | 10-20   | 32 | 2 | 7 | 12 | 16QAM | 3/4 | 13536 | 24 | 3 | 18432 | 4608  | ≥ 2 |
|                                                                                                                                                | 10-20   | 36 | 2 | 7 | 12 | 16QAM | 3/4 | 15264 | 24 | 3 | 20736 | 5184  | ≥ 2 |
|                                                                                                                                                | 10-20   | 40 | 2 | 7 | 12 | 16QAM | 3/4 | 16992 | 24 | 3 | 23040 | 5760  | ≥ 2 |
|                                                                                                                                                | 10-20   | 45 | 2 | 7 | 12 | 16QAM | 3/4 | 19080 | 24 | 4 | 25920 | 6480  | ≥ 2 |
|                                                                                                                                                | 10-20   | 48 | 2 | 7 | 12 | 16QAM | 3/4 | 20616 | 24 | 4 | 27648 | 6912  | ≥ 2 |
|                                                                                                                                                | 15 - 20 | 50 | 2 | 7 | 12 | 16QAM | 3/4 | 21384 | 24 | 4 | 28800 | 7200  | ≥ 2 |
|                                                                                                                                                | 15 - 20 | 54 | 2 | 7 | 12 | 16QAM | 3/4 | 22920 | 24 | 4 | 31104 | 7776  | ≥ 2 |
|                                                                                                                                                | 15 - 20 | 60 | 2 | 7 | 12 | 16QAM | 2/3 | 23688 | 24 | 4 | 34560 | 8640  | ≥ 2 |
|                                                                                                                                                | 15 - 20 | 64 | 2 | 7 | 12 | 16QAM | 2/3 | 25456 | 24 | 4 | 36864 | 9216  | ≥ 2 |
|                                                                                                                                                | 15 - 20 | 72 | 2 | 7 | 12 | 16QAM | 1/2 | 20616 | 24 | 4 | 41472 | 10368 | ≥ 2 |
|                                                                                                                                                | 20      | 75 | 2 | 7 | 12 | 16QAM | 1/2 | 21384 | 24 | 4 | 43200 | 10800 | ≥ 2 |
|                                                                                                                                                | 20      | 80 | 2 | 7 | 12 | 16QAM | 1/2 | 22920 | 24 | 4 | 46080 | 11520 | ≥ 2 |
|                                                                                                                                                | 20      | 81 | 2 | 7 | 12 | 16QAM | 1/2 | 22920 | 24 | 4 | 46656 | 11664 | ≥ 2 |
|                                                                                                                                                | 20      | 90 | 2 | 7 | 12 | 16QAM | 2/5 | 20616 | 24 | 4 | 51840 | 12960 | ≥ 2 |
|                                                                                                                                                | 20      | 96 | 2 | 7 | 12 | 16QAM | 2/5 | 22152 | 24 | 4 | 55296 | 13824 | ≥ 2 |
| NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit) |         |    |   |   |    |       |     |       |    |   |       |       |     |
| NOTE 2: As per Table 4.2-2 in TS 36.211 [7]                                                                                                    |         |    |   |   |    |       |     |       |    |   |       |       |     |
| NOTE 3: As per Table 4.2-1 in TS 36.211 [7]                                                                                                    |         |    |   |   |    |       |     |       |    |   |       |       |     |

## A.2.2.2.3 64-QAM

Table A.2.2.2.3-1: Reference Channels for 64-QAM with partial RB allocation

| Parameter | Ch BW    | Allocated RBs | UL-DL Configuration (NOTE 2) | Special subframe configuration (NOTE 3) | DFT-OFDM Symbols per Sub-Frame | Mod'n | Target Coding rate | Payload size for Sub-Frame 2, 7 | Transport block CRC | Number of code blocks per Sub-Frame (NOTE 1) | Total number of bits per Sub-Frame for Sub-Frame 2, 7 | Total symbols per Sub-Frame for Sub-Frame 2, 7 | UE Category (NOTE 4) |
|-----------|----------|---------------|------------------------------|-----------------------------------------|--------------------------------|-------|--------------------|---------------------------------|---------------------|----------------------------------------------|-------------------------------------------------------|------------------------------------------------|----------------------|
| Unit      | MHz      |               |                              |                                         |                                |       |                    | Bits                            | Bits                |                                              | Bits                                                  |                                                |                      |
|           | 1.4 - 20 | 1             | 2                            | 7                                       | 12                             | 64QAM | 3/4                | 616                             | 24                  | 1                                            | 864                                                   | 144                                            | 5,8                  |
|           | 1.4 - 20 | 2             | 2                            | 7                                       | 12                             | 64QAM | 3/4                | 1256                            | 24                  | 1                                            | 1728                                                  | 288                                            | 5,8                  |
|           | 1.4 - 20 | 3             | 2                            | 7                                       | 12                             | 64QAM | 3/4                | 1864                            | 24                  | 1                                            | 2592                                                  | 432                                            | 5,8                  |
|           | 1.4 - 20 | 4             | 2                            | 7                                       | 12                             | 64QAM | 3/4                | 2536                            | 24                  | 1                                            | 3456                                                  | 576                                            | 5,8                  |
|           | 1.4 - 20 | 5             | 2                            | 7                                       | 12                             | 64QAM | 3/4                | 3112                            | 24                  | 1                                            | 4320                                                  | 720                                            | 5,8                  |

|  |          |    |   |   |    |       |     |       |    |   |       |      |     |
|--|----------|----|---|---|----|-------|-----|-------|----|---|-------|------|-----|
|  | 3-20     | 6  | 2 | 7 | 12 | 64QAM | 3/4 | 3752  | 24 | 1 | 5184  | 864  | 5,8 |
|  | 3-20     | 8  | 2 | 7 | 12 | 64QAM | 3/4 | 5160  | 24 | 1 | 6912  | 1152 | 5,8 |
|  | 3-20     | 9  | 2 | 7 | 12 | 64QAM | 3/4 | 5736  | 24 | 1 | 7776  | 1296 | 5,8 |
|  | 3-20     | 10 | 2 | 7 | 12 | 64QAM | 3/4 | 6200  | 24 | 2 | 8640  | 1440 | 5,8 |
|  | 3-20     | 12 | 2 | 7 | 12 | 64QAM | 3/4 | 7480  | 24 | 2 | 10368 | 1728 | 5,8 |
|  | 5-20     | 15 | 2 | 7 | 12 | 64QAM | 3/4 | 9528  | 24 | 2 | 12960 | 2160 | 5,8 |
|  | 5-20     | 16 | 2 | 7 | 12 | 64QAM | 3/4 | 10296 | 24 | 2 | 13824 | 2304 | 5,8 |
|  | 5-20     | 18 | 2 | 7 | 12 | 64QAM | 3/4 | 11448 | 24 | 2 | 15552 | 2592 | 5,8 |
|  | 5-20     | 20 | 2 | 7 | 12 | 64QAM | 3/4 | 12576 | 24 | 3 | 17280 | 2880 | 5,8 |
|  | 5-20     | 24 | 2 | 7 | 12 | 64QAM | 3/4 | 15264 | 24 | 3 | 20736 | 3456 | 5,8 |
|  | 10-20    | 25 | 2 | 7 | 12 | 64QAM | 3/4 | 15840 | 24 | 3 | 21600 | 3600 | 5,8 |
|  | 10-20    | 27 | 2 | 7 | 12 | 64QAM | 3/4 | 16992 | 24 | 3 | 23328 | 3888 | 5,8 |
|  | 10-20    | 30 | 2 | 7 | 12 | 64QAM | 3/4 | 19080 | 24 | 4 | 25920 | 4320 | 5,8 |
|  | 10-20    | 32 | 2 | 7 | 12 | 64QAM | 3/4 | 20616 | 24 | 4 | 27648 | 4608 | 5,8 |
|  | 10-20    | 36 | 2 | 7 | 12 | 64QAM | 3/4 | 22920 | 24 | 4 | 31104 | 5184 | 5,8 |
|  | 10-20    | 40 | 2 | 7 | 12 | 64QAM | 3/4 | 25456 | 24 | 5 | 34560 | 5760 | 5,8 |
|  | 10-20    | 45 | 2 | 7 | 12 | 64QAM | 3/4 | 28336 | 24 | 5 | 38880 | 6480 | 5,8 |
|  | 10-20    | 48 | 2 | 7 | 12 | 64QAM | 3/4 | 30576 | 24 | 5 | 41472 | 6912 | 5,8 |
|  | 15 - 20  | 50 | 2 | 7 | 12 | 64QAM | 3/4 | 31704 | 24 | 6 | 43200 | 7200 | 5,8 |
|  | 15 - 20  | 54 | 2 | 7 | 12 | 64QAM | 3/4 | 34008 | 24 | 6 | 46656 | 7776 | 5,8 |
|  | 15 - 20  | 60 | 2 | 7 | 12 | 64QAM | 3/4 | 37888 | 24 | 7 | 51840 | 8640 | 5,8 |
|  | 15 - 20  | 64 | 2 | 7 | 12 | 64QAM | 3/4 | 40576 | 24 | 7 | 55296 | 9216 | 5,8 |
|  | 1.4 - 20 | 1  | 2 | 7 | 12 | 64QAM | 3/4 | 616   | 24 | 1 | 864   | 144  | 5,8 |
|  | 1.4 - 20 | 2  | 2 | 7 | 12 | 64QAM | 3/4 | 1256  | 24 | 1 | 1728  | 288  | 5,8 |
|  | 1.4 - 20 | 3  | 2 | 7 | 12 | 64QAM | 3/4 | 1864  | 24 | 1 | 2592  | 432  | 5,8 |
|  | 1.4 - 20 | 4  | 2 | 7 | 12 | 64QAM | 3/4 | 2536  | 24 | 1 | 3456  | 576  | 5,8 |
|  | 1.4 - 20 | 5  | 2 | 7 | 12 | 64QAM | 3/4 | 3112  | 24 | 1 | 4320  | 720  | 5,8 |
|  | 3-20     | 6  | 2 | 7 | 12 | 64QAM | 3/4 | 3752  | 24 | 1 | 5184  | 864  | 5,8 |
|  | 3-20     | 8  | 2 | 7 | 12 | 64QAM | 3/4 | 5160  | 24 | 1 | 6912  | 1152 | 5,8 |
|  | 3-20     | 9  | 2 | 7 | 12 | 64QAM | 3/4 | 5736  | 24 | 1 | 7776  | 1296 | 5,8 |
|  | 3-20     | 10 | 2 | 7 | 12 | 64QAM | 3/4 | 6200  | 24 | 2 | 8640  | 1440 | 5,8 |
|  | 3-20     | 12 | 2 | 7 | 12 | 64QAM | 3/4 | 7480  | 24 | 2 | 10368 | 1728 | 5,8 |
|  | 5-20     | 15 | 2 | 7 | 12 | 64QAM | 3/4 | 9528  | 24 | 2 | 12960 | 2160 | 5,8 |
|  | 5-20     | 16 | 2 | 7 | 12 | 64QAM | 3/4 | 10296 | 24 | 2 | 13824 | 2304 | 5,8 |
|  | 5-20     | 18 | 2 | 7 | 12 | 64QAM | 3/4 | 11448 | 24 | 2 | 15552 | 2592 | 5,8 |
|  | 5-20     | 20 | 2 | 7 | 12 | 64QAM | 3/4 | 12576 | 24 | 3 | 17280 | 2880 | 5,8 |
|  | 5-20     | 24 | 2 | 7 | 12 | 64QAM | 3/4 | 15264 | 24 | 3 | 20736 | 3456 | 5,8 |
|  | 10-20    | 25 | 2 | 7 | 12 | 64QAM | 3/4 | 15840 | 24 | 3 | 21600 | 3600 | 5,8 |
|  | 10-20    | 27 | 2 | 7 | 12 | 64QAM | 3/4 | 16992 | 24 | 3 | 23328 | 3888 | 5,8 |
|  | 10-20    | 30 | 2 | 7 | 12 | 64QAM | 3/4 | 19080 | 24 | 4 | 25920 | 4320 | 5,8 |
|  | 15 - 20  | 50 | 2 | 7 | 12 | 64QAM | 3/4 | 31704 | 24 | 6 | 43200 | 7200 | 5,8 |
|  | 15 - 20  | 54 | 2 | 7 | 12 | 64QAM | 3/4 | 34008 | 24 | 6 | 46656 | 7776 | 5,8 |
|  | 15 - 20  | 60 | 2 | 7 | 12 | 64QAM | 3/4 | 37888 | 24 | 7 | 51840 | 8640 | 5,8 |
|  | 15 - 20  | 64 | 2 | 7 | 12 | 64QAM | 3/4 | 40576 | 24 | 7 | 55296 | 9216 | 5,8 |

|                                                                                                                                                                                                                                   |         |    |   |   |    |       |     |       |    |    |       |       |     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|----|---|---|----|-------|-----|-------|----|----|-------|-------|-----|
|                                                                                                                                                                                                                                   | 15 - 20 | 72 | 2 | 7 | 12 | 64QAM | 3/4 | 45352 | 24 | 8  | 62208 | 10368 | 5,8 |
|                                                                                                                                                                                                                                   | 20      | 75 | 2 | 7 | 12 | 64QAM | 3/4 | 46888 | 24 | 8  | 64800 | 10800 | 5,8 |
|                                                                                                                                                                                                                                   | 20      | 80 | 2 | 7 | 12 | 64QAM | 3/4 | 51024 | 24 | 9  | 69120 | 11520 | 5,8 |
|                                                                                                                                                                                                                                   | 20      | 81 | 2 | 7 | 12 | 64QAM | 3/4 | 51024 | 24 | 9  | 69984 | 11664 | 5,8 |
|                                                                                                                                                                                                                                   | 20      | 90 | 2 | 7 | 12 | 64QAM | 3/4 | 51024 | 24 | 9  | 77760 | 12960 | 5,8 |
|                                                                                                                                                                                                                                   | 20      | 96 | 2 | 7 | 12 | 64QAM | 3/4 | 61664 | 24 | 11 | 82944 | 13824 | 5,8 |
| NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit)                                                                                    |         |    |   |   |    |       |     |       |    |    |       |       |     |
| NOTE 2: As per Table 4.2-2 in TS 36.211 [7].                                                                                                                                                                                      |         |    |   |   |    |       |     |       |    |    |       |       |     |
| NOTE 3: As per Table 4.2-1 in TS 36.211 [7]                                                                                                                                                                                       |         |    |   |   |    |       |     |       |    |    |       |       |     |
| NOTE 4: If UE does not report UE UL category, then the applicability of reference channel is determined by UE category. If UE reports UE UL category, then the applicability of reference channel is determined by UE UL category |         |    |   |   |    |       |     |       |    |    |       |       |     |

## A.2.2.2.4 256 QAM

Table A.2.2.2.4-1: Reference Channels for 256 QAM with partial RB allocation

| Parameter | Ch BW    | Allocated RBs | UL-DL Configuration (NOTE 2) | Special Slot Configuration (NOTE 3) | DFT-OFDM Symbols per Sub-Frame | Mod'n  | Target Coding rate | Payload size for Sub-Frame 2, 7 | Transport block CRC | Number of code blocks per Sub-Frame (NOTE 1) | Total number of bits per Sub-Frame for Sub-Frame 2, 7 | Total symbols per Sub-Frame for Sub-Frame 2, 7 | UE UL Category |
|-----------|----------|---------------|------------------------------|-------------------------------------|--------------------------------|--------|--------------------|---------------------------------|---------------------|----------------------------------------------|-------------------------------------------------------|------------------------------------------------|----------------|
| Unit      | MHz      |               |                              |                                     |                                |        |                    | Bits                            | Bits                |                                              | Bits                                                  |                                                |                |
|           | 1.4 - 20 | 1             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 840                             | 24                  | 1                                            | 1152                                                  | 144                                            | ≥ 15           |
|           | 1.4 - 20 | 2             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 1672                            | 24                  | 1                                            | 2304                                                  | 288                                            | ≥ 15           |
|           | 1.4 - 20 | 3             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 2536                            | 24                  | 1                                            | 3456                                                  | 432                                            | ≥ 15           |
|           | 1.4 - 20 | 4             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 3368                            | 24                  | 1                                            | 4608                                                  | 576                                            | ≥ 15           |
|           | 1.4 - 20 | 5             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 4264                            | 24                  | 1                                            | 5760                                                  | 720                                            | ≥ 15           |
|           | 3-20     | 6             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 5160                            | 24                  | 1                                            | 6912                                                  | 864                                            | ≥ 15           |
|           | 3-20     | 8             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 6712                            | 24                  | 2                                            | 9216                                                  | 1152                                           | ≥ 15           |
|           | 3-20     | 9             | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 7736                            | 24                  | 2                                            | 10368                                                 | 1296                                           | ≥ 15           |
|           | 3-20     | 10            | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 8504                            | 24                  | 2                                            | 11520                                                 | 1440                                           | ≥ 15           |
|           | 3-20     | 12            | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 10296                           | 24                  | 2                                            | 13824                                                 | 1728                                           | ≥ 15           |
|           | 5-20     | 15            | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 12960                           | 24                  | 3                                            | 17280                                                 | 2160                                           | ≥ 15           |
|           | 5-20     | 16            | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 13536                           | 24                  | 3                                            | 18432                                                 | 2304                                           | ≥ 15           |
|           | 5-20     | 18            | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 15264                           | 24                  | 3                                            | 20736                                                 | 2592                                           | ≥ 15           |
|           | 5-20     | 20            | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 16992                           | 24                  | 3                                            | 23040                                                 | 2880                                           | ≥ 15           |
|           | 5-20     | 24            | 2                            | 7                                   | 12                             | 256QAM | 3/4                | 20616                           | 24                  | 4                                            | 27648                                                 | 3456                                           | ≥ 15           |

|  |         |    |   |   |    |        |     |       |    |    |        |       |      |
|--|---------|----|---|---|----|--------|-----|-------|----|----|--------|-------|------|
|  | 10-20   | 25 | 2 | 7 | 12 | 256QAM | 3/4 | 21384 | 24 | 4  | 28800  | 3600  | ≥ 15 |
|  | 10-20   | 27 | 2 | 7 | 12 | 256QAM | 3/4 | 22920 | 24 | 4  | 31104  | 3888  | ≥ 15 |
|  | 10-20   | 30 | 2 | 7 | 12 | 256QAM | 3/4 | 25456 | 24 | 5  | 34560  | 4320  | ≥ 15 |
|  | 10-20   | 32 | 2 | 7 | 12 | 256QAM | 3/4 | 27376 | 24 | 5  | 36864  | 4608  | ≥ 15 |
|  | 10-20   | 36 | 2 | 7 | 12 | 256QAM | 3/4 | 30576 | 24 | 6  | 41472  | 5184  | ≥ 15 |
|  | 10-20   | 40 | 2 | 7 | 12 | 256QAM | 3/4 | 34008 | 24 | 6  | 46080  | 5760  | ≥ 15 |
|  | 10-20   | 45 | 2 | 7 | 12 | 256QAM | 3/4 | 37888 | 24 | 7  | 51840  | 6480  | ≥ 15 |
|  | 10-20   | 48 | 2 | 7 | 12 | 256QAM | 3/4 | 40576 | 24 | 8  | 55296  | 6912  | ≥ 15 |
|  | 15 - 20 | 50 | 2 | 7 | 12 | 256QAM | 3/4 | 42368 | 24 | 8  | 57600  | 7200  | ≥ 15 |
|  | 15 - 20 | 54 | 2 | 7 | 12 | 256QAM | 3/4 | 46888 | 24 | 8  | 62208  | 7776  | ≥ 15 |
|  | 15 - 20 | 60 | 2 | 7 | 12 | 256QAM | 3/4 | 51024 | 24 | 9  | 69120  | 8640  | ≥ 15 |
|  | 15 - 20 | 64 | 2 | 7 | 12 | 256QAM | 3/4 | 55056 | 24 | 9  | 73728  | 9216  | ≥ 15 |
|  | 15 - 20 | 72 | 2 | 7 | 12 | 256QAM | 3/4 | 61664 | 24 | 11 | 82944  | 10368 | ≥ 15 |
|  | 20      | 75 | 2 | 7 | 12 | 256QAM | 3/4 | 63776 | 24 | 11 | 86400  | 10800 | ≥ 15 |
|  | 20      | 80 | 2 | 7 | 12 | 256QAM | 3/4 | 68808 | 24 | 12 | 92160  | 11520 | ≥ 15 |
|  | 20      | 81 | 2 | 7 | 12 | 256QAM | 3/4 | 68808 | 24 | 12 | 93312  | 11664 | ≥ 15 |
|  | 20      | 90 | 2 | 7 | 12 | 256QAM | 3/4 | 76208 | 24 | 13 | 103680 | 12960 | ≥ 15 |
|  | 20      | 96 | 2 | 7 | 12 | 256QAM | 3/4 | 81176 | 24 | 14 | 110592 | 13824 | ≥ 15 |

NOTE 1: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit)

NOTE 2: As per Table 4.2-2 in TS 36.211 [7]

NOTE 3: As per Table 4.2-1 in TS 36.211 [7]

## A.3 DL reference measurement channels for E-UTRA

### A.3.1 General

The number of available channel bits varies across the sub-frames due to PBCH and PSS/SSS overhead. The payload size per sub-frame is varied in order to keep the code rate constant throughout a frame.

Unless otherwise stated, no user data is scheduled on subframes #5 in order to facilitate the transmission of system information blocks (SIB).

The algorithm for determining the payload size  $A$  is as follows; given a desired coding rate  $R$  and radio block allocation  $N_{RB}$

1. Calculate the number of channel bits  $N_{ch}$  that can be transmitted during the first transmission of a given sub-frame.
2. Find  $A$  such that the resulting coding rate is as close to  $R$  as possible, that is,

$$\min |R - (A + 24 * (N_{CB} + 1)) / N_{ch}|, \text{ where } N_{CB} = \begin{cases} 0, & \text{if } C = 1 \\ C, & \text{if } C > 1 \end{cases},$$

subject to

- a)  $A$  is a valid TB size according to clause 7.1.7 of TS 36.213 [6] assuming an allocation of  $N_{RB}$  resource blocks.
  - b)  $C$  is the number of Code Blocks calculated according to clause 5.1.2 of TS 36.212 [5].
3. If there is more than one  $A$  that minimizes the equation above, then the larger value is chosen per default and the chosen code rate should not exceed 0.93.
  4. For TDD, the measurement channel is based on DL/UL configuration ratio of 3DL+DwPTS (10 OFDM symbol SSF7): 1UL

#### A.3.1.1 QPSK

**Table A.3.1.1-1: Fixed Reference Channel for Receiver Requirements (TDD)**

| Parameter                                    | Unit      | Value |      |      |      |      |      |
|----------------------------------------------|-----------|-------|------|------|------|------|------|
| Channel Bandwidth                            | MHz       | 1.4   | 3    | 5    | 10   | 15   | 20   |
| Allocated resource blocks                    |           | 6     | 15   | 25   | 50   | 75   | 100  |
| Uplink-Downlink Configuration (NOTE 5)       |           | 2     | 2    | 2    | 2    | 2    | 2    |
| Special subframe configuration (NOTE 6)      |           | 7     | 7    | 7    | 7    | 7    | 7    |
| Allocated subframes per Radio Frame (D+S)    |           | 3     | 3+2  | 3+2  | 3+2  | 3+2  | 3+2  |
| Number of HARQ Processes                     | Processes | 7     | 7    | 7    | 7    | 7    | 7    |
| Maximum number of HARQ transmission          |           | 1     | 1    | 1    | 1    | 1    | 1    |
| Modulation                                   |           | QPSK  | QPSK | QPSK | QPSK | QPSK | QPSK |
| Target coding rate                           |           | 1/3   | 1/3  | 1/3  | 1/3  | 1/3  | 1/3  |
| Information Bit Payload per Sub-Frame        | Bits      |       |      |      |      |      |      |
| For Sub-Frame 3, 4, 8, 9                     |           | 408   | 1320 | 2216 | 4392 | 6712 | 8760 |
| For Sub-Frame 1, 6                           |           | N/A   | 776  | 1288 | 2664 | 4008 | 5352 |
| For Sub-Frame 5                              |           | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  |
| For Sub-Frame 0                              |           | 208   | 1064 | 1800 | 4392 | 6712 | 8760 |
| Transport block CRC                          | Bits      | 24    | 24   | 24   | 24   | 24   | 24   |
| Number of Code Blocks per Sub-Frame (NOTE 4) |           |       |      |      |      |      |      |
| For Sub-Frame 3, 4, 8, 9                     |           | 1     | 1    | 1    | 1    | 2    | 2    |
| For Sub-Frame 1, 6                           |           | N/A   | 1    | 1    | 1    | 1    | 1    |
| For Sub-Frame 5                              |           | N/A   | N/A  | N/A  | N/A  | N/A  | N/A  |

|                                                                                                                                                                                                                                                                                                   |      |          |          |          |          |          |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|----------|----------|----------|----------|----------|
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   |      | 1        | 1        | 1        | 1        | 2        | 2        |
| Binary Channel Bits Per Sub-Frame                                                                                                                                                                                                                                                                 | Bits |          |          |          |          |          |          |
| For Sub-Frame 3, 4, 8, 9                                                                                                                                                                                                                                                                          |      | 1368     | 3780     | 6300     | 13800    | 20700    | 27600    |
| For Sub-Frame 1, 6                                                                                                                                                                                                                                                                                |      | N/A      | 2616     | 4456     | 9056     | 13656    | 18256    |
| For Sub-Frame 5                                                                                                                                                                                                                                                                                   |      | N/A      | N/A      | N/A      | N/A      | N/A      | N/A      |
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   |      | 672      | 3084     | 5604     | 13104    | 20004    | 26904    |
| Max. Throughput averaged over 1 frame                                                                                                                                                                                                                                                             | kbps | 102.4    | 564      | 932      | 1965.6   | 3007.2   | 3970.4   |
| UE Category                                                                                                                                                                                                                                                                                       |      | $\geq 1$ | $\geq 1$ | $\geq 1$ | $\geq 1$ | $\geq 1$ | $\geq 1$ |
| NOTE 1: For normal subframes(0,3,4,5,8,9), 2 symbols allocated to PDCCH for 20 MHz, 15 MHz and 10 MHz channel BW; 3 symbols allocated to PDCCH for 5 MHz and 3 MHz; 4 symbols allocated to PDCCH for 1.4 MHz. For special subframe (1&6), only 2 OFDM symbols are allocated to PDCCH for all BWs. |      |          |          |          |          |          |          |
| NOTE 2: For 1.4MHz, no data shall be scheduled on special subframes(1&6) to avoid problems with insufficient PDCCH performance                                                                                                                                                                    |      |          |          |          |          |          |          |
| NOTE 3: Reference signal, Synchronization signals and PBCH allocated as per TS 36.211 [7]                                                                                                                                                                                                         |      |          |          |          |          |          |          |
| NOTE 4: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit).                                                                                                                                                   |      |          |          |          |          |          |          |
| NOTE 5: As per Table 4.2-2 in TS 36.211 [7]                                                                                                                                                                                                                                                       |      |          |          |          |          |          |          |
| NOTE 6: As per Table 4.2-1 in TS 36.211 [7]                                                                                                                                                                                                                                                       |      |          |          |          |          |          |          |

### A.3.1.2 64-QAM

**Table A.3.1.2-1: Fixed Reference Channel for Maximum input level for UE Categories  $\geq 3$  (TDD)**

| Parameter                                                                                                                                                                                                                                                                                         | Unit      | Value         |               |               |               |               |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|---------------|---------------|---------------|---------------|---------------|
| Channel bandwidth                                                                                                                                                                                                                                                                                 | MHz       | 1.4           | 3             | 5             | 10            | 15            | 20            |
| Allocated resource blocks                                                                                                                                                                                                                                                                         |           | 6             | 15            | 25            | 50            | 75            | 100           |
| Subcarriers per resource block                                                                                                                                                                                                                                                                    |           | 12            | 12            | 12            | 12            | 12            | 12            |
| Uplink-Downlink Configuration (NOTE 5)                                                                                                                                                                                                                                                            |           | 2             | 2             | 2             | 2             | 2             | 2             |
| Special subframe configuration (NOTE 6)                                                                                                                                                                                                                                                           |           | 7             | 7             | 7             | 7             | 7             | 7             |
| Allocated subframes per Radio Frame                                                                                                                                                                                                                                                               |           | 2             | 3+2           | 3+2           | 3+2           | 3+2           | 3+2           |
| Modulation                                                                                                                                                                                                                                                                                        |           | 64QAM         | 64QAM         | 64QAM         | 64QAM         | 64QAM         | 64QAM         |
| Target Coding Rate                                                                                                                                                                                                                                                                                |           | $\frac{3}{4}$ | $\frac{3}{4}$ | $\frac{3}{4}$ | $\frac{3}{4}$ | $\frac{3}{4}$ | $\frac{3}{4}$ |
| Number of HARQ Processes                                                                                                                                                                                                                                                                          | Processes | 7             | 7             | 7             | 7             | 7             | 7             |
| Maximum number of HARQ transmissions                                                                                                                                                                                                                                                              |           | 1             | 1             | 1             | 1             | 1             | 1             |
| Information Bit Payload per Sub-Frame                                                                                                                                                                                                                                                             |           |               |               |               |               |               |               |
| For Sub-Frames 3, 4, 8, 9                                                                                                                                                                                                                                                                         | Bits      | 2984          | 8504          | 14112         | 30576         | 46888         | 61664         |
| For Sub-Frames 1,6                                                                                                                                                                                                                                                                                | Bits      | N/A           | 5544          | 9528          | 19848         | 30576         | 40576         |
| For Sub-Frame 5                                                                                                                                                                                                                                                                                   | Bits      | N/A           | N/A           | N/A           | N/A           | N/A           | N/A           |
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   | Bits      | N/A           | 6968          | 12576         | 30576         | 45352         | 61664         |
| Transport block CRC                                                                                                                                                                                                                                                                               | Bits      | 24            | 24            | 24            | 24            | 24            | 24            |
| Number of Code Blocks per Sub-Frame (NOTE 4)                                                                                                                                                                                                                                                      |           |               |               |               |               |               |               |
| For Sub-Frames 3, 4, 8, 9                                                                                                                                                                                                                                                                         |           | 1             | 2             | 3             | 5             | 8             | 11            |
| For Sub-Frames 1,6                                                                                                                                                                                                                                                                                |           | N/A           | 2             | 2             | 4             | 6             | 8             |
| For Sub-Frame 5                                                                                                                                                                                                                                                                                   |           | N/A           | N/A           | N/A           | N/A           | N/A           | N/A           |
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   |           | N/A           | 2             | 3             | 5             | 8             | 11            |
| Binary Channel Bits per Sub-Frame                                                                                                                                                                                                                                                                 |           |               |               |               |               |               |               |
| For Sub-Frames 3, 4, 8, 9                                                                                                                                                                                                                                                                         | Bits      | 4104          | 11340         | 18900         | 41400         | 62100         | 82800         |
| For Sub-Frames 1,6                                                                                                                                                                                                                                                                                |           | N/A           | 7848          | 13368         | 27168         | 40968         | 54768         |
| For Sub-Frame 5                                                                                                                                                                                                                                                                                   | Bits      | N/A           | N/A           | N/A           | N/A           | N/A           | N/A           |
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   | Bits      | N/A           | 9252          | 16812         | 39312         | 60012         | 80712         |
| Max. Throughput averaged over 1 frame                                                                                                                                                                                                                                                             | kbps      | 596.8         | 3791.2        | 6369.6        | 13910         | 20945         | 27877         |
| NOTE 1: For normal subframes(0,3,4,5,8,9), 2 symbols allocated to PDCCH for 20 MHz, 15 MHz and 10 MHz channel BW; 3 symbols allocated to PDCCH for 5 MHz and 3 MHz; 4 symbols allocated to PDCCH for 1.4 MHz. For special subframe (1&6), only 2 OFDM symbols are allocated to PDCCH for all BWs. |           |               |               |               |               |               |               |
| NOTE 2: For 1.4MHz, no data shall be scheduled on special subframes(1&6) to avoid problems with insufficient PDCCH performance.                                                                                                                                                                   |           |               |               |               |               |               |               |
| NOTE 3: Reference signal, Synchronization signals and PBCH allocated as per TS 36.211 [7].                                                                                                                                                                                                        |           |               |               |               |               |               |               |
| NOTE 4: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit).                                                                                                                                                   |           |               |               |               |               |               |               |
| NOTE 5: As per Table 4.2-2 in TS 36.211 [7].                                                                                                                                                                                                                                                      |           |               |               |               |               |               |               |
| NOTE 6: As per Table 4.2-1 in TS 36.211 [7]                                                                                                                                                                                                                                                       |           |               |               |               |               |               |               |

### A.3.1.3 256-QAM

**Table A.3.1.3-1: Fixed Reference Channel for Maximum input level for UE Categories 11/12 and UE DL categories  $\geq 11$  (TDD)**

| Parameter                                                                                                                                                                                                                                                                                         | Unit      | Value  |        |        |         |        |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------|--------|--------|---------|--------|---------|
| Channel bandwidth                                                                                                                                                                                                                                                                                 | MHz       | 1.4    | 3      | 5      | 10      | 15     | 20      |
| Allocated resource blocks                                                                                                                                                                                                                                                                         |           | 6      | 15     | 25     | 50      | 75     | 100     |
| Subcarriers per resource block                                                                                                                                                                                                                                                                    |           | 12     | 12     | 12     | 12      | 12     | 12      |
| Uplink-Downlink Configuration (NOTE 5)                                                                                                                                                                                                                                                            |           | 2      | 2      | 2      | 2       | 2      | 2       |
| Special subframe configuration (NOTE 6)                                                                                                                                                                                                                                                           |           | 7      | 7      | 7      | 7       | 7      | 7       |
| Allocated subframes per Radio Frame                                                                                                                                                                                                                                                               |           | 2      | 3+2    | 3+2    | 3+2     | 3+2    | 3+2     |
| Modulation                                                                                                                                                                                                                                                                                        |           | 256QAM | 256QAM | 256QAM | 256QAM  | 256QAM | 256QAM  |
| Target Coding Rate                                                                                                                                                                                                                                                                                |           | 4/5    | 4/5    | 4/5    | 4/5     | 4/5    | 4/5     |
| Number of HARQ Processes                                                                                                                                                                                                                                                                          | Processes | 7      | 7      | 7      | 7       | 7      | 7       |
| Maximum number of HARQ transmissions                                                                                                                                                                                                                                                              |           | 1      | 1      | 1      | 1       | 1      | 1       |
| Information Bit Payload per Sub-Frame                                                                                                                                                                                                                                                             |           |        |        |        |         |        |         |
| For Sub-Frames 3,4,8,9                                                                                                                                                                                                                                                                            | Bits      | 4392   | 12216  | 19848  | 42368   | 63776  | 84760   |
| For Sub-Frames 1,6                                                                                                                                                                                                                                                                                | Bits      | N/A    | 10464  | 17824  | 36224   | 54624  | 73024   |
| For Sub-Frame 5                                                                                                                                                                                                                                                                                   | Bits      | N/A    | N/A    | N/A    | N/A     | N/A    | N/A     |
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   | Bits      | N/A    | 9912   | 17568  | 42368   | 63776  | 84760   |
| Transport block CRC                                                                                                                                                                                                                                                                               | Bits      | 24     | 24     | 24     | 24      | 24     | 24      |
| Number of Code Blocks per Sub-Frame (NOTE 4)                                                                                                                                                                                                                                                      |           |        |        |        |         |        |         |
| For Sub-Frames 3,4,8,9                                                                                                                                                                                                                                                                            |           | 1      | 2      | 4      | 7       | 11     | 14      |
| For Sub-Frames 1,6                                                                                                                                                                                                                                                                                |           | N/A    | 2      | 3      | 6       | 9      | 13      |
| For Sub-Frame 5                                                                                                                                                                                                                                                                                   |           | N/A    | N/A    | N/A    | N/A     | N/A    | N/A     |
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   |           | N/A    | 2      | 3      | 7       | 11     | 14      |
| Binary Channel Bits per Sub-Frame                                                                                                                                                                                                                                                                 |           |        |        |        |         |        |         |
| For Sub-Frames 3,4,8,9                                                                                                                                                                                                                                                                            | Bits      | 5472   | 15120  | 25200  | 55200   | 82800  | 110400  |
| For Sub-Frames 1,6                                                                                                                                                                                                                                                                                |           | N/A    | 8248   | 13536  | 27376   | 40576  | 55056   |
| For Sub-Frame 5                                                                                                                                                                                                                                                                                   | Bits      | N/A    | N/A    | N/A    | N/A     | N/A    | N/A     |
| For Sub-Frame 0                                                                                                                                                                                                                                                                                   | Bits      | N/A    | 12336  | 22416  | 52416   | 80016  | 107616  |
| Max. Throughput averaged over 1 frame                                                                                                                                                                                                                                                             | kbps      | 878.4  | 5570.4 | 9240   | 20049.6 | 30144  | 40503.2 |
| NOTE 1: For normal subframes(0,3,4,5,8,9), 2 symbols allocated to PDCCH for 20 MHz, 15 MHz and 10 MHz channel BW; 3 symbols allocated to PDCCH for 5 MHz and 3 MHz; 4 symbols allocated to PDCCH for 1.4 MHz. For special subframe (1&6), only 2 OFDM symbols are allocated to PDCCH for all BWs. |           |        |        |        |         |        |         |
| NOTE 2: For 1.4MHz, no data shall be scheduled on special subframes(1&6) to avoid problems with insufficient PDCCH performance.                                                                                                                                                                   |           |        |        |        |         |        |         |
| NOTE 3: Reference signal, Synchronization signals and PBCH allocated as per TS 36.211 [7].                                                                                                                                                                                                        |           |        |        |        |         |        |         |
| NOTE 4: If more than one Code Block is present, an additional CRC sequence of L = 24 Bits is attached to each Code Block (otherwise L = 0 Bit).                                                                                                                                                   |           |        |        |        |         |        |         |
| NOTE 5: As per Table 4.2-2 in TS 36.211 [7].                                                                                                                                                                                                                                                      |           |        |        |        |         |        |         |
| NOTE 6: As per Table 4.2-1 in TS 36.211 [7]                                                                                                                                                                                                                                                       |           |        |        |        |         |        |         |

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## Annex B: Void

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## Annex C: Void

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# Annex D: Void

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## Annex E: Void

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## Annex F: Void

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## Annex G: Void

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## Annex H (normative): Modified MPR behavior

The definitions of the bits in the modifiedMPRbehavior field have been moved to Annex H of 38.101-1[2].

## Annex I (normative): Dual uplink interferer

UE is mandated to support operation in dual and triple uplink mode for EN-DC configuration in NR FR1 listed in Table 5.5B.2-1, Table 5.5B.3-1, and Table 5.5B.4.1-1 and indicated by column single uplink allowed, Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.2-0, Table 7.3B.2.3.5.2-1 or NE-DC configuration in NR FR1 listed in Table 5.5B.4a.1-1 and indicated by column single uplink allowed if the intermodulation products caused by the dual uplink operation do not interfere with its own primary downlink transmission channel bandwidth of PCell or PSCell. For intermodulation products falling into any secondary downlink channel bandwidth, UE single UL capability is not considered.

Formula for determining if the EN-DC in NR FR1 configuration with dual uplink operation interferes with its own downlink reception.

Interference bandwidth:  $IBW = |a| * CBW1 + |b| * CBW2$

- $|a| + |b| = 2$  (or 3)
- CBW1 and CBW2 are the transmission bandwidth configurations of the UL channels

Center frequency of IBW:  $f_{IBW} = |a * f1 + b * f2|$

- f1 and f2 are center frequency of the transmission bandwidth configurations of each UL channel

The range of IMD 2 (or 3):  $[f_{IBW} - IBW/2, f_{IBW} + IBW/2]$

NOTE 1: UE shall be able to apply operations which are configured by RRC reconfiguration and corresponding HARQ timing on the transmission bandwidth.

NOTE 2: For identified difficult band combination, during two adjacent RRC reconfiguration, the changing of transmission bandwidth should not introduce IM2 and IM3, which will result in UE changing from 2Tx to 1Tx. Otherwise, UE behavior is not specified.

For DC\_3A\_n3A intra-band non-contiguous EN-DC combination, only single switched UL is supported in Rel-15.

For DC\_2A\_n2A, DC\_5A\_n5A, DC\_7A\_n7A, DC\_48A\_n48A, DC\_66A\_n66A intra-band non-contiguous EN-DC combination, and DC\_(n)5AA, DC\_(n)12AA, DC\_(n)38AA, DC\_(n)48AA intra-band contiguous EN-DC combination, only single switched UL is supported.

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# Annex J:Void

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## Annex K: Void

## Annex L (informative): Change history

| Change history |             |            |      |     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |             |
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| Date           | Meeting     | TDoc       | CR   | Rev | Cat | Subject/Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | New version |
| 2017-08        | RAN4#84     |            |      |     |     | Initial Skeleton                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.0.1       |
| 2017-11        | RAN4#84 Bis | R4-1711980 |      |     |     | Number TPs from editors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.1.0       |
| 2017-12        | RAN4#85     | R4-1713807 |      |     |     | <p>Approved TPs in RAN4#85</p> <p>R4-1714444, CA BW classes, TP, Ericsson</p> <p>R4-1714170, How to list DC configurations into TS 38.101-3, Nokia</p> <p>R4-1714530, TP on introducing operating bands for NR-LTE DC including SUL band combinations in 38.101-3, Qualcomm</p> <p>R4-1714098, TP to TS 38.101-3: UE RF requirements for non-standalone SUL, Huawei</p> <p>R4-1713206, TP on general parts for 38.101-3 NR interwork, Ericsson</p> <p>R4-1714443, TP to TS 38.101-3: On dual uplink operation for EN-DC in NR FR1 and single uplink, Nokia</p> <p>R4-1714450, TP to 38.101-3: maximum output power and unwanted emissions for EN-DC, Ericsson</p> <p>R4-1714346, TP to 38.101-3: REFSENS for intra-band EN-DC, Ericsson</p> <p>R4-1714345, TP for TS 36.101-3: clause 7 receiver requirements, Huawei</p> <p>Band list according to R4-1714542, List of bands and band combinations to be introduced into RAN4 NR core requirements by December 2017, RAN4 Chairmen</p>                                         | 0.2.0       |
| 2017-12        | RAN4#85     | R4-1714571 |      |     |     | Further corrections after email review                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.3.0       |
| 2017-12        | RAN#78      | RP-172477  |      |     |     | v1.0.0 submitted for plenary approval. Contents same as 0.3.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1.0.0       |
| 2017-12        | RAN#78      |            |      |     |     | Approved by plenary – Rel-15 spec under change control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 15.0.0      |
| 2018-03        | RAN#79      | RP-180264  | 0005 |     | F   | <p>Implementation of endorsed CRs to 38.101-3</p> <p>Endorsed draft CR</p> <p>F: R4-1801267, Draft CR on UE RF requirements for SUL in TS 38.101-3, Huawei</p> <p>B: R4-1801111, Draft CR for completed LTE 1CC + NR 1band for TS 38.101-3, NTT DOCOMO, INC.</p> <p>B: R4-1800716, Draft CR for introduction of completed band combinations from 37.863-03-01 into 38.101-3, Ericsson</p> <p>B: R4-1800063, Draft CR for completed EN-DC of LTE 4CC + NR 1band for TS 38.101-3, Nokia</p> <p>B: R4-1800717, Draft CR for introduction of completed band combinations from 37.865-01-01 into 38.101-3, Ericsson</p> <p>F: R4-1800049, Modification for TS38.101-3, CATT</p> <p>F: R4-1800287, 38.101-3 DC_(n)71B draft CR for clause 6.2.4.1 - A-MPR for intra-band EN-DC - NS value, T-Mobile USA Inc.</p> <p>F: R4-1800288, 38.101-3 DC_(n)71B draft CR for clause 7.3.3 Reference sensitivity for DC_(n)71B - MSD values, T-Mobile USA Inc.</p> <p>F: R4-1801139 Draft CR to 38.101-3: MSD for inter-band EN-DC, Ericsson</p> | 15.1.0      |
| 2018-06        | RAN#80      | RP-181374  | 0013 | 1   | F   | <p>CR to TS 38.101-3: Implementation of endorsed draft CRs from RAN4 #87</p> <p><b>Missing figures (Figure 6.3B.1.1-1, Figure 6.3B.1.1-2, Figure 6.3B.1.1-3 and Figure 6.3B.1.1-4) from the endorsed draft CR (R4-1807235) were added during the CR implementation.</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 15.2.0      |
| 2018-09        | RAN#81      | RP-182129  | 0020 | 2   | F   | <p>Big CR for 38.101-3</p> <p>Draft CRs from RAN4#88:</p> <p>R4-1809960 Draft CR to TS 38.101-3: to introduce new NR inter-band DC band combinations Samsung,KDDI,SKT,KT,LGU+</p> <p>R4-1809991 CR to 38.101-3:Corrections on UE coexistence table for Table 6.5B.3.3.1-1 MediaTek Inc.</p> <p>R4-1810054 Pcmx for Rel-15 inter-band EN-DC for FR1 and NR in FR2 InterDigital, Inc.</p> <p>R4-1810111 Single UL allowed corrections for DC_28A-n51A EN-DC in 38.101-3 Skyworks Solutions Inc.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 15.3.0      |

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|         |        |           |      |   | <p>R4-1810125 Draft CR to 38.101-3 Single UL allowed corrections for DC_28A_51A EN-DC Skyworks Solutions Inc.</p> <p>R4-1810128 Draft CR to 38.101-3 Single UL allowed corrections for EN-DC operation in NR FR1 (two bands) Skyworks Solutions Inc.</p> <p>R4-1810167 TP for TR 37.863-01-01: MSD for DC_5A_n78A due to the 4th harmonic MediaTek Inc.</p> <p>R4-1810410 Draft CR to 38.101-3: Corrections on symbols and abbreviations in clause 3 ZTE Corporation</p> <p>R4-1810417 Correction to DC_(n)71B MSD definition Nokia</p> <p>R4-1810433 Correction on EN-DC 8A_n79A SoftBank Corp., ZTE</p> <p>R4-1810476 Draft CR to TS 38.101-3 correction for DC_3_n3-n77, DC_3_n3-n78 CHTTL</p> <p>R4-1810976 Annex lettering change for 38.101-3 Qualcomm Incorporated</p> <p>R4-1811461 Clarification and corrections of EN-DC REFSENS exceptions requirement Nokia, Nokia Shanghai Bell</p> <p>R4-1811462 Correction to DC_(n)71B scs restriction for NR Nokia</p> <p>R4-1811466 EN DC_41-79 CATT</p> <p>R4-1811467 Draft CR TS 38.101-3 Corrections to Single UL Allowed Criteria for Mid-Band EN-DC in FR1 Skyworks Solutions Inc.</p> <p>R4-1811484 Pcmx for inter-band EN-DC FR1 draft CR InterDigital, Inc.</p> <p>R4-1811525 Draft CR TS 38.101-3 on missing requirements for FR1 EN-DC Skyworks Solutions, Inc.</p> <p>R4-1811542 Draft CR to 38.101-3 on correction on some errors Huawei, HiSilicon</p> <p>R4-1811796 Draft CR to 38.101-3 Corrections to Single UL allowed criteria for EN-DC Skyworks Solutions Inc.</p> <p>R4-1811800 DRAFT CR for PCmax FR2 correction Qualcomm Incorporated</p> <p>R4-1811810 Draft CR TS 38.101-3: Corrections for B41/n41 SPRINT Corporation</p>                                                                                                                                                                                                                                                          |        |
| 2018-12 | RAN#82 | RP-182359 | 0030 | F | <p>Endorced draft CRs from RAN4#88Bis :</p> <p>R4-1812057, Introduction of Intra-band contiguous EN-DC bandwidth classes, Nokia</p> <p>R4-1812290 Draft CR on MSD for EN-DC including Band 66 and n78 Huawei, HiSilicon</p> <p>R4-1812293 Draft CR on switching time mask for EN-DC Huawei, HiSilicon</p> <p>R4-1812298 Draft CR to TS 38.101-3: to add missing requirements for inter-band CA between FR1 and FR2. Samsung</p> <p>R4-1812360 Draft CR to 38.101-3: Correction to UL configuration for EN-DC reference sensitivity exceptions Skyworks Solutions Inc.</p> <p>R4-1812361 Draft CR to 38.101-3: NR uplink DFT-S-OFDM waveforms for EN-DC reference sensitivity Skyworks Solutions Inc.</p> <p>R4-1812362 Draft CR to 38.101-3: Editorial and RB allocation corrections to table 7.3B.2.3.4-2 Skyworks Solutions Inc.</p> <p>R4-1812363 Draft CR to 38.101-3: Single UL allowed operation corrections in clause 7.3B.2.3.5 Skyworks Solutions Inc.</p> <p>R4-1812404 Non-contiguous intra-band EN-DC emission requirements Qualcomm Incorporated</p> <p>R4-1812410 Correction on REFSENS exception for EN-DC 41A-n77A/n78A SoftBank Corp.</p> <p>R4-1812670 Correction on REFSENS exceptions of DC_5A-7A_n78A to TS 38.101-3 LG Uplus</p> <p>R4-1813471 draft CR on applicability of TDD configuratiin for CA in TS 38.101-3 Huawei</p> <p>R4-1813796 Draft CR for 38.101-3: Intra-band Pcmx for Type 2 UEs Sprint Corporation</p> <p>R4-1813816 Renaming of DC_(n)71B into DC_(n)71AA Nokia</p> <p>R4-1813817 Correction to EN-DC operating bands and configurations Nokia</p> <p>R4-1813818 Draft CR on correction REFSENS exceptions due to dual uplink operation for inter-band EN-DC to TS 38.101-3 Samsung</p> <p>R4-1813822 Draft CR for 38.101-3: Single UL allowed criteria in Annex I Vodafone España SA</p> <p>R4-1814157 Draft CR for UE-to-UE coexistence requirements for intra-band EN-DC in TS 38.101-3 LG Electronics France</p> | 15.4.0 |

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|         |        |           |      |   |   | <p>R4-1814167 Draft CR on Single UL for some EN-DC combinations Huawei</p> <p>Endorsed draft CRs from Ran4#89:</p> <p>R4-1815952 dCR on TS38.101-3 merging draft CRs from RAN4#(88Bis) Qualcomm Incorporated</p> <p>R4-1814803 Draft CR on editorial error for EN-DC band combinations to TS 38.101-3 Huawei, HiSilicon</p> <p>R4-1815802 draft CR editorial correction in 38.101-3 Ericsson</p> <p>R4-1814425 Simplification of requirements for EN-DC configuration including FR2 NTT DOCOMO, INC.</p> <p>R4-1814512 Draft CR to TS38.101-3 Corrections on MSD requirements for EN-DC combinations of band 8 and n77 n78(Clause 7.3B.2.3.1) ZTE Corporation</p> <p>R4-1814938 Draft CR to 38.101-3 on operating bands for CA and DC ZTE Corporation Zhifeng Ma</p> <p>R4-1814976 Correction for Maximum output power for inter-band EN-DC (two bands) Nokia, Nokia Shanghai Bell</p> <p>R4-1814977 Correction for ?TIB,c for EN-DC Nokia, Nokia Shanghai Bell</p> <p>R4-1814978 MPR and A-MPR for interband EN-DC Nokia, Nokia Shanghai Bell</p> <p>R4-1814980 Correction for intra-band EN-DC bandwidth class Nokia, Nokia Shanghai Bell</p> <p>R4-1815065 draft CR for adding missing transmit signal quality for inter band EN-DC for TS 38.101-3 NTT DOCOMO, INC.</p> <p>R4-1815811 draft Rel-15 CR to 38.101-3 to correct n260 BW class Ericsson, AT&amp;T</p> <p>R4-1815865 Draft CR for 38.101-3 Intra-band EN-DC nominal carrier spacing for 30 kHz raster SPRINT Corporation</p> <p>R4-1815973 Draft CR to 38.101-3 rel. 15 to fix MSD issues for higher order EN-DC combinations</p> <p>R4-1816227 Draft CR on Power Class for inter band EN-DC within FR1 OPPO</p> <p>R4-1816233 Receiver requirements for intra-band EN-DC Qualcomm Incorporated</p> <p>R4-1816621 Introduction of maxUplinkDutyCycle to ENDC HPUE in FR1 OPPO</p> <p>R4-1816638 Pcmx computation and evaluation for inter band ENDC Qualcomm</p> <p>R4-1816178 Draft CR for correction for missing agreed DC combinations in Rel-15 for TS 38.101-3 NTT DOCOMO, INC.</p> <p>R4-1816197 Draft CR to TS38.101-3 Clarifications on MSD and UL configuration tables for EN-DC ZTE Corporation</p> <p>R4-1816198 Simplification of EN-DC and CA between FR1 and FR2 UE to UE co-ex table by adopting CA band approach Nokia, Nokia Shanghai Bell</p> <p>R4-1816202 Correction to interband EN-DC OOB emission requirements Nokia, Nokia Shanghai Bell</p> <p>R4-1816203 Receiver requirements for interband EN-DC Nokia, Nokia Shanghai Bell</p> <p>R4-1816207 Draft CR to 38.101-3 rel. 15 to fix MPR issue Apple GmbH</p> <p>R4-1816224 Draft CR for 38.101-3 NS_04 applicability for intra-band EN-DC SPRINT Corporation</p> <p>R4-1816231 Draft CR on output power dynamic for DC OPPO</p> <p>R4-1816237 Correction for Intra-band contiguous EN-DC A-MPR definition Nokia, Nokia Shanghai Bell</p> <p>R4-1816246 Draft CR to TS38.101-3: Corrections on TS for MSD calculations based on ENDC bands combination including of bands 1,3,8, n77, and n78 MediaTek Inc.</p> <p>R4-1816247 Draft CR 38-101-3 Corrections for EN-DC Single Uplink allowed Operation Skyworks Solutions Inc.</p> <p>R4-1816250 draft CR for adding note about the fallback of EN-DC in Applicability of minimum requirements for TS 38.101-3 NTT DOCOMO, INC.</p> <p>R4-1816608 Draft CR on LTE RMC for TDD EN-DC UE RF Tests Qualcomm Incorporated</p> <p>R4-1816613 Draft CR for reducing AMPR for DC_(n)71AA without Dynamic Power Sharing" Motorola Mobility, T-Mobile"</p> |        |
| 2018-12 | RAN#82 | RP-182773 | 0033 | 1 | F | Completion of configured maximum output power for intra-band contiguous EN-DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 15.4.0 |
| 2018-12 | RAN#82 | RP-182774 | 0034 | 1 | F | Configured maximum output power for intra-band non-contiguous EN-DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 15.4.0 |

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| 2019-03 | RAN#83 | RP-190403 | 0035 |  | F | <p>CR to TS 38.101-3: Implementation of endorsed draft CRs from RAN4#90</p> <p>Endorced draft CRs from RAN4#90</p> <p>R4-1900034, Editorial corrections for 38.101-3, Qualcomm Incorporated</p> <p>R4-1900460, Draft CR to TS38.101-3_corrections on MSD, ZTE Corporation</p> <p>R4-1900461, Draft CR to TS38.101-3_inter-band NR DC between FR1 and FR2, ZTE Corporation</p> <p>R4-1900524, Draft CR to TS 38.101-3 on inter-band CA &amp; inter-band EN-DC configurations, ZTE Corporation</p> <p>R4-1900529, Draft CR to TS 38.101-3 on Single Uplink Allowed for EN-DC combinations of order 3 or higher, ZTE Corporation</p> <p>R4-1900726, Editorial corrections to delta Tib for EN-DC, Rohde &amp; Schwarz</p> <p>R4-1901359, draft CR for correction for missing operating band for EN-DC, NTT DOCOMO INC.</p> <p>R4-1901428, draft CR to make editorial corrections in 38-101-3 Rel-15, Ericsson</p> <p>R4-1901848, Draft CR for 38.101-3: Addition of default power class, Sprint Corporation</p> <p>R4-1901850, Draft CR for 38.101-3: Intra-band P<sub>cmx</sub> P<sub>EN-DC</sub> Total for non-DPS UEs, Sprint Corporation</p> <p>R4-1901851, Draft CR for 38.101-3: Intra-band P<sub>cmx</sub> Editorial corrections, Sprint Corporation</p> <p>R4-1901874, Guardband for harmonic exception to reference sensitivity, Qualcomm Incorporated</p> <p>R4-1901878, Non-simultaneous Tx/Rx for TDD intra-band EN-DC, Qualcomm Incorporated</p> <p>R4-1901890, A-MPR for DC<sub>(n)</sub>71AA without Dynamic Power Sharing, Motorola Mobility France S.A.S</p> <p>R4-1901926, Draft CR to 38.101-3 to clarify ACS2 wanted level, Qualcomm Incorporated</p> <p>R4-1901997, draft_CR TS 38.101-3 type 2 UE DC<sub>(n)</sub>41 and DC<sub>41</sub> n41 NS04 AMPR correction, Skyworks Solutions Inc.</p> <p>R4-1902002, Draft CR to 38.101-3 on DC<sub>n41</sub>-41 – B40 coexistence, Qualcomm Incorporated</p> <p>R4-1902154, Draft CR to TS38.101-3_clean up on inter-band CA between FR1 and FR2, ZTE Corporation</p> <p>R4-1902155, Draft CR for TS 38.101-3: Corrections to Table 7.3B.2.3.5.1-1 for reference sensitivity exceptions (two bands), MediaTek Inc.</p> <p>R4-1902156, draftCR corrections for TS 38.101-3, Huawei</p> <p>R4-1902157, CR on intraband ENDC channel configurations, Intel Corporation</p> <p>R4-1902160, Draft CR on some errors to TS 38.101-3, Huawei</p> <p>R4-1902161, CR to 38.101-3 to clarify non-simultaneous RXTX capability for co-bands, Qualcomm Incorporated</p> <p>R4-1902163, Draft CR to 38.101-3 to clarify DL carrier levels for bands in close frequency proximity, Qualcomm Incorporated</p> <p>R4-1902164, Draft CR to reflect agreed MSD analysis of DC<sub>25A</sub>-n41A for TS 38.101-3, MediaTek Inc.</p> <p>R4-1902169, draft CR for inter-band EN-DC P<sub>cmx</sub>, Huawei</p> <p>R4-1902172, Draft CR ACLR for NC intra-band EN-DC, Skyworks Solutions Inc.</p> <p>R4-1902176, Draft CR for 38.101-3 modification of requirements for intra-band non-contiguous EN-DC SEM, Huawei</p> <p>R4-1902179, draft CR for introduction of Tx IM for Inter-band EN-DC in TS38.101-3, NTT DOCOMO, INC.</p> <p>R4-1902182, Clarification for OOB boundary for intra-band contiguous and non-contiguous EN-DC, vivo</p> <p>R4-1902195, draft_CR TS 38.101-3 Footnote correction in Table 7.3B.2.3.1-2, Skyworks Solutions Inc.</p> <p>R4-1902232, Draft CR on SUL band combinations to TS 38.101-3, Huawei</p> <p>R4-1902478, Addition of power class 2 EN-DC ACLR requirement, Nokia</p> <p>R4-1902481, draftCR on inter-band EN-DC Rx requirement for TS 38.101-3, Huawei</p> <p>R4-1902486, Draft CR for 38.101-3 modification of requirements for network signalled value NS<sub>04</sub>, Huawei</p> <p>R4-1902496, Draft CR for TS 38.101-3: Switching time for intra-band EN-DC upon dual PA UE capability, Huawei</p> <p>R4-1902500, Draft CR for 38.101-3: adding MPR for intra-band ENDC, Skyworks Solutions Inc</p> <p>R4-1902660, Introduction of modified MPR for 38.101-3, Nokia</p> | 15.5.0 |
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|         |        |           |      |   | Editorial changes after RAN#83<br>To align the annex numbering with other specifications (TS 38.101-x series), 'Modified MPR behavior' was moved to annex H.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |
| 2019-06 | RAN#84 | RP-191240 | 0041 | F | <p>CR to TS 38.101-3: Implementation of endorsed draft CRs from RAN4#90bis and RAN4#91</p> <p>Endorced draft CRs from RAN4#90Bis</p> <p>R4-1902829, Draft CR for 38.101-3 editorial correction for editorial correction for intra-band contiguous EN-DC uplink configuration when Rx requirements are measured, Huawei</p> <p>R4-1903074 Draft CR to 38.101-3 rel. 15 to fix missing SUO note Apple Inc.</p> <p>R4-1903090 P<sub>cm</sub>ax for Rel-15 intra-band EN-DC within FR1 wrong references - fixes InterDigital Communications</p> <p>R4-1903150 Draft CR to TS 38.101-3 Spurious emission and Tx IM for inter-band CA between FR1 and FR2 ZTE Corporation</p> <p>R4-1903302 Draft CR to TS 38.101-3 correction for the DC_3_n3 delta R IBNC table CHTTL</p> <p>R4-1903426 draft CR for 38.101-3: Reflect the agreed MSD for DC_5_n78 China Telecom</p> <p>R4-1903515 Removal of reference sensitivity exception due to close proximity of bands for EN-DC in NR FR1 clause Nokia</p> <p>R4-1903958 Completion of definitions of EN-DC configured power Ericsson</p> <p>R4-1904639 Draft CR to 38.101-3 on DC_n41-41 – B40 coexistence, Qualcomm Incorporated</p> <p>R4-1904934 Harmonization of reference sensitivity level for DC clause Nokia</p> <p>R4-1904935 Change description 4.2(e) in Applicability of minimum requirements for TS 38.101-3 vivo</p> <p>R4-1904945 Draft CR to TS38.101-3 adding some exclusion frequencies for SEM and spurious emission for EN-DC ZTE Corporation</p> <p>R4-1904946 Draft CR to TS 38.101-3 on some minor corrections ZTE Corporation</p> <p>R4-1904951 Draft CR for 38.101-3 intra-band EN-DC AMPR Huawei</p> <p>R4-1904953 Draft CR for 38.101-3: NS_04 A-MPR power class relationship clarification Sprint Corporation</p> <p>R4-1904959 Draft CR on UE to UE coexistence for TS 38.101-3 Huawei</p> <p>R4-1904988 Draft CR to 38.101-1. Clarify EN-DC category for requirements of carrier imbalance Qualcomm Incorporated</p> <p>R4-1904995 draft CR to 38.101-3 Configured output power for inter-band EN-DC including both FR1 and FR2 Intel Corporation</p> <p>R4-1905085 Draft CR for TR 38.101-3 NE-DC RF requirement Huawei</p> <p>R4-1904925 Draft CR for improving EN-DC configuration tables in TS38.101-3 CATT</p> <p>Endorced draft CRs from RAN4#91</p> <p>R4-1905628 Draft CR to TS38.101-3_Frequency error for intra-band for EN-DC ZTE Corporation</p> <p>R4-1905629 Draft CR to TS 38.101-3 removal of the reference sensitivity exception for NR CA between FR1 and FR2 ZTE Corporation</p> <p>R4-1905767 draft CR to 38.101-3 Correction of DeltaTIB,c in configured output power for EN-DC Intel Corporation</p> <p>R4-1905774 Draft CR to TS38.101-3 Correction to intra-band and inter-band EN-DC P<sub>cm</sub>ax Intel Corporation</p> <p>R4-1905793 CR for TS 38.101-3 (Rel-15): Support of n257D-F for DC_1-42_n257 and DC_3-42_n257 SoftBank Corp.</p> <p>R4-1905799 Correction of LTE anchor condition to Spurious response for EN-DC Anritsu Corporation</p> <p>R4-1907057 Draft CR for 38.101-3: Further UE coexistence table clean-up Sprint Corporation</p> <p>R4-1907063 Draft CR for 38.101-3: Global replacement of LTE with E-UTRA Sprint Corporation</p> <p>R4-1907136 Draft CR to 38.101-3 rel. 15 to fix missing Exceptions for Out-of-band Blocking Apple</p> <p>R4-1907137 Draft CR to 38.101-3 rel. 15 to fix missing SUO note Apple</p> <p>R4-1907181 Draft CR for 38.101-3: Removal of unnecessary ACLR notes Sprint Corporation</p> <p>R4-1907422 Draft CR for TS 38.101-1 Correction of channel bandwidth set for NR CA Huawei</p> | 15.6.0 |

|         |        |           |      |   |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |
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|         |        |           |      |   |   | <p>R4-1907424 Draft CR for clarification of note for B42_n77 and B42_n78 NTT DOCOMO, INC.</p> <p>R4-1907425 Draft CR TS 38.101-3 Corrections to Intra-band ENDC MPR text Skyworks Solutions Inc.</p> <p>R4-1907426 Definition of BCS support in inter-band EN-DC mode Qualcomm Incorporated</p> <p>R4-1907448 Correction to EN-DC spurious emissions ROHDE &amp; SCHWARZ</p> <p>R4-1907476 draft CR for TS 38.101-3 intra-band EN-DC Pcmaw Huawei</p> <p>R4-1907482 Correction of RefSens exceptions due to UL harmonic interference for EN-DC in 38.101-3 vivo</p> <p>R4-1907483 [Rx]Draft CR for 38.101-3 defining Reference sensitivity for intra-band non-contiguous, Huawei</p> <p>R4-1907485 Corrections to MPR/A-MPR and additional requirements for intra-band EN-DC Ericsson</p> <p>R4-1907489 Draft CR to 38.101-3. Revise MSD for DC_20A-n8A Qualcomm Incorporated</p> <p>R4-1907492 Modification of reference sensitivity and general spurious emissions in 38.101-3 Qualcomm Incorporated</p> <p>R4-1907594 draft CR of modification on reference for inter-band EN-DC including FR2 for TS 38.101-3 NTT DOCOMO INC.</p> <p>R4-1907808 Draft CR to 38.101-3 NE-DC introduction InterDigital Communications</p> |        |
| 2019-06 | RAN#84 | RP-191241 | 0036 |   | B | CR to REL-16 TS 38.101-3: Implementation of endorsed draft CRs on NR combinations and dual Connectivity combinations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 16.0.0 |
| 2019-06 | RAN#84 | RP-191241 | 0037 |   | B | CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#91 into TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 16.0.0 |
| 2019-06 | RAN#84 | RP-191241 | 0039 |   | B | Introducing CR on new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in rel-16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 16.0.0 |
| 2019-06 | RAN#84 | RP-191252 | 0040 | 1 | B | Introduction of band combinations and requirements for Band n87 (LTE/NR sharing)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 16.0.0 |
| 2019-06 | RAN#84 | RP-191241 | 0042 | 1 | B | Big CR for agreed DC band combo of 1 LTE band + 1 NR band                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 16.0.0 |
| 2019-06 | RAN#84 | RP-191241 | 0043 |   | B | CR introduction completed band combinations 37.716-31-11 -> 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 16.0.0 |
| 2019-06 | RAN#84 | RP-191241 | 0044 |   | B | CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16.0.0 |
| 2019-09 | RAN#85 | RP-192049 | 0064 |   | A | CR to TS 38.101-3: Implementation of endorsed draft CRs from RAN4#92 (Rel-16)<br>- Mirror changes from R4-1910354 from RAN4#92                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0045 | 2 | B | CR to correct 7.3B.2.3.2 and 7.3B.2.3.4 for EN-DC DC_7_n77 and DC_7_n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0046 | 2 | F | Correction on EN-DC grouping in Rel-16 spec                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0047 | 1 | F | CR to TS 38.101-3 correction for the UL RB allocations of the MSD table                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 16.1.0 |
| 2019-09 | RAN#85 | RP-192027 | 0049 | 1 | F | [SUL] CR on SUL band combinations into Rel-16 TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0051 |   | B | CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#92 into TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 16.1.0 |
| 2019-09 | RAN#85 | RP-192033 | 0053 |   | C | CR for 38.101-3: B41 n41 EN-DC allocation based A-MPR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0054 | 1 | F | CR 38.101-3 Rel 16 Addition of footnote 3 to DC_40A_n41A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0056 | 1 | F | CR for 38.101-3: Correction of n5 combinations protection for B26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 16.1.0 |
| 2019-09 | RAN#85 | RP-192027 | 0057 |   | B | CR on introducing NR intra-band CA for 3DL Bands and 1UL band for 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 16.1.0 |
| 2019-09 | RAN#85 | RP-192027 | 0058 |   | B | CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0059 |   | F | Big CR for EN-DC of LTE 1band + NR 1band                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0060 |   | B | CR introduction completed band combinations 37.716-31-11 -> 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0061 |   | B | CR to introduce new combinations of LTE 4band + NR 1band for TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16.1.0 |
| 2019-09 | RAN#85 | RP-192035 | 0062 |   | F | CR for 38.101-3 Pcmaw for EN-DC with 3CC uplink                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 16.1.0 |
| 2019-09 | RAN#85 | RP-192027 | 0065 |   | B | CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 16.1.0 |
| 2019-09 | RAN#85 | RP-192028 | 0066 |   | B | CR on introduction of completed EN-DC of x bands LTE and 2 band NR from RAN4#92 into TS 38.101-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 16.1.0 |
| 2019-12 | RAN#86 | RP-193032 | 0075 |   | A | CR for 38.101-3 EN-DC RX Out-of-Band Blocking for shared bands and bands in close proximity                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0077 |   | A | CR to 38.101-3 Missing Harmonic Mixing MSD for DC_3_n77/n78                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0079 |   | A | CR for 38.101-3 EN-DC DL Synchronous Carriers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0085 |   | A | CR for 38.101-3: Correction to DC Config and dual UL interferer (Rel-16)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0087 |   | A | CR for 38.101-3: Correction to EN-DC and NE-DC Configurations (Rel-16)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0090 |   | A | CR to TS38.101-3: Correction on channel spacing for intra-band EN-DC carriers (section 5.4B.1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 16.2.0 |

|         |        |           |      |   |   |                                                                                                                                      |        |
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| 2019-12 | RAN#86 | RP-193012 | 0091 |   | B | CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-3             | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0092 |   | B | CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-3                   | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0093 | 1 | B | CR to reflect the completed ENDC combinations for 3 bands DL with 3 bands UL into Rel16 TS 38.101-3                                  | 16.2.0 |
| 2019-12 | RAN#86 | RP-193021 | 0094 |   | F | CR to remove square brackets for n90 in TS38.101-3                                                                                   | 16.2.0 |
| 2019-12 | RAN#86 | RP-193019 | 0095 | 1 | B | CR for adding solution for addressing SAR issue for EN-DC PC2 UE                                                                     | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0097 |   | B | Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-3                                                                 | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0099 |   | F | CR to TS 38.101-3 on single UL allowed for inter-band CA configurations (Rel-16)                                                     | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0102 |   | B | CR on introduction of completed EN-DC of 1 band LTE and 1 band NR                                                                    | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0106 |   | A | CR for TS 38.101-3: Removing MSD requirements for EN-DC combinations due to receiver even order harmonic mixing with UL 3rd harmonic | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0107 |   | A | CR to TS 38.101-3: clarification for MPR statement                                                                                   | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0108 |   | A | CR to TS 38.101-3 on inter-band CA, EN-DC, NE-DC and NR-DC configurations (Rel-16)                                                   | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0109 |   | F | CR for TS 38.101-3: Removing MSD requirements for EN-DC combinations due to receiver even order harmonic mixing with UL 3rd harmonic | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0111 |   | A | CR to TS 38.101-3: adding missing 90MHz channel BW support for n77, n78 related CA                                                   | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0112 |   | B | Introducing CR on new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in rel-16                                                                   | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0114 |   | F | Removal of brackets from MPR and MSD 38.101-3 REL16                                                                                  | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0120 |   | A | Pcmax for EN-DC: applicability of NS values and removal of a duty-cycle capability                                                   | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0123 | 1 | B | CR for TS 38.101-3: MSD due to cross band isolation                                                                                  | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0125 |   | A | CR for TS 38.101-3: Additional out-of-band blocking exceptions for inter-band EN-DC                                                  | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0126 |   | B | CR for 38.101-3 introduce SUL band combination DC_66A_n78(2A)_SUL_n78A-n86A                                                          | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0128 |   | A | CR for 38.101-3: correct MSD exception for DC_2_n78(Rel-16)                                                                          | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0129 |   | B | CR to introduce new combinations of LTE 4band + NR 1band for TS 38.101-3                                                             | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0130 |   | B | CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#92bis and RAN4#93 into TS 38.101-3                      | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0131 |   | B | CR introduction completed band combinations 37.716-31-11 -> 38.101-3                                                                 | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0132 |   | B | CR introduction completed band combinations 38.716-04-01 -> 38.101-3                                                                 | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0133 | 1 | F | CR to 38.101-3 to remove duplicate combinations                                                                                      | 16.2.0 |
| 2019-12 | RAN#86 | RP-193012 | 0134 |   | F | CR to 38.101-3 to add missing ?TIB and ?RIB values for DC_12-30_n66                                                                  | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0136 |   | A | Mirror CR for 38.101-3: Clarification of the notation for intra-band EN-DC combinations                                              | 16.2.0 |
| 2019-12 | RAN#86 | RP-193008 | 0140 | 2 | B | CR to 38.101-3 on uplink power control for non synchronous NR-DC between FR1 and FR2                                                 | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0148 |   | A | CR to TS 38.101-3 on inter-band EN-DC configurations including FR2 for five bands (Rel-16)                                           | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0152 | 1 | A | CR for 38.101-3 correction for intra-band EN-DC Pcmax                                                                                | 16.2.0 |
| 2019-12 | RAN#86 | RP-193033 | 0153 | 1 | A | CR for 38.101-3 intra-band EN-DC MPR/AMPR                                                                                            | 16.2.0 |
| 2019-12 | RAN#86 | RP-193032 | 0154 |   | F | EN-DC grouping correction for FR1 only configurations REL-16                                                                         | 16.2.0 |
| 2019-12 | RAN#86 |           |      |   |   | Change history corrected                                                                                                             | 16.2.1 |
| 2020-03 | RAN#87 | RP-200388 | 0159 | 1 | F | CR on SAR solution for TDD&TDD EN-DC PC2 UE                                                                                          | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0164 |   | A | Mirror CR for 38.101-3: Correction of MOP tolerance for B41/n41 EN-DC                                                                | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0165 | 1 | F | CR for 38.101-3: Remove delta Tib and delta Rib for FR1+FR2 CA                                                                       | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0166 |   | F | CR for 38.101-3: DC_25-41_n41 correction                                                                                             | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0172 |   | A | CR to TS 38.101-3: corrections on ACS for intra-band contiguous EN-DC                                                                | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0174 |   | A | CR to TS 38.101-3: editorial corrections on Rx requirements for intra-band contiguous EN-DC                                          | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0175 | 1 | F | CR to TS 38.101-3: Updated the MSD values for ENDC 3-n41                                                                             | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0177 |   | A | CR to TS 38.101-3: Correct the intra-band ENDC channel spacing                                                                       | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0178 |   | B | CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-3             | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0179 |   | B | CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-3                   | 16.3.0 |

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| 2020-03 | RAN#87 | RP-200380 | 0180 |   | B | CR to reflect the completed ENDC combinations for 3 bands DL with 3 bands UL into Rel16 TS 38.101-3                      | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0181 |   | F | Correction to remedy missing implementation of approved CR0093r1                                                         | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0182 |   | F | CR for TS38.101-3, Correction of IE RF-Parameters name of maxUplinkDutyCycle                                             | 16.3.0 |
| 2020-03 | RAN#87 | RP-200384 | 0184 |   | B | UE co-existence requirements for band n28 into 38.101-3                                                                  | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0186 |   | F | CR for 38.101-3: Correction of MOP tolerance for DC 39 n41                                                               | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0187 |   | B | CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#94-e into TS 38.101-3                       | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0190 |   | B | CR on introduction of completed EN-DC of 1 band LTE and 1 band NR                                                        | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0193 |   | A | CR to TS 38.101-3: editorial correction for output power dynamics for intra-band EN-DC                                   | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0195 |   | B | CR to TS 38.101-3: adding 90MHz channel BW support for Rel.16 CA_n78A-n257 configurations                                | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0196 |   | B | Introducing CR on new EN-DC LTE (x bands DL/1UL)+NR(2 bands DL/1UL) band combinations in rel-16                          | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0199 |   | A | CR on correction of 38.101-3 NEDC Ppowerclass (Rel-16)                                                                   | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0200 |   | D | CR to introduce new combinations of LTE 4band + NR 1band for TS 38.101-3                                                 | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0206 |   | B | CR to add 3 LTE bands and 1 NR band EN-DC combinations                                                                   | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0207 |   | B | CR to add NR Inter-band CA for 4 bands in TS 38.101-3                                                                    | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0208 | 1 | F | Editorial corrections                                                                                                    | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0211 |   | F | CR to 38.101-3 R16 to remove FDM ULSUP combinations                                                                      | 16.3.0 |
| 2020-03 | RAN#87 | RP-200396 | 0213 | 1 | A | CR for inter-band ENDC Tx requirement                                                                                    | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0215 | 1 | F | CR to 38.101-3 on EN-DC band combination with SUL                                                                        | 16.3.0 |
| 2020-03 | RAN#87 | RP-200378 | 0217 |   | A | EN-DC configuration table corrections                                                                                    | 16.3.0 |
| 2020-03 | RAN#87 | RP-200380 | 0218 |   | B | CR for introduce new EN-DC of LTE 2,3,4 band + NR FR1 1UL1DL band + NR FR2 1UL1DL band for TS 38.101-3                   | 16.3.0 |
| 2020-06 | RAN#88 | RP-200880 | 0223 | 3 | B | CR to TS 38.101-3: Switching time mask between two uplink carriers in EN-DC                                              | 16.4.0 |
| 2020-06 | RAN#88 | RP-200960 | 0228 |   | F | CR for TS38.101-3, Aligned IE RF-Parameters name of maxUplinkDutyCycle with RAN2                                         | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0229 |   | B | Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-3                                                     | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0232 |   | A | CR Coexistence cleanup for 38101-3 Rel16                                                                                 | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0234 |   | A | CR to TS 38.101-3 R16: corrections on ACS for intra-band contiguous EN-DC                                                | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0240 |   | A | CR for TS 38.101-3: MSD due to UL harmonic                                                                               | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0241 |   | F | CR for TS 38.101-3: Adding missing MSD due to UL harmonic for DC 28 n50                                                  | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0245 |   | A | MOP for interband EN-DC including both FR1 and FR2 REL16                                                                 | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0248 |   | A | CR to 38.101-3 MSD due to UL harmonics and intermodulation interference R16                                              | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0251 |   | A | Mirror CR for 38.101-3: Corrections for Ppowerclass and referenced sections                                              | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0252 |   | B | Introducing CR on new EN-DC LTE(xDL/1UL)+ NR(2DL/1UL) DC in Rel-16                                                       | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0255 |   | B | Big CR on introduction of completed EN-DC of 1 band LTE and 1 band NR                                                    | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0259 |   | A | CR to TS 38.101-3 on configured output power relaxation due to EN-DC (Rel-16)                                            | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0261 |   | A | CR to TS 38.101-3 on REFSSENS relaxation due to EN-DC (Rel-16)                                                           | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0264 |   | F | Correction to EN-DC coexistence requirements                                                                             | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0267 |   | A | CR to TS 38.101-3: Clean up the MSD test point for ENDC(three band)                                                      | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0268 |   | B | CR to reflect the completed NR inter band CA DC combinations for 2 bands DL with up to 2 bands UL into Rel16 TS 38.101-3 | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0269 |   | B | CR to reflect the completed ENDC combinations for 3 bands DL with 3 bands UL into Rel16 TS 38.101-3                      | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0274 |   | B | CR to introduce new combinations of LTE 4band + NR 1band for TS 38.101-3                                                 | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0275 |   | B | CR on introduction of completed EN-DC of 2 bands LTE and 1 band NR from RAN4#94bis-e and RAN4#95-e into TS 38.101-3      | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0276 |   | B | CR to reflect the completed NR inter band CA DC combinations for 3 bands DL with 2 bands UL into Rel16 TS 38.101-3       | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0277 |   | B | CR introduction completed band combinations 37.716-31-11 -                                                               | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0279 |   | F | CR Rel-16 for editorial corrections TS 38.101-3                                                                          | 16.4.0 |
| 2020-06 | RAN#88 | RP-200959 | 0280 |   | F | CR for 38.101-3: to clean up for SUL band combinations                                                                   | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0238 | 1 | A | CR for TS 38.101-3: Missing MSD due to cross band isolation                                                              | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0243 | 1 | F | FR1+FR2 CA interband CA BCS support REL16                                                                                | 16.4.0 |

|         |        |           |      |   |   |                                                                                                                            |        |
|---------|--------|-----------|------|---|---|----------------------------------------------------------------------------------------------------------------------------|--------|
| 2020-06 | RAN#88 | RP-201045 | 0282 | 1 | B | Addition of UE coexistence between US DC combinations and NR Band n77                                                      | 16.4.0 |
| 2020-06 | RAN#88 | RP-200965 | 0249 | 1 | B | CR for 38.101-3: Introduction of Power Class 1.5                                                                           | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0236 | 1 | A | CR to TS 38.101-3: editorial corrections on wide band Intermodulation for intra-band contiguous EN-DC in FR1               | 16.4.0 |
| 2020-06 | RAN#88 | RP-200988 | 0296 |   | F | CR to remove TBD in 38.101-3                                                                                               | 16.4.0 |
| 2020-06 | RAN#88 | RP-201055 | 0281 | 2 | B | CR to 38.101-3 MSD due to UL harmonics and intermodulation interference R16                                                | 16.4.0 |
| 2020-06 | RAN#88 | RP-200958 | 0287 | 2 | B | CR for TS 38.101-3: NR V2X con-current operation                                                                           | 16.4.0 |
| 2020-06 | RAN#88 | RP-200985 | 0272 | 1 | A | Removal of the Annex modifiedMPR-Behaviour from the NSA specification                                                      | 16.4.0 |
| 2020-09 | RAN#89 | RP-201507 | 0300 |   | F | CR for missing note for DC_39A_n41A for non-simultaneous RX/TX operation                                                   | 16.5.0 |
| 2020-09 | RAN#89 | RP-201507 | 0301 |   | F | CR for correcting DC_48_n5 UE spurious coexistence in 38.101-3                                                             | 16.5.0 |
| 2020-09 | RAN#89 | RP-201507 | 0303 |   | F | CR for missing IMD MSD in 38.101-3 for DC_3A-28A_n41A, DC_28A-41A_n77A                                                     | 16.5.0 |
| 2020-09 | RAN#89 | RP-201512 | 0307 |   | A | CR for missing IMD MSD in 38.101-3 for DC_1A-41A_n78A, DC_7A-28A_n78A                                                      | 16.5.0 |
| 2020-09 | RAN#89 | RP-201512 | 0309 |   | A | Correction to in-band emissions for intra-band contiguous EN-DC                                                            | 16.5.0 |
| 2020-09 | RAN#89 | RP-201507 | 0313 |   | F | Coexistence cleanup for 38101-3 Rel16                                                                                      | 16.5.0 |
| 2020-09 | RAN#89 | RP-201506 | 0314 |   | D | CR Editorial cleanup of band combination tables for 38101-3 Rel16                                                          | 16.5.0 |
| 2020-09 | RAN#89 | RP-201512 | 0317 |   | A | CR to 38.101-3 MSD due to UL harmonics and intermodulation interference R16                                                | 16.5.0 |
| 2020-09 | RAN#89 | RP-201507 | 0319 |   | F | CR to correct protected band of intra-band EN-DC                                                                           | 16.5.0 |
| 2020-09 | RAN#89 | RP-201512 | 0323 |   | A | CR for TS 38.101-3: FR1 inter-band EN-DC out-of-band blocking UL configuration                                             | 16.5.0 |
| 2020-09 | RAN#89 | RP-201504 | 0324 | 3 | B | CR to TS 38.101-3: PC2 band 3+band n78 ENDC                                                                                | 16.5.0 |
| 2020-09 | RAN#89 | RP-201512 | 0326 |   | A | Corrections of Japan-related EN-DC co-ex tables for REL-15 combo                                                           | 16.5.0 |
| 2020-09 | RAN#89 | RP-201492 | 0329 | 1 | F | Correction on 5G V2X con-current UE RF requirements in rel-16                                                              | 16.5.0 |
| 2020-09 | RAN#89 | RP-201492 | 0330 | 1 | F | CR on TS38.101-3 for NR V2X                                                                                                | 16.5.0 |
| 2020-09 | RAN#89 | RP-201749 | 0334 | 3 | B | CR to TS 38.101-3: PC2 band 3+band n41 ENDC                                                                                | 16.5.0 |
| 2020-09 | RAN#89 | RP-201506 | 0335 |   | F | CR to TS 38.101-3: Clean up the MSD test point for ENDC(three band)                                                        | 16.5.0 |
| 2020-09 | RAN#89 | RP-201504 | 0344 |   | F | Correction of delta Powerclass for Inter-band EN-DC                                                                        | 16.5.0 |
| 2020-09 | RAN#89 | RP-201506 | 0347 | 1 | F | CR for 38.101-3 to remove PHS system, 860–890 and 1400–1427 protection for EN-DC band combination with band n1, n8 and n50 | 16.5.0 |
| 2020-09 | RAN#89 | RP-201507 | 0349 |   | F | CR on inter-band ENDC Pcmx                                                                                                 | 16.5.0 |
| 2020-09 | RAN#89 | RP-201495 | 0350 | 1 | B | CR to 38.101-3 on time masks for ULSUP in R16                                                                              | 16.5.0 |
| 2020-09 | RAN#89 | RP-201512 | 0351 | 1 | F | CR to 38.101-3 - Correction to cross band isolation MSD tables and DC_42_n79                                               | 16.5.0 |
| 2020-09 | RAN#89 | RP-201494 | 0352 | 1 | F | CR for 38.101-3 Switching time mask for inter-band EN-DC UEs only supporting single switched UL                            | 16.5.0 |
| 2020-09 | RAN#89 | RP-201507 | 0353 |   | F | CR for TS 38.101-3 introduce new power class for EN-DC                                                                     | 16.5.0 |
| 2020-12 | RAN#90 | RP-202509 | 0362 | 1 | F | Correction on Additional ILs and MSD levels for DC_20_n38 UE                                                               | 16.6.0 |
| 2020-12 | RAN#90 | RP-202427 | 0363 | 1 | F | Correction on 5G V2X inter-band con-current UE RF requirements in TS38.101-3                                               | 16.6.0 |
| 2020-12 | RAN#90 | RP-202427 | 0364 | 1 | F | CR for TS 38.101-3, Time mask for TDM operation between NR V2X and LTE V2X in ITS band                                     | 16.6.0 |
| 2020-12 | RAN#90 | RP-202509 | 0367 |   | F | CR to 38.101-3 (Rel-16) error corrections to configurations for CA and DC                                                  | 16.6.0 |
| 2020-12 | RAN#90 | RP-202427 | 0368 | 1 | F | General corrections for V2X sections in 38.101-3                                                                           | 16.6.0 |
| 2020-12 | RAN#90 | RP-202485 | 0370 |   | A | UL output power for spurious response and general Rx                                                                       | 16.6.0 |
| 2020-12 | RAN#90 | RP-202430 | 0382 |   | F | CR to TS 38.101-3 on intra-band contiguous EN-DC BW class (Rel-16)                                                         | 16.6.0 |
| 2020-12 | RAN#90 | RP-202509 | 0383 | 1 | F | CR to TS 38.101-3 on simplification for inter-band CA configuration between FR1 and FR2                                    | 16.6.0 |
| 2020-12 | RAN#90 | RP-202485 | 0385 |   | A | CR to TS 38.101-3: Some corrections on the ENDC                                                                            | 16.6.0 |
| 2020-12 | RAN#90 | RP-202442 | 0386 | 1 | F | CR to TS 38.101-3: Add requirement on the inter-band EN-DC with no DL interruption                                         | 16.6.0 |
| 2020-12 | RAN#90 | RP-202485 | 0388 |   | F | CR to TS 38.101-3: corrections on ACS for intra-band contiguous EN-DC                                                      | 16.6.0 |
| 2020-12 | RAN#90 | RP-202429 | 0391 |   | F | Correction of delta Powerclass for Inter-band EN-DC                                                                        | 16.6.0 |
| 2020-12 | RAN#90 | RP-202509 | 0392 | 1 | F | CR on NR power class under EN-DC                                                                                           | 16.6.0 |
| 2020-12 | RAN#90 | RP-202428 | 0396 |   | F | CR to TS 38.101-3 corrections on inter-band EN-DC configurations including FR1 and FR2                                     | 16.6.0 |
| 2020-12 | RAN#90 | RP-202509 | 0398 |   | F | CR to correct MSD of DC_1A-41A_n77A                                                                                        | 16.6.0 |
| 2020-12 | RAN#90 | RP-202414 | 0402 | 2 | B | CR to add NR-U EN-DC combinations                                                                                          | 16.6.0 |
| 2020-12 | RAN#90 | RP-202485 | 0410 | 1 | A | CR to TS38.101-3[R16] Applicability of 2Rx requirements                                                                    | 16.6.0 |
| 2020-12 | RAN#90 | RP-202485 | 0412 |   | A | CR 38101-3 R16 Band 10 protection and DC_42_n79 correction                                                                 | 16.6.0 |
| 2020-12 | RAN#90 | RP-202428 | 0413 | 1 | F | CR for editorial corrections 38.101-3                                                                                      | 16.6.0 |
| 2020-12 | RAN#90 | RP-202485 | 0414 | 1 | F | Correction to PCMAX for contiguous intra-band EN-DC                                                                        | 16.6.0 |

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| 2020-12 | RAN#90   | RP-202485 | 0420 |   | A | CR for 38.101-3 Correction on EN-DC synchronous carriers (R16)                                                                | 16.6.0  |
| 2020-12 | RAN#90   | RP-202485 | 0424 | 1 | F | CR for TS 38.101-3: correction of spurious emission band UE co-existence (R16)                                                | 16.6.0  |
| 2020-12 | RAN#90   | RP-202485 | 0425 | 1 | F | Adding delta TIB requirement for DC_2-7-7-13_n66                                                                              | 16.6.0  |
| 2021-03 | RAN#91   | RP-210091 | 0435 | 1 | F | CR to TS 38.101-3 on correction to hanging paragraph in the spec (Rel-16)                                                     | 16.7.0  |
| 2021-03 | RAN#91   | RP-210091 | 0437 | 1 | B | TS 38.101-3: Addition of missing lower order fallbacks R16                                                                    | 16.7.0  |
| 2021-03 | RAN#91   | RP-210072 | 0440 | 1 | F | CR for TS 38.101-3, General corrections for NR V2X                                                                            | 16.7.0  |
| 2021-03 | RAN#91   | RP-210082 | 0447 |   | F | CR for TS 38.101-3: Correction on 1Tx-2Tx switching between two uplink carriers (Rel-16)                                      | 16.7.0  |
| 2021-03 | RAN#91   | RP-210082 | 0456 | 1 | F | Clarification on timing difference for Tx switching in EN-DC R16                                                              | 16.7.0  |
| 2021-03 | RAN#91   | RP-210088 | 0458 | 1 | F | CR to TS 38.101-3 clarification on the single uplink allowance for DC_3A_n3A                                                  | 16.7.0  |
| 2021-03 | RAN#91   | RP-210091 | 0463 | 1 | F | Requirements Type 2 UEs supporting inter-band MRDC with overlapping DL                                                        | 16.7.0  |
| 2021-03 | RAN#91   | RP-210089 | 0467 |   | F | CR for 38.101-3 to add the missing Tib Rib for DC_2-7-7-66_n78/ DC_2-7-66-66_n78/ DC_2-7-7-66-66_n78 (Rel-16)                 | 16.7.0  |
| 2021-03 | RAN#91   | RP-210117 | 0475 |   | A | CR for 38.101-3 to introduce a new MSD due to the counter intermodulation interference(Rel-16)                                | 16.7.0  |
| 2021-03 | RAN#91   | RP-210075 | 0477 |   | F | CR for 38.101-3: Correction for CA_n66A-n260                                                                                  | 16.7.0  |
| 2021-03 | RAN#91   | RP-210086 | 0479 |   | F | CR to TS38.101-3: Correction on duty cycle signalling terminology for PC2 inter-band ENDC                                     | 16.7.0  |
| 2021-03 | RAN#91   | RP-210117 | 0493 | 1 | F | CR for bug fixing of band combination tables for 38101-3 Rel16                                                                | 16.7.0  |
| 2021-03 | RAN#91   | RP-210117 | 0503 |   | A | CR for 38.101-3: clarification of intra-band EN-DC BCS applicability                                                          | 16.7.0  |
| 2021-03 | RAN#91   | RP-210852 | 0509 | 1 | A | Correcting FR1-FR2 BCS ambiguity – Interpretation B                                                                           | 16.7.0  |
| 2021-06 | RAN#92-e | RP-211084 | 0518 | - | A | Corrections to EN-DC spurious emission tables                                                                                 | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211077 | 0520 | - | F | CR correction to DC_7A-20A_n3A MSD test point R16 CATF                                                                        | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211101 | 0525 | 1 | F | CR for TS 38.101-3, Time mask for NR V2X and LTE V2X switching in ITS band                                                    | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211086 | 0532 | - | A | CR to TS 38.101-3[R16]: Addition of UE co-existence requirements for band 40 and n40.                                         | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211077 | 0535 | 1 | F | Cleanup for UE co-existence 38.101-3 Rel-16                                                                                   | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211077 | 0537 | - | F | CR to TS 38.101-3 on delta TIB and RIB corrections (Rel-16)                                                                   | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211078 | 0544 | - | F | CR to 38.101-3 for missing MSD due to cross band and MSD due to receiver harmonic mixing for combos with n46                  | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211077 | 0550 | 1 | F | CR for updating the note of mandatory simultaneous Rx/Tx capability for FR1 EN-DC combinations                                | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211077 | 0553 | 1 | F | CR for updating the note of mandatory simultaneous Rx/Tx capability for FR2 included and FR1+FR2 EN-DC and NR-CA combinations | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211086 | 0559 | - | A | CR for clarification on interBandContiguousMRDC in TS 38.101-3                                                                | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211086 | 0568 |   | F | CR for 38.101-3 to correct some errors in Delta TIB and Delta RIB table                                                       | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211119 | 0570 | 1 | F | CR for 38.101-3 to introduce the missing MSD requirements                                                                     | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211088 | 0573 |   | A | CR to TS38.101-3: Correction on TIB,c description for FR1-FR2 CA                                                              | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211119 | 0578 | - | F | CR for missing delta T & delta R of EN-DC with intra-band non-contiguous LTE CA combos in Rel.16                              | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211110 | 0587 | - | F | Notational amendment and correction to PCMAX for EN-DC                                                                        | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211115 | 0591 |   | F | CR for corrections 38.101-3                                                                                                   | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211077 | 0599 | 1 | F | CR for 38.101-3 missing ENDC coexistence                                                                                      | 16.8.0  |
| 2021-06 | RAN#92-e | RP-211080 | 0604 | 1 | F | CR for 38.101-3-g70: Corrections to intra-band non-contiguous EN-DC REFSSENS                                                  | 16.8.0  |
| 2021-09 | RAN#93-e | RP-211921 | 0431 | 3 | A | CR to 38.101-3 on handling of fallbacks for FR2 CA                                                                            | 16.9.0  |
| 2021-09 | RAN#93-e | RP-211891 | 0631 |   | F | CR for 38.101-3 to introduce the missing MSD requirements                                                                     | 16.9.0  |
| 2021-09 | RAN#93-e | RP-211923 | 0637 |   | F | Big CR for TS 38.101-3 Maintenance part1 (Rel-16)                                                                             | 16.9.0  |
| 2021-12 | RAN#94-e | RP-212845 | 0670 |   | F | Big CR for TS 38.101-3 Maintenance (Rel-16)                                                                                   | 16.10.0 |
| 2022-03 | RAN#95   | RP-220337 | 0701 |   | F | Big CR for TS 38.101-3 Maintenance (Rel-16)                                                                                   | 16.11.0 |
| 2022-06 | RAN#96   | RP-221677 | 0711 | 1 | F | CR for TS 38.101-3, Correction on MOP requirements for inter-band V2X con-current operation_Rel-16                            | 16.12.0 |
| 2022-06 | RAN#96   | RP-221663 | 0729 |   | F | CR to TS 38.101-3 V16.11.0 on intra-band ULCA UL configurations                                                               | 16.12.0 |
| 2022-06 | RAN#96   | RP-221655 | 0734 |   | F | Big CR for TS 38.101-3 Maintenance (Rel-16)                                                                                   | 16.12.0 |
| 2022-09 | RAN#97   | RP-222023 | 0751 |   | F | Big CR for 38.101-3 maintenance (Rel-16)                                                                                      | 16.13.0 |
| 2022-12 | RAN#98-e | RP-223290 | 0765 |   | A | CR for TS 38.101-3 on clarifications for intra-band EN-DC configurations (Rel-16)                                             | 16.14.0 |
| 2022-12 | RAN#98-e | RP-223291 | 0772 |   | F | CR for TS 38.101-3 Rel-16: Corrections on band combinations for UE co-existence                                               | 16.14.0 |
| 2022-12 | RAN#98-e | RP-223291 | 0777 | 1 | F | Rel16 Cat F Correction CR on adding the missing fallback combination DC_66A-66A_n66A                                          | 16.14.0 |
| 2022-12 | RAN#98-e | RP-223290 | 0789 |   | F | CR to TS38.101-3[R16] 4Rx MSD for ENDC                                                                                        | 16.14.0 |

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| 2022-12 | RAN#98-e | RP-223296 | 0794 |   | F | CR for an update on output power dynamics for intra-band EN-DC from Rel.16                                                                                                                     | 16.14.0 |
| 2022-12 | RAN#98-e | RP-223290 | 0798 |   | A | R16 CR on inter band ENDC OOB correction (CAT-A)                                                                                                                                               | 16.14.0 |
| 2022-12 | RAN#98-e | RP-223291 | 0803 |   | A | CR on TDD RMC for Intra-band EN-DC - TS 38.101-3                                                                                                                                               | 16.14.0 |
| 2023-03 | RAN#99   | RP-230499 | 0813 | 1 | F | CR for TS 38.101-3 Rel-16: Introducing missing MSD for harmonic mixing                                                                                                                         | 16.15.0 |
|         |          | RP-230504 | 0817 | 1 | F | CR to 38.101-3 for corrections on intra-band EN-DC configurations                                                                                                                              | 16.15.0 |
| 2023-03 | RAN#99   | RP-230499 | 0840 |   | F | CR to R16 TS38.101-3 maintenance for UE co-ex requirements for UL EN-DC                                                                                                                        | 16.15.0 |
| 2023-03 | RAN#99   | RP-230502 | 0845 |   | A | CR on Harmonic mixing MSD for DC_8A-n79A (R16 CAT-A)                                                                                                                                           | 16.15.0 |
| 2023-03 | RAN#99   | RP-230508 | 0852 |   | F | Correction on the powerClassNRPart IE                                                                                                                                                          | 16.15.0 |
| 2023-03 | RAN#99   | RP-230507 | 0860 | 1 | F | Clarification on Time mask for Tx switching for NSA                                                                                                                                            | 16.15.0 |
| 2023-03 | RAN#99   | RP-230503 | 0871 |   | A | CR for TS 38.101-3 to introduce DC_20_n28 general description(R16)                                                                                                                             | 16.15.0 |
| 2023-03 | RAN#99   | RP-230503 | 0888 |   | A | CR for TS 38.101-3 on intra-band EN-DC band combination support for DC_(n)41 (R16 CAT_A)                                                                                                       | 16.15.0 |
| 2023-06 | RAN#100  | RP-231341 | 0974 | 1 | F | On requirements for inter-band non-collocated EN-DC with overlapping DL bands (R16)                                                                                                            | 16.16.0 |
| 2023-06 | RAN#100  | RP-231351 | 0926 | 2 | F | Rel-16 CR to 38 101-3 for Clarification of UL Tx Switching                                                                                                                                     | 16.16.0 |
| 2023-06 | RAN#100  | RP-231354 | 0918 | 2 | F | EN-DC interband 2UL co-ex simplification R16                                                                                                                                                   | 16.16.0 |
| 2023-06 | RAN#100  | RP-231355 | 0930 |   | A | NOT IMPLEMENTED (no changes in the CR. It'll be corrected and implemented in the next TSG) Rel16 Cat A CR for 38.101-3 Add R18,8R relaxation for ENDC with 8 Rx antennas ports for EUTRA bands | 16.16.0 |
| 2023-06 | RAN#100  | RP-231355 | 0937 |   | F | CR to TS38.101-3: Corrections on MOP FR1-FR2 inter-band NR CA and MOP/MPR for ENDC including FR2/FR1 and FR2                                                                                   | 16.16.0 |
| 2023-06 | RAN#100  | RP-231356 | 0964 |   | A | CR to R16 TS38.101-3 for addition of missing MSD requirements for DC_19_n77 and DC_21_n77                                                                                                      | 16.16.0 |
| 2023-06 | RAN#100  | RP-231356 | 0970 |   | A | CR for corrections on EN-DC channel bandwidth section                                                                                                                                          | 16.16.0 |
| 2023-06 | RAN#100  | RP-231356 | 0946 | 1 | F | CR for Rel-16 38.101-3 to delete the configurations of DC_48A/B/C/D/E_n46E                                                                                                                     | 16.16.0 |
| 2023-06 | RAN#100  | RP-231356 | 0960 | 1 | A | CR to 38.101-3 Rel-16 Cat A, MSD corrections                                                                                                                                                   | 16.16.0 |
| 2023-09 | RAN#101  | RP-232501 | 0994 |   | A | [NR_newRAT]Rel16 Cat A CR for 38.101-3 Add R18,8R relaxation for ENDC with 8 Rx antennas ports for EUTRA bands                                                                                 | 16.17.0 |
| 2023-09 | RAN#101  | RP-232502 | 1005 |   | A | [NR_newRAT-Core]Corrections on the description on the delta Rib value for DCA and DC in REFSEN requirement                                                                                     | 16.17.0 |
| 2023-09 | RAN#101  | RP-232487 | 1014 |   | F | CR for Rel-16 38.101-3 clarification on non-simultaneous Rx/Tx operation for ENDC including CA_n77-n79 and CA_n78-n79                                                                          | 16.17.0 |
| 2023-09 | RAN#101  | RP-232500 | 1017 | 1 | F | CR to 38.101-3 Correction to intra-band EN-DC configuration                                                                                                                                    | 16.17.0 |
| 2023-12 | RAN#102  | RP-233332 | 1056 |   | F | Rel16 Cat F CR for 38.101-3 Correct the clause indication for non-collocated deployment                                                                                                        | 16.18.0 |
| 2023-12 | RAN#102  | RP-233337 | 1043 | 1 | F | CR for 38.101-3 UE to UE coex R16                                                                                                                                                              | 16.18.0 |
| 2023-12 | RAN#102  | RP-233336 | 1039 | 1 | F | CR on TS38.101-3 for simplification of NR V2X UE coexistence in Rel-16                                                                                                                         | 16.18.0 |
| 2024-03 | RAN#103  | RP-240552 | 1125 | 1 | F | [TEI16] Clarification on RF requirement for intra-band non-collocated EN-DC                                                                                                                    | 16.19.0 |
| 2024-03 | RAN#103  | RP-240554 | 1143 |   | F | (DC_R16_1BLTE_1BNR_2DL2UL) CR to 38.101-3 Rel-16 Cat-F for Spurious Emissions for Inter-band EN-DC within FR1                                                                                  | 16.19.0 |
| 2024-03 | RAN#103  | RP-240554 | 1162 |   | F | (DC_R16_1BLTE_1BNR_2DL2UL) CR for corrections and re-structures of the MOP table for EN-DC (Rel.16)                                                                                            | 16.19.0 |
| 2024-03 | RAN#103  | RP-240554 | 1102 | 1 | F | CR for TS 38.101-3 Rel-16 CAT-F: Introducing missing Rel-16 MSD requirements                                                                                                                   | 16.19.0 |
| 2024-03 | RAN#103  | RP-240557 | 1177 | 2 | F | (NR_CADC_R16_3BDL_2BUL) CR to TS 38.101-3: DC_1-41_n77 MSD correction                                                                                                                          | 16.19.0 |
| 2024-03 | RAN#103  | RP-240561 | 1154 |   | A | (NR_newRAT) Clarifications for FR2 testing with NR-DC and NR-CA                                                                                                                                | 16.19.0 |
| 2024-03 | RAN#103  | RP-240562 | 1099 |   | A | CR for TS 38.101-3 Rel-16 CAT-A: Introducing missing Rel-15 MSD requirements                                                                                                                   | 16.19.0 |
| 2024-03 | RAN#103  | RP-240563 | 1129 |   | A | NR_newRAT-Core) CR to R16 TS 38.101-3 correct PC3 MSD for DC_19A_n77A and DC_3A-19A_n79A                                                                                                       | 16.19.0 |
| 2024-03 | RAN#103  | RP-240566 | 1135 | 1 | A | (NR_newRAT-Core) CR for 38.101-3 corrections to EN-DC power class table                                                                                                                        | 16.19.0 |
| 2024-04 | RAN#104  | RP-241395 | 1188 |   | F | CR to 38.101-3 on enabling missing UL feature support for inter-band CA between FR1 and FR2                                                                                                    | 16.20.0 |
| 2024-04 | RAN#104  | RP-241390 | 1219 |   | F | (DC_R16_1BLTE_1BNR_2DL2UL) CR for TS 38.101-3: Correction on inconsistent UL EN-DC configurations                                                                                              | 16.20.0 |
| 2024-04 | RAN#104  | RP-241382 | 1226 |   | F | (NR_newRAT-Core) Correct the NOTE for harmonic mixing MSD valid test point                                                                                                                     | 16.20.0 |
| 2024-04 | RAN#104  | RP-241484 | 1236 |   | F | (NonCol_intraB_ENDC_NR_CA-Core) CR 38.101-3 v16.19.0 Clarifications on RF requirement for non-collocated inter-band EN-DC with E-UTRA contiguous CCs                                           | 16.20.0 |
| 2024-04 | RAN#104  | RP-241382 | 1242 |   | A | Clarification of general spurious emission test range in ENDC (R16)                                                                                                                            | 16.20.0 |

|         |         |           |      |   |   |                                                                                                                                                    |         |
|---------|---------|-----------|------|---|---|----------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| 2024-04 | RAN#104 | RP-241390 | 1206 | 1 | F | (DC_R16_1BLTE_1BNR_2DL2UL-Core) CR for 38.101-3 Address the ambiguity on the order for component carriers for EN-DC                                | 16.20.0 |
| 2024-04 | RAN#104 | RP-241388 | 1199 | 3 | F | (TEI) On general clause for receiver characteristics                                                                                               | 16.20.0 |
| 2024-09 | RAN#105 | RP-242149 | 1281 | - | F | (DC_R16_1BLTE_1BNR_2DL2UL) CR to TS 38.101-3 Rel16 Removal of Unnecessary NE-DC Requirements                                                       | 16.21.0 |
| 2024-12 | RAN#106 | RP-243027 | 1314 |   | F | (LTE_NR_B41_Bn41_PC29dBm-Core) CR for TS 38.101-3: Add ACLR requirement for PC1.5 intra-band contiguous EN-DC                                      | 16.22.0 |
| 2025-03 | RAN#107 | RP-250584 | 1342 |   | F | CR 38.101-3 Clarification of collocation requirements R16                                                                                          | 16.23.0 |
| 2025-03 | RAN#107 | RP-250581 | 1351 |   | F | (DC_R16_1BLTE_1BNR_2DL2UL-Core) Corrections on reference sensitivity for intra-band contiguous and inter-band EN-DC configurations                 | 16.23.0 |
| 2025-03 | RAN#107 | RP-250579 | 1362 |   | A | CR for TS 38.101-3 to correct Test BW configuration of DC_5A-7A_n78A MSD                                                                           | 16.23.0 |
| 2025-06 | RAN#108 | RP-250913 | 1387 |   | F | (DC_R16_2BLTE_1BNR_3DL2UL) CR to correct the Band 41 BW used for the DC_5A_41A_n79A MSD in clause 7.3B.2.3.5.2 according to CA_5A-41A - TS38.101-3 | 16.24.0 |
| 2025-06 | RAN#108 | RP-250913 | 1394 | 1 | F | (DC_R16_1BLTE_1BNR_2DL2UL-Core) Corrections on single UL allowed for two bands EN-DC configurations                                                | 16.24.0 |

# History

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