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Evolved Universal Terrestrial Radio Access (E-UTRA);
User Equipment (UE) conformance specification;
Radio transmission and reception;
Part 2: Implementation Conformance Statement (ICS)
(3GPP TS 36.521-2 version 12.8.0 Release 12)



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Foreword

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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:

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 - 1 presented to TSG for information;
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- 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.

Introduction

The present document is part 2 of a multi-parts TS:

3GPP TS 36.521-1 [1]: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 1: Conformance testing.

3GPP TS 36.521-2: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part :2 Implementation Conformance Statement (ICS).

3GPP TS 36.521-3 [2]: Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 3: Radio Resource Management (RRM) Conformance Testing.

1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for 3G Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-1 [3] and ISO/IEC 9646-7 [4]

The present document specifies the recommended applicability statement for the test cases included in 3GPP TS 36.521-1 [1] and 3GPP TS 36.521-3 [2]. These applicability statements are based on the features implemented in the LIF

Special conformance testing functions can be found in 3GPP TS 36.509 [5] and the common test environments are included in 3GPP TS 36.508 [6].

The present document is valid for UE implemented according to 3GPP releases starting from Release 8 up to the Release indicated on the cover page of the present document.

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 unless the context in which the reference is made suggests a different Release is relevant (information on the applicable release in a particular context can be found in e.g. test case title, description or applicability, message description or content).
- [1] 3GPP TS 36.521-1: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 1: Conformance testing ".
- [2] 3GPP TS 36.521-3: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification Radio transmission and reception Part 3: Radio Resource Management Conformance Testing ".
- [3] ISO/IEC 9646-1: "Information technology Open systems interconnection Conformance testing methodology and framework Part 1: General concepts".
- [4] ISO/IEC 9646-7: "Information technology Open systems interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements".
- [5] 3GPP TS 36.509: "Evolved Universal Terrestrial Radio Access (E-UTRA); Special conformance testing functions for User Equipment".
- [6] 3GPP TS 36.508: "Evolved Universal Terrestrial Radio Access (E-UTRA); Common Test Environments for User Equipment (UE) Conformance Testing".
- [8] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [9] 3GPP TS 36.201: "LTE Physical Layer General Description"
- [10] 3GPP TS 36.302: "Evolved Universal Terrestrial Radio Access (E-UTRA); Services provided by the physical layer for E-UTRA".
- [11] 3GPP TS 36.321: "Evolved Universal Terrestrial Radio Access (E-UTRA); Medium Access Control (MAC) protocol specification".

| [12] | 3GPP TS 36.322: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Link Control (RLC) protocol specification". |
|------|---|
| [13] | 3GPP TS 36.323: "Evolved Universal Terrestrial Radio Access (E-UTRA); Packet Data Convergence Protocol (PDCP) specification". |
| [14] | 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA); Radio Resource Control (RRC) Protocol Specification". |
| [15] | 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS); Stage 3" |
| [16] | 3GPP TS 36.307: "Requirements on User Equipments (UEs) Supporting a release-independent frequency band". |
| [17] | 3GPP TS 36.306: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio access capabilities". |
| [18] | 3GPP TS 36.133: "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for support of radio resource management". |

3 Definitions, symbols and abbreviations

For the purposes of the present document, the following terms, definitions, symbols and abbreviations apply:

- such given in TR 21.905 [8]
- such given in ISO/IEC 9646-1 [3] and ISO/IEC 9646-7 [4]

NOTE: Some terms and abbreviations defined in [3] and [4] are explicitly included below with small modification to reflect the terminology used in 3GPP.

3.1 Definitions

Implementation Conformance Statement (ICS): statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented

ICS proforma: document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS

Implementation eXtra Information for Testing (IXIT): A statement made by a supplier or implementer of an UEUT which contains or references all of the information (in addition to that given in the ICS) related to the UEUT and its testing environment, which will enable the test laboratory to run an appropriate test suite against the UEUT

IXIT proforma: A document, in the form of a questionnaire, which when completed for an UEUT becomes an IXIT

Protocol Implementation Conformance Statement (PICS): An ICS for an implementation or system claimed to conform to a given protocol specification

Protocol Implementation eXtra Information for Testing (PIXIT): An IXIT related to testing for conformance to a given protocol specification

static conformance review: A review of the extent to which the static conformance requirements are claimed to be supported by the UEUT, by comparing the answers in the ICS(s) with the static conformance requirements expressed in the relevant specification(s)

3.2 Symbols

No specific symbols have been identified so far.

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in 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 TR 21.905 [8].

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

ICSImplementation Conformance StatementIXITImplementation eXtra Information for TestingPICSProtocol Implementation Conformance StatementPIXITProtocol Implementation eXtra Information for Testing

RRM Radio Resource Management SCS System Conformance Statement

TC Test Case

UEUT User Equipment Under Test

4 Recommended test case applicability

The applicability of each individual test is identified in the tables 4.1-1 or 4.2-1. This is just a recommendation based on the purpose for which the test case was written.

The applicability of every test is formally expressed by the use of Boolean expression that are based on parameters (ICS) included in annex A of the present document.

Selection criteria of tested bands / CA-Configurations for each applicable test is formally expressed using group theory based on parameters (ICS) included in annex A of the present document.

Additional information related to the Test Case (TC), e.g. affecting its dynamic behaviour or its execution may be provided as well

The columns in tables 4.1-1 / 4.2-1 have the following meaning:

Clause

The clause column indicates the clause number in TS 36.521-1 [1] or respectively TS 36.521-3 [2] that contains the test body.

Title

The title column describes the name of the test and contains the clause title of the clause in TS 36.521-1 [1] or TS 36.521-3 [2] that contains the test body.

Release

The release column indicates the earliest release from which each test case is applicable. It may also indicate a range of releases or a single release to which a test case is applicable.

Applicability - Condition

The following notations are used for the applicability column:

R recommended - the test case is recommended to all terminals supporting E-UTRA

O optional – the test case is optional

N/A not applicable - in the given context, the test case is not recommended.

Ci conditional - the test is recommended ("R") or not ("N/A") depending on the support of other

items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ...

THEN ... ELSE...) ELSE ..." is used to avoid ambiguities.

Applicability - Comments

This comments column contains a verbal description of the condition included in the applicability column.

Tested Bands / CA-Configurations Selection

This column defines a set of bands / CA Configurations the test is to be run for, if the test is applicable. If the set is empty, the test is considered as not applicable.

The following notations are used in the tested bands selection column:

Di Derive the set based on Band Selection Criteria Di defined in table 4.1-1b.

Ei Derive the set based on CA Configurations Selection Criteria Ei defined in table 4.1-1c.

TBD Band selection not defined at this time, in the meantime test all Bands / CA Configurations

Text For more complex selection criteria, or if the criteria are already specified somewhere else in the

spec, text reference to the section is given.

Additional Information

This column contains indication if the test case may perform differently depending on the UE capabilities.

NOTE To meet the validation requirements from certification bodies then there is a need to uniquely reference the FDD and TDD branch (i.e. different behaviour within one and the same TC) of common FDD and TDD test cases. The FDD and TDD branches of common FDD and TDD test cases can be referenced by amending a "FDD" or "TDD" suffix to the test case clause number. For example for test case 6.2.2 the FDD and TDD branches can be identified by "6.2.2 FDD" and "6.2.2 TDD".

4.1 RF conformance test cases

Table 4.1-1: Applicability of RF conformance test cases, ref. TS 36.521-1 [1]

| Clause | Title | Release | | Applicability | Tested Bands / CA- | Additional Information |
|----------|--|---------|-----------|--|-----------------------------|------------------------|
| | | | Condition | Comments | Configurations Selection | |
| | | | Trans | mitter Characteristics | | |
| 6.2.2 | UE Maximum Output Power | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.2.2_1 | UE Maximum Output Power for | Rel-10 | C39 | UE supporting E-UTRA | D04 | FDD |
| | HPUE | | | Power Class 1 | | TDD |
| 6.2.2A.1 | UE Maximum Output Power for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |

| Clause | Title | Release | | Applicability | Tested Bands / CA- | Additional Information |
|----------|---|---------|-----------|--|--------------------------|------------------------|
| | | | Condition | Comments | Configurations Selection | |
| 6.2.2A.2 | UE Maximum Output Power for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD TDD |
| 6.2.2A.3 | UE Maximum Output Power for CA (intra-band non-contiguous DL | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | FDD TDD |
| 6.2.2B | CA and UL CA) UE Maximum Output Power for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD FDD |
| 6.2.2E | UE Maximum Output Power for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0) | D01 | HD-FDD |
| | Maximum Power | | | | | TDD FDD |
| 6.2.3A.2 | Reduction (MPR) for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | TDD |
| 6.2.3A.3 | Maximum Power Reduction (MPR) for CA (intra-band non-contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | FDD TDD |
| | Maximum Power | | | LIE supporting E LITP A | | FDD |
| 6.2.3E | Reduction (MPR) for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD TDD |
| 6.2.4A.3 | Additional Maximum Power Reduction (A- MPR) for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non-contiguous DL CA and UL CA | E02 | FDD |
| | | | | | | TDD |
| | Additional Maximum Power | | | THE CONTRACTOR OF | | FDD |
| 6.2.4E | Reduction (A-MPR) for UE | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | category 0 | | | | | TDD |
| 6.2.5 | Configured UE transmitted Output Power | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |

| Clause | Title | Release | | Applicability | Tested Bands / CA- | Additional Information |
|----------|--|---------|-----------|--|-----------------------------|---------------------------|
| | | | Condition | Comments | Configurations Selection | |
| | | | | | | TDD |
| 6.2.5_1 | Configured UE transmitted Output | Rel-10 | C39 | UE supporting E-UTRA Power Class 1 | D04 | FDD |
| | Power for HPUE | | | 1 Ower Class 1 | | TDD |
| 6.2.5A.1 | Configured UE transmitted Output Power for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| | Additional | | | | | FDD |
| 6.2.5A.3 | Maximum Power Reduction (A- MPR) for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | TDD |
| | Additional | | | | | FDD |
| 6.2.5A.4 | Maximum Power Reduction (A- MPR) for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | TDD |
| 6.2.5B | Configured transmitted power for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | | | | | | FDD |
| 6.2.5E | Configured transmitted power | Rel-12 | C112 | UE supporting E-UTRA | D01 | HD-FDD |
| | for UE category 0 | | | (UE category 0) | | TDD |
| 6.3.1 | Void | | | | | |
| 6.3.2 | Minimum Output Power | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| | Minimum Output | | | | | |
| 6.3.2A.1 | Power for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.3.2B | Minimum Output Power for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | | | | | | TDD |
| | Minimum Output | | | | | FDD |
| 6.3.2E | Power for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | Category 0 | | | | | TDD |
| 6.3.3 | Transmit OFF Power | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| | Transmit OFF | | | | | |
| 6.3.3A.1 | Power for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.3.3A.2 | UE Transmit OFF power for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| | Transmit OFF | | | UE supporting E-UTRA | | FDD |
| 6.3.3A.3 | Power for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | and intra-band non- contiguous DL CA and UL CA | E02 | TDD |
| 6.3.3B | UE Transmit OFF power for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | UE Transmit OFF | | | | | FDD |
| 6.3.3E | power for UE | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | category 0 | | | | | TDD |
| 6.3.4.1 | General ON/OFF time mask | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.3.4.2.1 | PRACH time mask | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.3.4.2.2 | SRS time mask | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.3.4A.1. 1 | General ON/OFF time mask for CA (intra-band | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous | E01 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | contiguous DL CA and UL CA) | | | DL CA and UL CA | | |
| | | | | | | TDD |
| 6.3.4A.1. 2 | General ON/OFF time mask for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| | General ON/OFF time mask for CA | | | UE supporting E-UTRA | | FDD |
| 6.3.4A.1. 3 | (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | and intra-band non- contiguous DL CA and UL CA | E02 | TDD |
| 6.3.4B | ON/OFF time mask for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | General ON/OFF | | | | | FDD |
| 6.3.4E.1 | time mask for UE | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | category 0 | | | | | TDD |
| 6.3.5.1 | Power Control Absolute Power Tolerance | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.3.5.2 | Power Control Relative Power Tolerance | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.3.5.3 | Aggregate Power Control Tolerance | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.3.5A.1. 1 | Power Control Absolute Power Tolerance for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| | Power Control | | | THE same of the E 1970 A | | FDD |
| 6.3.5A.1. 2 | Absolute Power Tolerance for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | TDD |

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| | | | Condition | Comments | Configurations Selection | |
| 6.3.5A.1. 3 | Power Control Absolute Power Tolerance for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | FDD TDD |
| 6.3.5A.2. 1 | Power Control Relative Power Tolerance for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| | Power Control Relative Power | | | LIE composting E LITPA | | FDD |
| 6.3.5A.2. 2 | Tolerance for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | TDD |
| | Power Control Relative Power | | | LIE E LIED A | | FDD |
| 6.3.5A.2. 3 | Tolerance for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | TDD |
| 6.3.5A.3. 1 | Aggregate Power Control Tolerance for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.3.5A.3. 2 | Aggregate Power Control Tolerance for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| 6.3.5A.3. | Aggregate Power Control Tolerance for CA (intra-band non-contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | FDD |
| | | | | | | TDD |
| 6.3.5B.1 | Power Control Absolute power tolerance for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | 1 | 1 | | | | |

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| | | | Condition | Comments | Configurations Selection | |
| 6.3.5B.2 | Power Control Relative power tolerance for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.3.5B.3 | Aggregate power control tolerance for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | Power Control | | | | | FDD |
| 6.3.5E.1 | Absolute power tolerance for UE | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | category 0 | | | | | TDD |
| | Power Control | | | | | FDD |
| 6.3.5E.2 | Relative power tolerance for UE | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | category 0 | | | | | TDD |
| | Aggregate power | | | | | FDD |
| 6.3.5E.3 | control tolerance | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | for UE category 0 | | | | | TDD |
| 6.5.1 | Frequency Error | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.5.1A.1 | Frequency Error for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.5.1A.3 | Frequency Error for CA (intra-band non-contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | FDD |
| | | | | | | TDD |
| 6.5.1B | Frequency Error for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | | | | | | FDD |
| 6.5.1E | Frequency Error for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | | | | | | TDD |
| 6.5.2.1 | Error Vector | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | Magnitude (EVM) | | | | | |
| | | | | | | TDD |
| 6.5.2.1A | PUSCH-EVM with exclusion period | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| | Error Vector | | | | | FDD |
| 6.5.2.1E. 1 | Magnitude for UE | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | category 0 | | | | | TDD |
| 6.5.2.2 | Carrier leakage | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| | | | | | | FDD |
| 6.5.2.2E | Carrier leakage for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | | | | | | TDD |
| 6.5.2.3 | In-band emissions for non allocated RB | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| | In-band emissions | | | | | FDD |
| 6.5.2.3E | for non allocated RB for UE | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | category 0 | | | (ez emeger) e | | TDD |
| 6.5.2.4 | EVM equalizer spectrum flatness | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| | EVM1: | | | | | FDD |
| 6.5.2.4E | EVM equalizer spectrum flatness | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | for UE category 0 | | | (02 uninger) | | TDD |
| 6.5.2A.1. 1 | Error Vector Magnitude (EVM) for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.5.2A.2. 1 | Carrier leakage for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | | | | | | TDD |
| 6.5.2A.3. 1 | In-band emissions for non allocated RB for CA (intra- band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.5.2B.1 | Error Vector Magnitude for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.5.2B.2 | Carrier leakage for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.5.2B.3 | In-band emissions for non allocated RB for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.5.2B.4 | EVM equalizer spectrum flatness for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.6.1 | Occupied bandwidth | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.6.1A.1 | Occupied bandwidth for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.6.1A.2 | 6.6.1A.2 Occupied bandwidth for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| | Occupied | | | UE supporting E-UTRA | | FDD |
| 6.6.1A.3 | bandwidth for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | and intra-band non- contiguous DL CA and UL CA | E02 | TDD |

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| | | | Condition | Comments | Configurations Selection | |
| 6.6.1B | Occupied bandwidth for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | Occupied | | | | | FDD |
| 6.6.1E | bandwidth for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD TDD |
| | Carata a Fariai | | | | | ולוט |
| 6.6.2.1 | Spectrum Emission Mask | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.6.2.1_1 | Spectrum Emission Mask for Multi- cluster PUSCH | Rel-10 | C100 | UE supporting E-UTRA and Multi-Cluster PUSCH | D07 | FDD |
| 6.6.2.1A. 1 | Spectrum Emission Mask for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.6.2.1A. 2 | Spectrum Emission Mask for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| | Spectrum Emission | | | UE supporting E-UTRA | | FDD |
| 6.6.2.1A. 3 | Mask for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | and intra-band non- contiguous DL CA and UL CA | E02 | TDD |
| 6.6.2.1B | Spectrum Emission Mask for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | Spectrum Emission | | | | | FDD |
| 6.6.2.1E | Mask for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0 | D01 | HD-FDD |
| | | | | | | TDD |
| 6.6.2.2 | Additional Spectrum Emission Mask | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.6.2.2A. | Additional | Rel-10 | C19 | UE supporting E-UTRA | E01 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| 1 | Spectrum Emission Mask for CA (intra-band contiguous DL CA and UL CA) | | | and intra-band contiguous DL CA and UL CA | 00.00.00.00 | |
| | | | | | | TDD |
| 6.6.2.2B | Additional Spectrum Emission Mask for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.6.2.3 | Adjacent Channel Leakage power Ratio | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.6.2.3_1 | Adjacent Channel Leakage power | Rel-10 | C39 | UE supporting E-UTRA | D04 | FDD |
| 0.0.2.5_1 | Ratio for HPUE | iter 10 | | Power Class 1 | | TDD |
| 6.6.2.3_2 | Adjacent Channel Leakage power Ratio for Multi- Cluster PUSCH | Rel-10 | C100 | UE supporting E-UTRA and Multi-Cluster PUSCH | D07 | FDD |
| 6.6.2.3A. 1 | Adjacent Channel Leakage power Ratio for CA (intra- band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.6.2.3B | Adjacent Channel Leakage power Ratio for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.6.2.4 | Void | | | | | |
| 6.6.3.1 | Transmitter Spurious emissions | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.6.3.1_1 | Transmitter Spurious emissions for Multi-Cluster PUSCH | Rel-10 | C100 | UE supporting E-UTRA and Multi-Cluster PUSCH | D07 | FDD |
| 6.6.3.1A. 1 | Transmitter Spurious emissions for CA (intra-band | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous | E01 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | contiguous DL CA and UL CA) | | | DL CA and UL CA | | |
| | and UL CA) | | | | | |
| | | | | | | TDD |
| 6.6.3.1A. 2 | Transmitter Spurious emissions for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| 6.6.3.2 | Spurious emission band UE co- existence | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.6.3.2A. 1 | Spurious emission band UE co- existence for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | and OL CA) | | | | | |
| | | | | | | TDD |
| 6.6.3.2A. 2 | Spurious emission band UE co- existence for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| | A 11'.' | | | | | TDD |
| 6.6.3.3 | Additional spurious emissions | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.6.3.3A. 1 | Additional spurious emissions for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 6.6.3.3A. 3 | Additional spurious emissions for CA (intra-band non- contiguous DL CA and UL CA) | Rel-11 | C115 | UE supporting E-UTRA and intra-band non- contiguous DL CA and UL CA | E02 | FDD |
| | | | | | | TDD |
| 6.6.3B.2 | Spurious emission band UE co- existence for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | Transmit | - | G.1.2 | | 501 | TDD |
| 6.7 | intermodulation | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 6.7A.1 | Transmit intermodulation for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| | Transmit intermodulation for | | | UE supporting E-UTRA | | FDD |
| 6.7A.2 | CA (inter-band DL CA and UL CA) | Rel-11 | C116 | and inter-band DL CA and UL CA | E03 | TDD |
| 6.7B | Transmit intermodulation for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 6.8B | Time alignment between transmitter branches for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | | | Reco | eiver Characteristics | | |
| 7.3 | Reference sensitivity level | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 7.3A.1 | Reference sensitivity level for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | , | | | | | TDD |
| 7.3A.2 | Reference sensitivity level for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E08 | FDD |
| | | | | | | TDD |
| 7.3A.3 | Reference sensitivity level for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E10 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |
| 7.3A.4 | Reference sensitivity level for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | E09 | FDD |
| | | | | | | TDD |
| 7.3A.5 | Reference sensitivity level for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and interband CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD-TDD CA | E07 | FDD-TDD |
| 7.3A.6 | Reference sensitivity level for CA (inter-band DL CA and UL CA) | Rel-11 | C116 | UE supporting E-UTRA and inter-band DL CA and UL CA | E03 | FDD |
| | | | | | | TDD |
| | D 0 | | | | | FDD |
| 7.3E | Reference sensitivity level for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0) | D01 | HD-FDD |
| | Reference | | | | | |
| 7.3B | sensitivity level for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 7.4 | Maximum input level | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | | | | | | TDD |
| 7.4_H | 7.4_H Maximum input level for 256QAM in DL | Rel-12 | C113h | UE supporting E-UTRA and 256QAM in DL | | FDD |
| | | | | | | TDD |
| 7.4A.1 | Maximum input level for CA (intra- band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 7.4A.1_H | Maximum input level for CA (intra- band contiguous DL CA and UL CA) for 256QAM in DL | Rel-12 | C19h | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA and 256QAM in DL | | FDD |
| | | | | | | TDD |
| 7.4A.2 | Maximum input level for CA (intra- band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E08 | FDD |
| | | | | | | TDD |
| 7.4A.2_H | Maximum input level for CA (intra- band contiguous DL CA without UL CA) for 256QAM in DL | Rel-12 | C20h | UE supporting E-UTRA and intra-band contiguous DL CA and 256QAM in DL | | |
| | | | | | | |
| 7.4A.3 | Maximum input level for CA (inter- band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E10 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |
| 7.4A.4 | Maximum input level for CA (intra band non- contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | E09 | FDD |
| | | | | | | TDD |
| | 1 | | | I . | <u> </u> | <u> </u> |

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| | | | Condition | Comments | Configurations Selection | |
| 7.4A.5 | Maximum input level for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and inter- band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD-TDD CA | E07 | FDD-TDD |
| 7.4A.5_H | Maximum input level for CA (3DL CA without UL CA) for 256QAM in DL | Rel-12 | C122h | UE supporting E-UTRA and 3DL CA and 256QAM in DL | | FDD |
| | | | | | | TDD |
| 7.4B | Maximum input level for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | Maximum input | | | | | FDD |
| 7.4E | level for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0) | D01 | HD-FDD |
| | category o | | | | | TDD |
| 7.5 | Adjacent Channel Selectivity (ACS) | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 7.5A.1 | Adjacent Channel Selectivity (ACS) for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 7.5A.2 | Adjacent Channel Selectivity (ACS) for CA (intra-band contiguous DL CA | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E11 | FDD |

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| | | | Condition | Comments | Configurations Selection | |
| | without UL CA) | | | | | |
| | | | | | | TDD |
| 7.5A.3 | Adjacent Channel Selectivity (ACS) for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E12 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |
| 7.5A.4 | Adjacent Channel Selectivity (ACS) for CA (intra band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | E05 | FDD |
| | | | | | | TDD |
| 7.5A.5 | Adjacent Channel Selectivity (ACS) for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and interband CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | ļ | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD- TDD CA | E07 | FDD-TDD |
| 7.5B | Adjacent Channel Selectivity (ACS)for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | | | | UE supporting E-UTRA | | FDD |
| 7.5E | Adjacent Channel Selectivity (ACS) | Rel-12 | C112 | (UE category 0) | D01 | HD-FDD |

| Clause | Title | Release | | Applicability | Tested Bands / CA- | Additional Information |
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| | | | Condition | Comments | Configurations Selection | |
| | for UE category 0 | | | | | TDD |
| 7.6.1 | In-band blocking | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 7.6.1A.1 | In-band blocking for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 7.6.1A.2 | In-band blocking for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E11 | FDD |
| | | | | | | TDD |
| 7.6.1A.3 | In-band blocking for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E12 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |
| 7.6.1A.4 | In-band blocking for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | E05 | FDD |
| | | | | | | TDD |
| 7.6.1A.5 | In-band blocking for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and interband CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD- | E07 | FDD-TDD |

| Clause | Title | Release | | Applicability | Tested Bands / CA- | Additional Information |
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| | | | Condition | Comments | Configurations Selection | |
| | | | | TDD CA | | |
| 7.6.1B | In-band blocking for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | | | | | | FDD |
| 7.6.1E | In-band blocking for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0) | D01 | HD-FDD |
| | | | | | | TDD |
| 7.6.2 | Out of-band blocking | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 7.6.2A.1 | Out of-band blocking for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 7.6.2A.2 | Out of-band blocking for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E08 | FDD |
| | | | | | | TDD |
| 7.6.2A.3 | Out of-band blocking for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E10 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |
| 7.6.2A.4 | Out of-band blocking for CA (intra-band non- contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | E09 | FDD |
| | | | | | | TDD |
| 7.6.2A.5 | Out-of-band blocking for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |

| Clause | Title | Release | | Applicability | Tested Bands / CA- | Additional Information |
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| | | | Condition | Comments | Configurations Selection | |
| | | | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and inter- band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD- TDD CA | E07 | FDD-TDD |
| 7.6.2B | Out-of-band blocking for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | Out of-band | | | | | FDD |
| 7.6.2E | blocking for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0) | D01 | HD-FDD |
| | | | | | | TDD |
| 7.6.3 | Narrow band blocking | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 7.6.3A.1 | Narrow band blocking for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 7.6.3A.2 | Narrow band blocking for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E08 | FDD |
| | , | | | | | TDD |
| 7.6.3A.3 | Narrow band blocking for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E10 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |

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| | | | Condition | Comments | Configurations Selection | |
| 7.6.3A.4 | Narrow band blocking for CA (intra-band non- contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | E09 | FDD |
| | | | | | | TDD |
| 7.6.3A.5 | Narrow band blocking for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and interband CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD-TDD CA | E07 | FDD-TDD |
| 7.6.3B | Narrow band blocking for UL- MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | Narrow band | | | LIE E LIED A | | FDD |
| 7.6.3E | blocking for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0) | D01 | HD-FDD |
| | | | | | | TDD |
| 7.7 | Spurious response | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |
| 7.7A.1 | Spurious response for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 7.7A.2 | Spurious response for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E08 | FDD |

| Clause | Title | Release | | Applicability | Tested Bands / CA- | Additional Information |
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| | | | Condition | Comments | Configurations Selection | |
| | | | | | | TDD |
| 7.7A.3 | Spurious response for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E10 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |
| 7.7A.4 | Spurious response for CA (intra-band non-contiguous DL CA without UL CA) | Rel-11 | C43 | UE supporting E-UTRA and intra-band non- contiguous DL CA but no UL CA | E09 | FDD |
| | | | | | | TDD |
| 7.7A.5 | Spurious response for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |
| | | i | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and interband CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD-TDD CA | E07 | FDD-TDD |
| 7.7B | Spurious response for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| | | | | | | FDD |
| 7.7E | Spurious response for UE category 0 | Rel-12 | C112 | UE supporting E-UTRA (UE category 0) | D01 | HD-FDD |
| | | | | | | TDD |
| 7.8.1 | Wide band Intermodulation | Rel-8 | C113 | UE supporting E-UTRA | D01 | FDD |
| | | | | | | TDD |

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| | | | Condition | Comments | Configurations Selection | |
| 7.8.1A.1 | Wide band Intermodulation for CA (intra-band contiguous DL CA and UL CA) | Rel-10 | C19 | UE supporting E-UTRA and intra-band contiguous DL CA and UL CA | E01 | FDD |
| | | | | | | TDD |
| 7.8.1A.2 | Wide band Intermodulation for CA (intra-band contiguous DL CA without UL CA) | Rel-10 | C20 | UE supporting E-UTRA and intra-band contiguous DL CA | E11 | FDD |
| | | | | | | TDD |
| 7.8.1A.3 | Wide band Intermodulation for CA (inter-band DL CA without UL CA) | Rel-10 | C21 | UE supporting E-UTRA and inter-band DL CA | E12 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C146 | UE supporting E-UTRA and 2DL CA with FDD- TDD inter-band CA | | FDD-TDD |
| 7.8.1A.5 | Wideband intermodulation for CA (3DL CA without UL CA) | Rel-10 | C121 | UE supporting E-UTRA and 3DL with intra-band contiguous CA or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-11 | C122 | UE supporting E-UTRA and 3DL with intra-band non-contiguous and interband CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | E07 | FDD |
| | | | | | | TDD |
| | | Rel-12 | C123 | UE supporting E-UTRA and 3DL CA with FDD- TDD CA | E07 | FDD-TDD |
| 7.8.1B | Wide band intermodulation for UL-MIMO | Rel-10 | C07 | UE supporting E-UTRA and UL_MIMO | D05 | FDD |
| | | | | | | TDD |
| 7.8.1E | Wide band | Rel-12 | C112 | UE supporting E-UTRA | D01 | FDD |

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| | | | Condition | С | omments | Configurations Selection | |
| | Intermodulation for | | | (UE cate | gory 0) | | HD-FDD |
| | UE category 0 | | | | | | TDD |
| 7.9 | Spurious emissions | Rel-8 | C113 | UE suppo | orting E-UTRA | D01 | FDD |
| | | | | | | | TDD |
| 7.9A | Spurious emissions | Rel-10 | C120 | UE supporting E-UTRA and inter-band DL CA with a DL-only band | | E13 | FDD |
| 7.9A | for CA | Kei-10 | C120 | | | E13 | TDD |
| | | | | | | | FDD |
| 7.9E | Spurious emissions for UE category 0 | Rel-12 | C112 | UE suppo (UE cates | orting E-UTRA gory 0) | D01 | HD-FDD |
| | | | | | | | TDD |
| | | | Perfo | ormance R | Requirement | | |
| 8.2.1.1.1 | FDD PDSCH Single Antenna Port Perfor | | | UE supporting E UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.1.1.1_A. 1 or 8.2.1.1.1_A. 2 is executed. | |
| 8.2.1.1.1 __ 1 | FDD PDSCH Single Antenna Port Performance (Release 9 and forward) | | Rel-9 | C31 | UE supporting E UTRA FDD (UE categories 1 | performed once, in a | Test execution not necessary if 8.2.1.1.1_A. 1 or 8.2.1.1.1_A. 2 is executed. |
| 8.2.1.1.1_ | 8.2.1.1.1_ FDD PDSCH Single Antenna Port Performance | | Rel-10 | C102 | UE supporting E- UTRA FDD and intra-band contiguous DL CA or inter-band DL CA (UE Category ≥ 3) | | Test execution not necessary if 8.2.1.1.1_A. 2 is executed. |
| A.1 for CA (2 DL CA) | | | Rel-11 | C103 | UE supporting E UTRA FDD and Downlink Intra- band non- contiguous CA (Category ≥ 3) | Refer to 36.521-1 | Test execution not necessary if 8.2.1.1.1_A. 2 is executed. |
| 8.2.1.1.1_ A.2 | FDD PDSCH Single Antenna Port Performance for CA (3DL CA) | | Rel-10 | C124 | UE supporting E UTRA FDD and 3DL with intra- band contiguous | | |

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| | | | Condition | С | omments | Configurations Selection | |
| | | | | | CA, or 3DL with inter-band CA, or 3DL with intraband contiguous and inter-band C (UE Category ≥ 1) | A | |
| | | | Rel-11 | C125 | UE supporting E UTRA FDD and 3DL with intra- band non- contiguous and inter-band CA, o 3DL with intra- band non- contiguous and intra-band contiguous CA (Category ≥ 5) | r | |
| 8.2.1.1.2 | FDD PDSCH Single Antenna Port Perfor with 1 PRB in presen MBSFN | mance | Rel-8 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be - performed once, in a chosen band supporting tested BW | |
| 8.2.1.2.1 | FDD PDSCH Transa Diversity 2x2 | mit | Rel-8 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.1.2.1 __ | FDD PDSCH Transi Diversity 2x2 (Relea forward) | | Rel-9 | C15 | UE supporting E UTRA FDD (UE category 1) | Each 'Test Number' to | |
| 8.2.1.2.2 | FDD PDSCH Transi Diversity 4x2 | mit | Rel-8 | C09 | UE supporting E UTRA FDD and operating bands supporting 1,4 M Bandwidth | THz performed once, in a chosen band supporting tested BW | |
| 8.2.1.2.2 __ | FDD PDSCH Transı Diversity 4x2 (Relea forward) | | Rel-9 | C01 | UE supporting E UTRA FDD | Each 'Test | |

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| | | | Condition | С | Comments | | nfigurations Selection | |
| | | | | | | | band supporting tested BW | |
| 8.2.1.2.3_ C.1 | FDD PDSCH Transmit diversity 2x2 for eICIC (non-MBFSN ABS) | | Rel-10 | C29 | UEs supporting E- UTRA FDD and Feature Group Indictor 115 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.1.2.3_ E.1 | FDD PDSCH Transmit diversity 2x2 for feICIC (non-MBFSN ABS) | | Rel-11 | C77 | UE supporting E- UTRA FDD and CRS interference handling (UE Category ≥ 2) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.1.2.4 | FDD PDSCH Transmit Diversity 2x2 with TM3 Interference Model – Enhanced Performance Requirement Type A | | Rel-11 | C44 | UE supporting E- UTRA FDD and the enhanced performance requirements type A for LTE | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.1.2.5 | FDD PDSCH Trans: Diversity 2x2 with T Interference Model - Enhanced Performan Requirement Type F | rM2 - nce | Rel-12 | C150 | UE supporting E UTRA FDD and enhanced performance requirements typ for LTE | the | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.1.2.6 | FDD PDSCH Trans Diversity 2x2 with 7 Interference Model - Enhanced Performan Requirement Type E | rM9 - nce | Rel-12 | C150 | UE supporting E UTRA FDD and enhanced performance requirements typ for LTE | the | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.1.3.1 | FDD PDSCH Open Spatial Multiplexing | | Rel-8 | C01 | UE supporting E UTRA FDD | - | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.1.3.1_A. 1 or 8.2.1.3.1_A. 2 is executed. |
| 8.2.1.3.1 __ | FDD PDSCH Open Spatial Multiplexing (Release 11 and forward) | 2x2 | Rel-11 | C01 | UE supporting E UTRA FDD | - | Each 'Test Number' to be performed once, in a | Test execution not necessary if 8.2.1.3.1_A. |

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| | | | Condition | C | Comments | | nfigurations Selection | |
| | | | | | | | chosen band supporting tested BW | or 8.2.1.3.1_A. 2 is executed. |
| 8.2.1.3.1_ | FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (2 DL CA) | | Rel-10 | C101 | UE supporting E UTRA FDD and intra-band contiguous DL C or inter-band DL CA (UE Categor ≥2) | CA | Refer to 36.521-1 8.1.2.3 | If 8.2.1.3.1_A. 2 is executed for a CA capability, test execution is not necessary for that CA capability. |
| A.1 | | | Rel-11 | C90 | UE supporting E UTRA FDD and intra-band non- contiguous DL C (UE Category ≥ 2) | CA | Refer to 36.521-1 8.1.2.3 | If 8.2.1.3.1_A. 2 is executed for a CA capability, test execution is not necessary for that CA capability. |
| 8.2.1.3.1_ A.2 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 for CA (3DL CA) | | Rel-10 | C124 | UE supporting E UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra- band contiguous and inter-band CA(UE Category 5) | ı T | TBD | |
| | | | Rel-11 | C125 | UE supporting E UTRA FDD and 3DL with intra- band non- contiguous and inter-band CA, o 3DL with intra- band non- contiguous and intra-band contiguous CA (Category ≥ 5) | r | TBD | |
| 8.2.1.3.1A _A.1 | FDD Soft buffer management test for | : CA (2 | Rel-10 | C104 | UE supporting E UTRA FDD and intra-band | | Refer to 36.521-1 8.1.2.3 | TBD |

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| | | | Condition | С | omments | Configurati Selectio | | |
| | DL CA) | | | | contiguous DL C or inter-band DL CA (UE category and 4) | | | |
| | | | Rel-11 | C106 | UE supporting E UTRA FDD and Downlink Intra- band non- contiguous CA (1) categories 3 and | Refer 36.52 UE 8.1.2 | 1-1 | TBD |
| 8.2.1.3.1B | FDD PDSCH Open Spatial Multiplexing Enhanced Performan Requirement Type C | g 2x2 – | Rel-12 | C142 | UE supporting E UTRA FDD and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | Numbe be perform | med in a en d rting | |
| 8.2.1.3.1C | FDD PDSCH Open Spatial Multiplexing with TM1 Interferen Enhanced Performan Requirement Type C | g 2x2 ace – | Rel-12 | C142 | UE supporting E UTRA FDD and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | Number be perform | med in a en d rting | |
| 8.2.1.3.2 | FDD PDSCH Open Loop Spatial Multiplexing 4x2 | | Rel-8 | C13 | UE supporting E UTRA FDD | Each " Numbe be perforr once, chos ban supportested | med in a en d rting | (UE categories 2-8) |
| 8.2.1.3.3_ C.1 | FDD PDSCH Open Spatial Multiplexing eICIC (non-MBSFN | g 2x2 for | Rel-10 | C29 | UEs supporting I UTRA FDD and Feature Group Indictor 115 | Each ' Numbe E- be | Test er' to med in a en d rting | |
| 8.2.1.3.3_ C.2 | FDD PDSCH Open Spatial Multiplexing eICIC (MBSFN AB | 2x2 for | Rel-10 | C29 | UEs supporting I UTRA FDD and Feature Group Indictor 115 | Each ' Numbe E- be | Test er' to med in a en d rting | |
| 8.2.1.3.3_ E.1 | FDD PDSCH Open Loop Spatial Multiplexing 2x2 for feICIC (non-MBSFN ABS) | | Rel-11 | C77 | UE supporting E UTRA FDD and CRS interference handling and Feature Group Indicator 115 (U. | Number be perform once, | er' to med in a | |

| Clause | Title | Release | | Applica | bility | Tested Bands / CA- | Additional Information |
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| | | | Condition | (| Comments | Configurations Selection | |
| | | | | | Category ≥ 2) | band supporting tested BW | |
| 8.2.1.4.1 | FDD PDSCH Close Single/Multi Layer S Multiplexing 2x2 | | Rel-8 only | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be - performed once, in a chosen band supporting tested BW | |
| 8.2.1.4.1 __ | FDD PDSCH Closed Single/Multi Layer S Multiplexing 2x2 (R and forward) | Spatial | Rel-9 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be - performed once, in a chosen band supporting tested BW | |
| 8.2.1.4.1_ E.1 | FDD PDSCH Closed Single/Multi Layer S Multiplexing 2x2 fo (non-MBSFN ABS) | Spatial r feICIC | Rel-11 | C77 | UE supporting E UTRA FDD and CRS interference handling and Feature Group Indicator 115 (U Category ≥ 2) | Number' to be performed once, in a | |
| 8.2.1.4.1_ H | FDD PDSCH Closed Multi Layer Spatial Multiplexing 2x2 fo 256QAM in DL | - | Rel-12 | C01h | UE supporting E UTRA FDD and 256QAM in DL | | |
| 8.2.1.4.2 | FDD PDSCH Close Single/Multi Layer S Multiplexing 4x2 | | Rel-8 only | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be - performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.1.4.2_A. 1 or 8.2.1.4.2_A. 2 is executed. |
| 8.2.1.4.2 __ 1 | FDD PDSCH Close Single/Multi Layer S Multiplexing 4x2 (R and forward) | Spatial | Rel-9 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be - performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.1.4.2_A. 1 or 8.2.1.4.2_A. 2 is executed. |
| 8.2.1.4.2_ A.1 | FDD PDSCH Closed Multi Layer Spatial Multiplexing 4x2 for DL CA) | - | Rel-10 | C102 | UE supporting E UTRA FDD and intra-band contiguous DL C or inter-band DL CA (UE Categor | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.2.1.4.2_A. 2 is |

| Clause | Title | Release | | Applicability | | | ted Bands / CA- | Additional Information |
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| | | | Condition | C | Comments | | nfigurations Selection | |
| | | | | | 3) | | | executed. |
| | | | Rel-11 | C103 | UE supporting E UTRA FDD and intra-band non- contiguous DL C (UE Category ≥ 2) | CA | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.2.1.4.2_A. 2 is executed. |
| 8.2.1.4.2_ A.2 | FDD PDSCH Closed Multi Layer Spatial Multiplexing 4x2 for (3DL CA) | _ | Rel-10 | C124 | UE supporting E UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, o 3DL with intra- band contiguous and inter-band C (UE Category > | ı or A | TBD | |
| | | | Rel-11 | C125 | UE supporting E UTRA FDD and 3DL with intraband noncontiguous and inter-band CA, of 3DL with intraband noncontiguous and intra-band contiguous CA (Category ≥ 5) | r | TBD | |
| 8.2.1.4.2A | FDD PDSCH Closed Multi Layer Spatial Multiplexing 2x2 – Enhanced Performan Requirement Type C | nce | Rel-12 | C142 | UE supporting E UTRA FDD and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | 8.2.1.4.2A |
| 8.2.1.4.3 | FDD PDSCH Closed Single Layer Spatial Multiplexing 2x2 wi Interference model - Enhanced Performan Requirement Type A | ith TM4 | Rel-11 | C44 | UE supporting E UTRA FDD and enhanced performance requirements typ for LTE | the | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.1.7_A. 1 | FDD Carrier aggregation with power imbalance band contiguous DL | ce (intra- | Rel-10 | C22 | UE supporting E UTRA FDD and intra-band contiguous DL C | | TBD | |
| 8.2.2.1 | Void | | | | | | | |
| 1 | with power imbaland band contiguous DL | ce (intra- | Rel-10 | C22 | UTRA FDD and intra-band | | 100 | |

| Clause | Title | Release | F1 | | | Tes | ted Bands / CA- | Additional Information |
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| | | | Condition | С | omments | Configurations Selection | | |
| 8.2.2.1.1 | TDD PDSCH Single Antenna Port Perfor | | Rel-8 | C02 | UE supporting E UTRA TDD | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.2.1.1_A. 1 or 8.2.2.1.1_A. 2 is executed. |
| 8.2.2.1.1 __ 1 | TDD PDSCH Single Antenna Port Performance (Release 9 and forward) | | Rel-9 | C54 | UE supporting E- UTRA TDD (UE categories 1, 2) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.2.1.1_A. 1 or 8.2.2.1.1_A. 2 is executed. |
| 8.2.2.1.1_ | TDD PDSCH Single Antenna Port Performance | | Rel-10 | C110 | UE supporting E UTRA TDD and intra-band contiguous DL CA(UE Category 5) | | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.2.2.1.1_A. 2 is executed. |
| A.1 | for CA (2DL CA) | | Rel-11 | C109 | UE supporting E UTRA TDD and inter-band or Inter- band non- contiguous DL CA(UE Category 5) | ra- | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.2.2.1.1_A. 2 is executed. |
| 8.2.2.1.1_ A.2 | TDD PDSCH Single Antenna Port Perfor for CA (3DL CA) | | Rel-10 | C128 | UE supporting E UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra- band contiguous and inter-band C (UE Category > 1) | ı r | TBD | |
| | | | Rel-11 | C129 | UE supporting E UTRA TDD and 3DL with intra- band non- contiguous and inter-band CA, o 3DL with intra- band non- contiguous and intra-band contiguous CA (| r | TBD | |

| Clause | Title | Release | | Applical | bility | Tested Bands / CA- | Additional Information |
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| | | | Condition | c | Comments | Configurations Selection | |
| | | | | | Category ≥ 5) | | |
| 8.2.2.1.2 | TDD PDSCH Single Antenna Port Perfor with 1PRB in the pro MBSFN | mance | Rel-8 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.2 | Void | | | | | | |
| 8.2.2.2.1 | TDD PDSCH Trans Diversity 2x2 | mit | Rel-8 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.2.1 __ | TDD PDSCH Trans Diversity 2x2 (Releatorward) | | Rel-9 | C16 | UE supporting E UTRA TDD (UF category 1) | Each 'Test Number' to be | |
| 8.2.2.2.2 | TDD PDSCH Trans Diversity 4x2 | mit | Rel-8 | C10 | UE supporting E UTRA TDD and operating bands supporting 1,4 M Bandwidth | Each 'Test Number' to be performed | |
| 8.2.2.2.2_ | TDD PDSCH Trans Diversity 4x2 (Releatorward) | | Rel-9 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be | |
| 8.2.2.2.3_ C.1 | TDD PDSCH Trans diversity 2x2 for eIC (non-MBFSN ABS) | CIC | Rel-10 | C30 | UEs supporting l UTRA TDD and Feature Group Indictor 115 | Each 'Test Number' to E- be | |
| 8.2.2.2.3_ E.1 | TDD PDSCH Trans diversity 2x2 for fel- (non-MBFSN ABS) | CIC | Rel-11 | C78 | UE supporting E UTRA TDD and CRS interference handling and ss- | Each 'Test Number' to be | |

| Clause | Title | Release | | Applicab | oility | | ted Bands / CA- | Additional Information |
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| | | | Condition | С | omments | | figurations Selection | |
| | | | | | CCH interference handling and Feature Group Indicator 115 (U Category ≥ 2) | e | chosen band supporting tested BW | |
| 8.2.2.2.4 | TDD PDSCH Trans Diversity 2x2 with T Interference Model - Enhanced Performan Requirement Type A | rM3 - nce | Rel-11 | C45 | UE supporting E UTRA TDD and enhanced performance requirements typ for LTE | the | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.2.6 | TDD PDSCH Trans Diversity 2x2 with T Interference Model - Enhanced Performan Requirement Type F | rM2 - nce | Rel-12 | C151 | UE supporting E UTRA TDD and enhanced performance requirements typ for LTE | the | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.2.7 | TDD PDSCH Trans Diversity 2x2 with T Interference Model - Enhanced Performat Requirement Type E | rM9 - nce | Rel-12 | C151 | UE supporting E UTRA TDD and enhanced performance requirements typ for LTE | the | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.3 | Void | | | | | | 100100 271 | |
| 8.2.2.3.1 | TDD PDSCH Open Spatial Multiplexing | | Rel-8 | C02 | UE supporting E UTRA TDD | - | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.2.3.1_A. 1 or .2 is executed. |
| 8.2.2.3.1 __ | TDD PDSCH Open Spatial Multiplexing (Release 11 and forward) | 2x2 | Rel-11 | C02 | UE supporting E UTRA TDD | - | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.2.3.1_A. 1 or .2 is executed. |
| 8.2.2.3.1_ A.1 | TDD PDSCH Open Spatial Multiplexing CA (2DL CA) | | Rel-10 | C110 | UE supporting E UTRA TDD and intra-band contiguous DL C (UE Category ≥ 1 | CA | Refer to 36.521-1 8.1.2.3 | If 8.2.2.3.1_A. 2 is executed for a CA capability, test execution is not necessary for that CA |

| Clause | Title | Release | | Applicab | ility | Tes | ted Bands / CA- | Additional Information |
|-------------------|---|---------|-----------|----------|--|-----------|---------------------------------|---|
| | | | Condition | С | omments | | figurations Selection | |
| | | | | | | | | capability |
| | | | Rel-11 | C109 | UE supporting E UTRA TDD and inter-band or intr band non- contiguous DL C (UE Category ≥ 1) | ra- CA | Refer to 36.521-1 8.1.2.3 | If 8.2.2.3.1_A. 2 is executed for a CA capability, test execution is not necessary for that CA capability |
| 8.2.2.3.1_ A.2 | TDD PDSCH Open Spatial Multiplexing CA (3DL CA) | | Rel-10 | C128 | UE supporting E UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, o 3DL with intra- band contiguous and inter-band CA(UE Category 5) | ı | Refer to 36.521-1 8.1.2.3 | |
| | | | Rel-11 | C129 | UE supporting E UTRA TDD and 3DL with intra- band non- contiguous and inter-band CA, o 3DL with intra- band non- contiguous and intra-band contiguous CA (Category ≥ 5) | r | TBD | |
| 8.2.2.3.1A | TDD Soft buffer | (2.5) | Rel-10 | C105 | UE supporting E UTRA TDD and intra-band contiguous DL C or inter-band DL CA (UE category 3 a | CA | Refer to 36.521-1 8.1.2.3 | TBD |
| _A.1 | management for CA CA) | (2 DL | Rel-11 | C72 | UE supporting E UTRA TDD and intra-band non- contiguous DL C (UE category 3 a 4) | CA | Refer to 36.521-1 8.1.2.3 | TBD |

| Clause | Title | Release | | Applicat | oility | | ted Bands / CA- | Additional Information |
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| | | | Condition | C | comments | | figurations Selection | |
| 8.2.2.3.1B | TDD PDSCH Open Spatial Multiplexing Enhanced Performa Requirement Type O | g 2x2 – nce | Rel-12 | C143 | UE supporting E UTRA TDD and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.3.1C | TDD PDSCH Open Spatial Multiplexing with TM1 Interferer Enhanced Performa Requirement Type O | g 2x2 nce – nce | Rel-12 | C143 | UE supporting E UTRA TDD and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.3.2 | TDD PDSCH Open Spatial Multiplexing | | Rel-8 | C02 | UE supporting E UTRA TDD (UF Category ≥ 2) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.3.3_ C.1 | TDD PDSCH Open Spatial Multiplexing eICIC (non-MBSFN | g 2x2 for | Rel-10 | C30 | UEs supporting I UTRA TDD and Feature Group Indictor 115 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.3.3_ C.2 | TDD PDSCH Open Spatial Multiplexing eICIC (MBSFN AB | g 2x2 for | Rel-10 | C30 | UEs supporting I UTRA TDD and Feature Group Indictor 115 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.2.2.3.3_ E.1 | TDD PDSCH Open Spatial Multiplexing feICIC (non-MBSF) | g 2x2 for | Rel-11 | C78 | UE supporting E UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group Indicator 115 (U Category ≥ 2) | e e | TBD | |
| 8.2.2.4 | Void | | | | | | | |
| 8.2.2.4.1 | TDD PDSCH Close Single/Multi Layer (Multiplexing 2x2 | | Rel-8 only | C02 | UE supporting E UTRA TDD | ļ- | Each 'Test Number' to be performed once, in a chosen | |

| Clause | Title | Release | | Applicab | pility | Tested Bands / CA- | Additional Information |
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| | | | Condition | С | omments | Configurations Selection | |
| | | | | | | band supporting tested BW | |
| 8.2.2.4.1 __ 1 | TDD PDSCH Close Multi Layer Spatial Multiplexing 2x2 (R and forward) | • | Rel-9 | C02 | UE supporting E UTRA TDD | once, in a chosen band supporting tested BW | |
| 8.2.2.4.1_ E.1 | TDD PDSCH Closed Loop Single/Multi Layer Spatial Multiplexing 2x2 for feICIC (non-MBSFN ABS) | | Rel-11 | C78 | UE supporting E UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group Indicator 115 (U Category ≥ 2) | Each 'Test Number' to be performed once, in a chosen band | |
| 8.2.2.4.1_ H | TDD PDSCH Close Multi Layer Spatial Multiplexing 2x2 fo 256QAM in DL | • | Rel-12 | C02h | UE supporting E UTRA TDD and 256QAM in DL | | |
| 8.2.2.4.2 | TDD PDSCH Close Single/Multi Layer & Multiplexing 4x2 | | Rel-8 only | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be - performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.2.4.2_A. 1 or 8.2.2.4.2_A. 2 is executed. |
| 8.2.2.4.2_ 1 | TDD PDSCH Close Multi Layer Spatial Multiplexing 4x2 (R and forward) | 1 | Rel-9 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | Test execution not necessary if 8.2.2.4.2_A. 1 or 8.2.2.4.2_A. 2 is executed. |
| 8.2.2.4.2_ A.1 | TDD PDSCH Close Multi Layer Spatial Multiplexing 4x2 fo (2DL CA) | 1 | Rel-10 | C110 | UE supporting E UTRA TDD and intra-band contiguous DL CA(UE Category 5) | Refer to 36.521-1 | Test execution not necessary if 8.2.2.4.2_A. 2 is executed. |
| | (ZDL CA) | | Rel-11 | C109 | UE supporting E UTRA TDD and inter-band or Intr band non- contiguous DL | Refer to | Test execution not necessary if 8.2.2.4.2_A. |

| Clause | Title | Release | | Applicab | pility | Tested Bands / CA- | Additional Information |
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| | | | Condition | С | omments | Configurations Selection | |
| | | | | | CA(UE Category 5) | | 2 is executed. |
| 8.2.2.4.2_ A.2 | TDD PDSCH Closed Loop Multi Layer Spatial Multiplexing 4x2 for CA (3DL CA) | | Rel-10 | C128 | UE supporting E UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, o 3DL with intra- band contiguous and inter-band C (UE Category > 2 | r A | |
| | | | Rel-11 | C129 | UE supporting E UTRA TDD and 3DL with intraband noncontiguous and inter-band CA, of 3DL with intraband noncontiguous and intra-band contiguous CA (Category ≥ 5) | r | |
| 8.2.2.4.2A | TDD PDSCH Close Multi Layer Spatial Multiplexing 2x2 – Enhanced Performan Requirement Type C | nce | Rel-12 | C143 | UE supporting E UTRA TDD and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | Number' to be performed once, in a | |
| 8.2.2.4.3 | TDD PDSCH Close Single Layer Spatial Multiplexing 2x2 wi Interference Model - Enhanced Performan Requirement Type A | ith TM4 | Rel-11 | C45 | UE supporting E UTRA TDD and enhanced performance requirements typ for LTE | the be performed once, in a | |
| 8.2.2.7_A. 1 | TDD Carrier aggreg with power imbalan- band contiguous DL | ce (intra- | Rel-10 | C24 | UE supporting E UTRA TDD and intra-band contiguous DL C | Refer to 36.521-1 | |
| 8.2.3.1.1.1 | TDD FDD CA PDS Single Antenna Port Performance for FD (2DL CA) | | Rel-12 | C132 | UE supporting E UTRA FDD and TDD and 2DL C with FDD as PCe (UE Category ≥ 2 | A ell | |
| 8.2.3.1.1.2 | TDD FDD CA PDS Single Antenna Port Performance for FD (3DL CA) | | Rel-12 | C133 | UE supporting E UTRA FDD and TDD and 3DL C with FDD as PCe | A | |

| Clause | Title | Release | | Applicat | oility | Tested Bands / CA- | Additional Information |
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| | | | Condition | C | Comments | Configurations Selection | |
| | | | | | (UE Category ≥ 5 | 5) | |
| 8.2.3.1.2.1 | TDD FDD CA PDS Single Antenna Port Performance for TD PCell(2DL CA) | : | Rel-12 | C134 | UE supporting E- UTRA FDD and TDD and 2DL Co with TDD as PCe (UE Category ≥ 3 | A ell | |
| 8.2.3.1.2.2 | TDD FDD CA PDS Single Antenna Port Performance for TD (3DL CA) | | Rel-12 | C135 | UE supporting E- UTRA FDD and TDD and 3DL Ca with TDD as PCe (UE Category ≥ 5 | A ell | |
| 8.2.3.2.1.1 | TDD FDD CA PDS Open Loop Spatial Multiplexing 2x2 fo PCell (2DL CA) | | Rel-12 | C132 | UE supporting E- UTRA FDD and TDD and 2DL Co with FDD as PCe (UE Category ≥ 3 | A ell | |
| 8.2.3.2.1.2 | TDD FDD CA PDS Open Loop Spatial Multiplexing 2x2 fo PCell (3DL CA) | | Rel-12 | C133 | UE supporting E- UTRA FDD and TDD and 3DL Ca with FDD as PCe (UE Category ≥ | A ·II | |
| 8.2.3.2.1A | TDD FDD CA PDS buffer management FDD PCell (2DL CA | test for | Rel-12 | C136 | UE supporting E- UTRA FDD and TDD and 2DL Ca with FDD as PCe (UE categories 3 and 4) | A | |
| 8.2.3.2.2.1 | TDD FDD CA PDS Open Loop Spatial Multiplexing 2x2 fo PCell (2DL CA) | | Rel-12 | C134 | UE supporting E- UTRA FDD and TDD and 2DL Co with TDD as PCe (UE Category ≥ | A ell | |
| 8.2.3.2.2.2 | TDD FDD CA PDS Open Loop Spatial Multiplexing 2x2 fo PCell (3DL CA) | | Rel-12 | C135 | UE supporting E- UTRA FDD and TDD and 3DL Co with TDD PCell (UE Category ≥ 5 | A | |
| 8.2.3.2.2A | TDD FDD CA PDS buffer management TDD PCell (2DL CA | test for | Rel-12 | C137 | UE supporting E- UTRA FDD and TDD and 2DL Co with TDD PCell (UE categories 3 and 4) | | |
| 8.2.3.3.1.1 | TDD FDD CA PDS Closed Loop Multi I Spatial Multiplexing FDD PCell (2DL CA | Layer g 4x2 for | Rel-12 | C132 | UE supporting E- UTRA FDD and TDD and 2DL Co with FDD as PCe (UE Category ≥ 3 | A ell | |
| 8.2.3.3.1.2 | TDD FDD CA PDS Closed Loop Multi I | | Rel-12 | C133 | UE supporting E- UTRA FDD and | . TBD | |

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| | | | Condition | C | omments | | igurations election | |
| | Spatial Multiplexing FDD PCell (3DL Ca | | | | TDD and 3DL C with FDD as PC (UE Category ≥ 1 | A ell | | |
| 8.2.3.3.2.1 | TDD FDD CA PDS Closed Loop Multi I Spatial Multiplexing TDD PCell (2DL Ca | Layer g 4x2 for | Rel-12 | C134 | UE supporting E UTRA FDD and TDD and 2DL C with TDD as PC (UE Category ≥ 1 | CA ell | TBD | |
| 8.2.3.3.2.2 | TDD FDD CA PDS Closed Loop Multi I Spatial Multiplexing TDD PCell (3DL Ca | Layer g 4x2 for | Rel-12 | C135 | UE supporting E UTRA FDD and TDD and 3DL C with TDD as PC (UE Category ≥ 1 | CA ell | TBD | |
| 8.3.1 | Void | | | | | | | |
| 8.3.1.1.1_ D | FDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 a simultaneous trans for eDL-MIMO | g on without | Rel-10 | C25 | UE supporting E UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | ;- | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.3.1.1.1_ H | FDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 a simultaneous trans for eDL-MIMO for 256QAM in DL | g on without | Rel-12 | C25h | UE supporting E UTRA FDD and eDL-MIMO and 256QAM in DL Feature Group Indicator 103 | | | |
| 8.3.1.1.2_ D | FDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 simultaneous transm for eDL-MIMO | g on with a | Rel-10 | C25 | UE supporting E UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | - | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.3.1.1.3 | FDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 TM9 Interference M Enhanced Performan Requirement Type A | y on with lodel - | Rel-11 | C40 | UE supporting E UTRA FDD and Feature Group Indictor 103 and supporting the enhanced performance requirements typ for LTE | be A | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.3.1.2.1_ D | FDD PDSCH Dual- Spatial Multiplexing eDL-MIMO | | Rel-10 | C25 | UE supporting E UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |

| Clause | Title | Release | | Applicab | ility | Tes | ted Bands / CA- | Additional Information |
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| | | | Condition | С | omments | | nfigurations Selection | |
| 8.3.1.2.1_ D_1 | FDD PDSCH Dual- Spatial Multiplexing eDL-MIMO (Releas forward) | g for | Rel-11 | TBD | UE supporting E UTRA FDD and eDL-MIMO and Feature Group Indicator [TBD] | ,- | TBD | |
| 8.3.1.2.2 | FDD PDSCH Dual-layer Spatial Multiplexing – Enhanced Performance Requirement Type C | | Rel-12 | C144 | UE supporting E UTRA FDD and eDL-MIMO and Feature Group Indicator 103 and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | d | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.3.1.3.1_ F | FDD PDSCH Perfor with DCI format 2D Quasi Co-located An Ports, Same Cell ID single NZP CSI-RS for CoMP | , non ntenna and | Rel-11 | C50 | UE supporting E UTRA FDD and Maximum CSI processes of One a component car within a band wi PDSCH transmission mod 10 (UE Category 2) | e on rier th | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.3.1.3.2_ F | FDD PDSCH Perfor with DCI format 2D Quasi Co-located Ar Ports, Same Cell ID multiple NZP CSI-R resources for CoMP | ntenna and | Rel-11 | C52 | UE supporting E UTRA FDD and Maximum CSI processes of Thror Four on a component carrie within a band with PDSCH transmission model 10 (UE Category 2) | ee er th | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.3.1.3.3_ F | FDD PDSCH Perfor with DCI format 2D Quasi Co-located An Ports, Different Cell Colliding CRS and s NZP CSI-RS resource CoMP | , non ntenna ID, single | Rel-11 | C117 | UE supporting E UTRA FDD and Maximum CSI processes of One Three or Four or component carrie within a band wi PDSCH transmission mod 10 (UE Category 2) | e, n a er th | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.3.2.1.1 | TDD PDSCH Single Spatial Multiplexing antenna port 5 (Rele and forward) | gon | Rel-8 | C02 | UE supporting E UTRA TDD | - | Each 'Test Number' to be performed once, in a chosen band supporting | |

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| | | | Condition | С | omments | Configurations Selection | |
| 8.3.2.1.1 __ | TDD PDSCH Single Spatial Multiplexing antenna port 5 (Releand forward) | gon | Rel-9 | C16 | UE supporting E UTRA TDD (UE category 1) | | |
| 8.3.2.1.2 | TDD PDSCH Single-layer Spatial Multiplexing on antenna port 7 or 8 without a simultaneous transmission | | Rel-9 only | C34 | UE supporting E UTRA TDD and supporting enhanced dual la TDD. | Each 'Test Number' to be performed | |
| | | | Rel-10 | C02 | UE supporting E UTRA TDD. | Each 'Test Number' to be | |
| 8.3.2.1.2_ D | TDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 a simultaneous trans for eDL-MIMO | g on without | Rel-10 | C26 | UE supporting E UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | Each 'Test Number' to be | |
| 8.3.2.1.2_ H | TDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 a simultaneous trans for eDL-MIMO for 256QAM in DL | g on without | Rel-12 | C26h | UE supporting E UTRA TDD and eDL-MIMO and 256QAM in DL s Feature Group Indicator 104 | - | |
| 8.3.2.1.3 | TDD PDSCH Single Spatial Multiplexing antenna port 7 or 8 v simultaneous transm | g on with a | Rel-9 only | C34 | UE supporting E UTRA TDD and supporting enhanced dual la TDD. | performed | |
| | | | Rel-10 | C02 | UE supporting E UTRA TDD. | Each 'Test Number' to be | |

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| | | | Condition | C | Comments | Configurations Selection | |
| 8.3.2.1.3_ D | TDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 simultaneous transm for eDL-MIMO | g on with a | Rel-10 | C25a | UE supporting E UTRA TDD and eDL-MIMO and Feature Group Indicator 103 | De performed | |
| 8.3.2.1.4 | TDD PDSCH Single Spatial Multiplexing antenna ports 7 or 8 TM9 Interference M Enhanced Performan Requirement Type A | g on with lodel - | Rel-11 | C41 | UE supporting E UTRA TDD and Feature Group Indictor 103 and supporting the enhanced performance requirements typ for LTE | Each 'Test Number' to be performed once, in a chosen band | |
| 8.3.2.2.1 | TDD PDSCH Dual- Spatial Multiplexing | | Rel-9 only | C34 | UE supporting E UTRA TDD and supporting enhanced dual la TDD. | performed | |
| | | | Rel-10 | C02 | UE supporting E UTRA TDD. | Each 'Test Number' to be | |
| 8.3.2.2.1_ D | TDD PDSCH Dual- Spatial Multiplexing eDL-MIMO | • | Rel-10 | C25a | UE supporting E UTRA TDD and eDL-MIMO and Feature Group Indicator 103 | Each 'Test Number' to be | |
| 8.3.2.2.1_ D_1 | TDD PDSCH Dual- Spatial Multiplexing eDL-MIMO (Releas forward) | g for | Rel-11 | TBD | UE supporting E UTRA TDD and eDL-MIMO and Feature Group Indicator [TBD] | | |
| 8.3.2.2.2 | TDD PDSCH Dual- Spatial Multiplexing Enhanced Performal Requirement Type O | g – nce | Rel-12 | C143 | UE supporting E UTRA TDD and Enhanced Performance Requirement Typ for LTE (UE Category ≥ 2) | Number' to be performed | |
| 8.3.2.4.1_ | TDD PDSCH Performit DCI format 2D | | Rel-11 | C51 | UE supporting E UTRA TDD and | - Each 'Test | |

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| | | | Condition | С | comments | Configurations Selection | |
| F | Quasi Co-located An Ports, Same Cell ID single NZP CSI-RS for CoMP | and | | | Maximum CSI processes of One a component carr within a band wi PDSCH transmission mod 10 (UE Category 2) | th once, in a chosen band supporting tested BW | |
| 8.3.2.4.2_ F | TDD PDSCH Performent and ports, Same Cell ID multiple NZP CSI-R resources for CoMP | o, non ntenna and SS | Rel-11 | C53 | UE supporting E UTRA TDD and Maximum CSI processes of Thro or Four on a component carrie within a band wi PDSCH transmission mod 10 (UE Category 2) | Each 'Test Number' to be performed once, in a chosen band supporting | |
| 8.3.2.4.3_ F | TDD PDSCH Performs with DCI format 2D Quasi Co-located An Ports, Different Cell Colliding CRS and s NZP CSI-RS resource CoMP | o, non ntenna ID, single | Rel-11 | C118 | UE supporting E UTRA TDD and Maximum CSI processes of One Three or Four on component carrie within a band wi PDSCH transmission mod 10 (UE Category 2) | Each 'Test Number' to be performed once, in a chosen band supporting | |
| 8.4.1.1 | FDD PCFICH/PDC Single-antenna Port Performance | | Rel-8 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.1.2 | Void | | | | | | |
| 8.4.1.2.1 | FDD PCFICH/PDC Transmit Diversity 2 | | Rel-8 only | C09 | UE supporting E UTRA FDD and operating bands supporting 1,4 M Bandwidth | IHz be performed once, in a chosen band supporting tested BW | |
| 8.4.1.2.1 __ 1 | FDD PCFICH/PDC Transmit Diversity 2 (Release 9 and forw | 2x2 | Rel-9 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting | |

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| | | | Condition | c | Comments | Configurations Selection | |
| 8.4.1.2.2 | FDD PCFICH/PDC Transmit Diversity | | Rel-8 only | C01 | UE supporting E UTRA FDD | tested BW Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.1.2.3_ E.1 | FDD PCFICH/PDC Transmit Diversity 2 feICIC (non-MBSFI | 2x2 for | Rel-11 | C77 | UE supporting E UTRA FDD and CRS interference handling and Feature Group Indicator 115 (U Category ≥ 2) | Number' to be performed once, in a chosen | |
| 8.4.1.2.3_ E.2 | FDD PCFICH/PDC Transmit Diversity 2 feICIC (MBSFN AF | 2x2 for | Rel-11 | C77 | UE supporting E UTRA FDD and CRS interference handling and Feature Group Indicator 115 (U | Each 'Test Number' to be performed once, in a chosen | |
| 8.4.1.2.2_ | FDD PCFICH/PDC Transmit Diversity 4 (Release 9 and forw | 1x2 | Rel-9 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be | |
| 8.4.1.2.3_ C.1 | FDD PCFICH/PDC Transmit Diversity 2 eICIC (non-MBSFN | 2x2 for | Rel-10 | C29 | UE supporting E UTRA FDD and Feature Group Indicator 115 | Each 'Test Number' to be | |
| 8.4.1.2.3_ C.2 | FDD PCFICH/PDC Transmit Diversity 2 eICIC (MBSFN AB | 2x2 for | Rel-10 | C29 | UEs supporting I UTRA FDD and Feature Group Indictor 115 | | |
| 8.4.2.1 | TDD PCFICH/PDC Single-antenna Port Performance | | Rel-8 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be | |

| Clause | Title | Release | | Applicat | pility | | sted Bands / CA- | Additional Information |
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| | | | Condition | С | omments | | nfigurations Selection | |
| 8.4.2.2 | Void | | | | | • | | |
| 8.4.2.2.1 | TDD PCFICH/PDCCH Transmit Diversity 2x2 | | Rel-8 only | C10 | UE supporting E- UTRA TDD and operating bands supporting 1,4 MH Bandwidth | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.2.2.1 __ | TDD PCFICH/PDCCH Transmit Diversity 2x2 (Release 9 and forward) | | Rel-9 | C02 | UE supporting E- UTRA TDD | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.2.2.2 | TDD PCFICH/PDC Transmit Diversity 4 | | Rel-8 only | C02 | UE supporting E UTRA TDD | - | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.2.2.2 __ | TDD PCFICH/PDC Transmit Diversity 4 (Release 9 and forward) | lx2 | Rel-9 | C02 | UE supporting E UTRA TDD | - | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.2.2.3_ C.1 | TDD PCFICH/PDC Transmit Diversity 2 eICIC (non-MBSFN | 2x2 for | Rel-10 | C30 | UEs supporting I UTRA TDD and Feature Group Indictor 115 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.2.2.3_ C.2 | TDD PCFICH/PDC Transmit Diversity 2 eICIC (MBSFN AB | 2x2 for | Rel-10 | C30 | UEs supporting I UTRA TDD and Feature Group Indictor 115 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.4.2.2.3_ E.1 | TDD PCFICH/PDC Transmit Diversity 2 feICIC (non-MBSFI | 2x2 for | Rel-11 | C78 | UE supporting E UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group | e | Each 'Test Number' to be performed once, in a chosen band supporting | |

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| | | | Condition | C | comments | Configurations Selection | |
| | | | | | Indicator 115(UF Category ≥ 2) | E tested BW | |
| 8.4.2.2.3_ E.2 | TDD PCFICH/PDCCH Transmit Diversity 2x2 for feICIC (MBSFN ABS) | | Rel-11 | C78 | UE supporting E UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group Indicator 115(UH Category ≥ 2) | Each 'Test Number' to be performed once, in a chosen band | |
| 8.5.1.1 | FDD PHICH Single Port Performance | -antenna | Rel-8 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.5.1.2 | Void | | | | | 100100 211 | |
| 8.5.1.2.1 | FDD PHICH Transa Diversity 2x2 | nit | Rel-8 only | C09 | UE supporting E UTRA FDD and operating bands supporting 1,4 M Bandwidth | performed | |
| 8.5.1.2.1 __ | FDD PHICH Transr Diversity 2x2 (Releatorward) | | Rel-9 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.5.1.2.2 | FDD PHICH Transr Diversity 4x2 | nit | Rel-8 only | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.5.1.2.2 __ 1 | FDD PHICH Transa Diversity 4x2 (Releatorward) | | Rel-9 | C01 | UE supporting E UTRA FDD | once, in a chosen band supporting tested BW | |
| 8.5.1.2.3_ C.1 | FDD PHICH Transr Diversity 2x2 for eI | | Rel-10 | C29 | UE supporting E UTRA FDD and Feature Group | | |

| Clause | Title | Release | | Applicab | ility | Tested Bands / CA- | Additional Information |
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| | | | Condition | С | omments | Configurations Selection | |
| | (non-MBSFN ABS) | | | | Indicator 115 | performed once, in a chosen band supporting tested BW | |
| 8.5.1.2.3_ E.1 | FDD PHICH Transn Diversity 2x2 for fel (non-MBSFN ABS) | | Rel-11 | C77 | UE supporting E UTRA FDD and CRS interference handling and Feature Group Indicator 115 (U Category ≥ 2) | Each 'Test Number' to be performed once, in a chosen | |
| 8.5.2.1 | TDD PHICH Single Port Performance | -antenna | Rel-8 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.5.2.2 | Void | | | | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 8.5.2.2.1 | TDD PHICH Transr Diversity 2x2 | nit | Rel-8 only | C10 | UE supporting E UTRA TDD and operating bands supporting 1,4 M Bandwidth | Each 'Test Number' to be performed | |
| 8.5.2.2.1 __ | TDD PHICH Transr Diversity 2x2 (Relea forward) | | Rel-9 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be | |
| 8.5.2.2.2 | TDD PHICH Transr Diversity 4x2 | nit | Rel-8 only | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be | |
| 8.5.2.2.2_ 1 | TDD PHICH Transr Diversity 4x2 (Relea forward) | | Rel-9 | C02 | UE supporting E UTRA TDD | Each 'Test | |

| Clause | Title | Release | | Applicab | ility | Tested Bands CA- | Information |
|-------------------|--|---------|-----------|----------|---|--|--|
| | | | Condition | С | omments | Configuration Selection | 5 |
| | | | | | | once, in a chosen band supporting tested BW | 3 |
| 8.5.2.2.3_ C.1 | TDD PHICH Transı Diversity 2x2 for eI (non-MBSFN ABS) | CIC | Rel-10 | C30 | UEs supporting I UTRA TDD and Feature Group Indictor 115 | | |
| 8.5.2.2.3_ E.1 | TDD PHICH Transi Diversity 2x2 for fel (non-MBSFN ABS) | ICIC | Rel-11 | C78 | UE supporting E UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group Indicator 115(UF Category ≥ 2) | Each 'Tes Number' to be performed once, in a chosen band | |
| 8.7.1.1 | FDD sustained data performance (Rel-9 forward) | | Rel-9 | C76 | UE supporting E UTRA FDD and supporting 256QAM in DL (UE categories from1 to 4) | | EPDCCH UEs to be tested in this test if 8.7.1.1_A.1, 8.7.1.1_A.2 |
| 8.7.1.1_1 | FDD sustained data performance (Rel-10 forward) | | Rel-10 | C42 | UE supporting E UTRA FDD and supporting 256QAM in DL (UE categories 6 | not performed once, in a chosen | EPDCCH UEs to be tested in this test if 8.7.1.1_A.1, 8.7.1.1_A.2 |
| 8.7.1.1_A. 1 | FDD Sustained data performance for CA CA) | | Rel-10 | C107 | UE supporting E UTRA FDD and intra-band contiguous DL C or inter-band DL CA and not supportin 256QAM in DL (UE category 3, 4 6, 7, 9 and 10) | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.7.1.1_A.2 is executed. |

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| | | | Condition | С | omments | | ofigurations Selection | |
| | | | Rel-11 | C93 | UE supporting E UTRA FDD and intra-band non- contiguous DL C and not supportin 256QAM in DL (UE category 3, 6, 7, 9 and 10) | CA ng | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.7.1.1_A.2 is executed. |
| 8.7.1.1_A. 2 | FDD Sustained data performance for CA CA) | | Rel-10 | C126 | UE supporting E UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra- band contiguous and inter-band Cand not supporting 256QAM in DL (UE category 6, 9, 10, 11 and 12) | h h or Ang | Refer to 36.521-1 8.1.2.3 | |
| | | | Rel-11 | C127 | UE supporting E UTRA FDD and 3DL with intra- band non- contiguous and inter-band CA, o 3DL with intra- band non- contiguous and intra-band contiguous CA a not supporting 256QAM in DL (UE category 6, 9, 10, 11 and 12) | or .nd | TBD | |
| 8.7.1.1_H. 1 | FDD sustained data performance (Single for 256QAM in DL | | Rel-12 | C42h | UE supporting E UTRA FDD and 256QAM and UI DL category 13 | | | |
| 8.7.1.1_H. 2 | FDD Sustained data performance for CA CA) for 256QAM in | (2DL | Rel-12 | C107h | UE supporting E UTRA FDD and 2DL CA and 256QAM in DL | | | |
| 8.7.1.1_H. 3 | FDD Sustained data performance for CA CA) for 256QAM in | (3DL | Rel-12 | C126h | UE supporting E UTRA FDD and 3DL CA ,and supporting 256QAM in DL | | | |
| 8.7.2.1 | TDD sustained data performance (Rel-9 | | Rel-9 | C111 | UE supporting E UTRA TDD and not supporting | | Each 'Test Number' to be performed | It is not necessary for CA UEs and |

| Clause | Title | Release | | Applicab | oility | | ted Bands / CA- | Additional Information |
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| | | | Condition | С | omments | | figurations election | |
| | forward) | | | | 256QAM in DL (UE categories fi 1 to 4) | rom | once, in a chosen band supporting tested BW | EPDCCH UEs to be tested in this test if 8.7.2.1_A.1, 8.7.2.1_A.2 or 8.7.4.1 is executed. |
| 8.7.2.1_1 | TDD sustained data performance (Rel-10 forward) | | Rel-10 | C73 | UE supporting E UTRA TDD and not supporting 256QAM in DL (UE category 6 a 7) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | It is not necessary for CA UEs and EPDCCH UEs to be tested in this test if 8.7.2.1_A.1, 8.7.2.1_A.2 or 8.7.4.1 is executed. |
| 8.7.2.1_A. 1 | TDD sustained data performance for CA CA) | | Rel-10 | C74 | UE supporting E UTRA TDD and intra-band contiguous DL C or inter-band DL CA and not supporting 256QAM in DL (UE category 3, 4 6, 7, 9 and 10) | CA | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.7.2.1_A.4 is executed. |
| | | | Rel-11 | C75 | UE supporting E UTRA TDD and intra-band non- contiguous DL C and not supportin 256QAM in DL (UE category 3, 4 6, 7, 9 and 10) | CA ng | Refer to 36.521-1 8.1.2.3 | Test execution not necessary if 8.7.2.1_A.4 is executed. |
| 8.7.2.1_A. 2 | TDD Sustained data performance for CA CA) | | Rel-10 | C130 | UE supporting E UTRA TDD and 3DL with intraband contiguous CA, or 3DL with interband CA, or 3DL with intraband contiguous and interband C and not supporting 256QAM in DL (UE category 6, 9, 10, 11 and 12) | h r A ng | Refer to 36.521-1 8.1.2.3 | |
| | | | Rel-11 | C131 | UE supporting E UTRA TDD and 3DL with intra- | | TBD | |

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| | | | Condition | С | omments | Configurations Selection | |
| | | | | | band non- contiguous and inter-band CA, o 3DL with intra- band non- contiguous and intra-band contiguous CA a not supporting 256QAM in DL (UE category 6, 9, 10, 11 and 12) | r nd | |
| 8.7.2.1_H. 1 | TDD sustained data performance (Single for 256QAM in DL | | Rel-12 | C73h | UE supporting E UTRA TDD and 256QAM in DL UE DL category | and | |
| 8.7.2.1_H. 2 | TDD sustained data performance for CA CA) for 256QAM in | (2DL | Rel-12 | C74h | UE supporting E UTRA TDD and 2DL CA, and supporting 256QAM in DL | | |
| 8.7.2.1_H. 3 | TDD Sustained data performance for CA CA) for 256QAM in | (3DL | Rel-12 | C130h | UE supporting E UTRA TDD and 3DL CA and supporting 256QAM in DL | | |
| 8.7.3.1 | FDD sustained data performance for EPI scheduling | | Rel-11 | C55 | UE supporting E UTRA FDD and EPDCCH | | |
| 8.7.4.1 | TDD sustained data performance for EPI scheduling | | Rel-11 | C56 | UE supporting E UTRA TDD and EPDCCH | | |
| 8.7.5.1.1 | TDD FDD CA Susta data rate performanc FDD PCell (2DL CA | e for | Rel-12 | C138 | UE supporting E UTRA FDD and TDD and 2DL C with FDD as PCo and not supportin 256QAM in DL (UE category 3, 4 6, 7, 9 and 10) | - TBD A ell ng | |
| 8.7.5.1.2 | TDD FDD CA Susta data rate performance FDD PCell (3DL CA | e for | Rel-12 | C139 | UE supporting E UTRA FDD and TDD and 3DL C | | |

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| | | | Condition | С | omments | Configurations Selection | |
| | | | | | with FDD as PCe and not supportin 256QAM in DL (UE category 6, 7 9, 10, 11 and 12) | ng | |
| 8.7.5.1_H. 1 | TDD FDD CA Sustained data rate performance for FDD PCell (2DL CA) for 256QAM in DL | | Rel-12 | C138h | UE supporting E- UTRA FDD and TDD and 2DL TDD-FDD CA w FDD as PCell and supporting 256QAM in DL | vith | |
| 8.7.5.1_H. 2 | TDD FDD CA Susta data rate performand FDD PCell (3DL CA 256QAM in DL | e for | Rel-12 | C139h | UE supporting E- UTRA FDD and TDD and 3DL TDD-FDD CA w FDD as PCell and supporting 256QAM in DL | vith | |
| 8.7.5.2.1 | TDD FDD CA Susta data rate performand TDD PCell (2DL CA | e for | Rel-12 | C140 | UE supporting E- UTRA FDD and TDD and 2DL C with TDD as PCe and not supportin 256QAM in DL (UE category 3, 4 6, 7, 9 and 10) | A ell g | |
| 8.7.5.2.2 | TDD FDD CA Susta data rate performand TDD PCell (3DL Ca | e for | Rel-12 | C141 | UE supporting E- UTRA FDD and TDD and 3DL C with TDD as PCc and not supportin 256QAM in DL (UE category 6, 7, 9, 10, 11 and 12) | A ell ng 7, | |
| 8.7.5.2_H. 1 | TDD FDD CA Susta data rate performand TDD PCell (2DL CA 256QAM in DL | e for | Rel-12 | C140h | UE supporting E- UTRA FDD and TDD and 2DL TDD-FDD CA w TDD as PCell an supporting 256QAM in DL | vith | |
| 8.7.5.2_H. 2 | TDD FDD CA Susta data rate performand TDD PCell (3DL CA 256QAM in DL | e for | Rel-12 | C141h | UE supporting E- UTRA FDD and TDD and 3DL TDD-FDD CA w TDD as PCell an supporting 256QAM in DL | vith | |
| 8.8.1.1 | FDD distributed EPI performance | DCCH | Rel-11 | C55 | UE supporting E- UTRA FDD and | | |

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| | | | Condition | C | omments | Configurations Selection | |
| | | | | | EPDCCH | once, in a chosen band supporting tested BW | |
| 8.8.1.2 | TDD distributed EP performance | DCCH | Rel-11 | C56 | UE supporting E UTRA TDD and EPDCCH | once, in a chosen band supporting tested BW | |
| 8.8.2.1 | FDD localized EPD performance with T | | Rel-11 | C91 | UE supporting E UTRA FDD and EPDCCH and Feature Group Indicator 103 | | |
| 8.8.2.2 | TDD localized EPD performance with T | | Rel-11 | C92 | UE supporting E UTRA TDD and EPDCCH and Feature Group Indicator 103 | performed once, in a chosen band supporting tested BW | |
| 8.8.3.1 | FDD localized EPD transmission with TI Type B quasi co-loc type | M10 | Rel-11 | C57 | UE supporting E UTRA FDD and EPDCCH and Multiple CSI processes on a component carrie within a band wi PDSCH transmission mod 10 | Each 'Test Number' to be performed once, in a chosen band | |
| 8.8.3.2 | TDD localized EPD transmission with TT Type B quasi co-loc type | M10 | Rel-11 | C58 | UE supporting E UTRA TDD and EPDCCH and Multiple CSI processes on a component carrie within a band wi PDSCH transmission mod 10 | Each 'Test Number' to be performed once, in a chosen band | |
| 8.9.1.1.1 | Transmit diversity performance for UE 0 (Cell-Specific Ref Symbols) | | Rel-12 | C145 | UE supporting E UTRA FDD (UE category 0) | | |

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| | | | Condition | Co | mments | Configurations Selection | |
| | | | | | | tested BW | |
| | | | Reporting of | of Channel | State Information | า | |
| 9.2.1.1 | FDD CQI Reporting under AWGN conditions - PUCCH 1-0 | | Rel-8 | C01 | UE supporting I UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.2.1.2 | TDD CQI Reporting AWGN conditions - 1-0 | | Rel-8 | C02 | UE supporting I UTRA TDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.2.1.3_C. 1 | FDD CQI Reporting AWGN conditions - 1-0 for eICIC (non-I ABS) | - PUCCH | Rel-10 | C29 | UE supporting I UTRA FDD and Feature Group Indicator 115 | | |
| 9.2.1.4_C. 1 | TDD CQI Reporting AWGN conditions - 1-0 for eICIC (non-I ABS) | PUCCH | Rel-10 | C30 | UEs supporting UTRA TDD and Feature Group Indictor 115 | | |
| 9.2.1.5_E. 1 | FDD CQI Reporting AWGN conditions - 1-0 for feICIC (non- ABS) | - PUCCH | Rel-11 | C77 | UE supporting F UTRA FDD and CRS interference handling and Feature Group Indicator 115 (U Category ≥ 2) | Each 'Test Number' to be performed once, in a | |
| 9.2.1.6_E. 1 | TDD CQI Reporting AWGN conditions - 1-0 for feICIC (non- ABS) | - PUCCH | Rel-11 | C78 | UE supporting I UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group Indicator 115(U Category ≥ 2) | Each 'Test Number' to be performed once, in a chosen band | |
| 9.2.2.1 | FDD CQI Reporting AWGN conditions - 1-1 | | Rel-8 | C01 | UE supporting I UTRA FDD | Each 'Test Number' to be performed once, in a | |

| Clause | Title | Release | | Applicabi | lity | Tested Bands / CA- | Additional Information |
|-----------|---|---------|-----------|-----------|---|---|------------------------|
| | | | Condition | Co | omments | Configurations Selection | |
| | | | | | | chosen band supporting tested BW | |
| 9.2.2.2 | TDD CQI Reporting AWGN conditions - 1-1 | | Rel-8 | C02 | UE supporting I UTRA TDD | once, in a chosen band supporting tested BW | |
| 9.2.3.1_D | FDD CQI Reporting AWGN conditions - 1-1 for eDL-MIMO | | Rel-10 | C25 | UE supporting I UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | l be | |
| 9.2.3.2_D | TDD CQI Reporting AWGN conditions - 1-1 for eDL-MIMO | | Rel-10 | C26 | UE supporting I UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | d be | |
| 9.2.4.1_F | FDD CQI Reporting AWGN conditions - CSI Process for CoM | Single | Rel-11 | C117 | UE supporting I UTRA FDD and Maximum CSI processes of On Three or Four or component carri within a band w PDSCH transmission mo 10 (UE Categor 2) | Each 'Test Number' to be performed once, in a chosen band supporting | |
| 9.2.4.2_F | TDD CQI Reporting AWGN conditions - CSI Process for CoM | Single | Rel-11 | C118 | UE supporting I UTRA TDD and Maximum CSI processes of On Three or Four of component carri within a band w PDSCH transmission model 10 (UE Category 2) | Each 'Test Number' to be performed once, in a chosen band supporting | |
| 9.3.1.1.1 | FDD CQI Reporting fading conditions - F 3-0 | | Rel-8 | C01 | UE supporting I UTRA FDD | Each 'Test Number' to be performed once, in a chosen band | |

| Clause | Title | Release | | Applicab | ility | Tested Bands / CA- | Additional Information |
|-------------------|--|---------|-----------|----------|---|--|------------------------|
| | | | Condition | Co | omments | Configurations Selection | |
| | | | | | | supporting tested BW | |
| 9.3.1.1.2 | TDD CQI Reporting fading conditions - I 3-0 | | Rel-8 | C02 | UE supporting I UTRA TDD | Each 'Test Number' to be | |
| 9.3.1.2.1_ D | FDD CQI Reporting fading conditions - I 3-1 for eDL-MIMO | | Rel-10 | C25 | UE supporting I UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.3.1.2.2_ D | TDD CQI Reporting fading conditions - I 3-1 for eDL-MIMO | | Rel-10 | C25a | UE supporting I UTRA TDD and eDL-MIMO and Feature Group Indicator 103 | d be | |
| 9.3.1.3.1_ E.1 | FDD CQI Reporting fading conditions – 3-0 for feICIC (non-ABS) | PUSCH | Rel-11 | C79 | UE supporting F UTRA FDD and CRS interference handling and Feature Group Indicator 115 | d be | |
| 9.3.1.3.2_ E.1 | TDD CQI Reporting fading conditions – 3-0 for feICIC (non- ABS) | PUSCH | Rel-11 | C80 | UE supporting I UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group Indicator 115 | E- Each 'Test Number' to be performed | |
| 9.3.2.1.1 | FDD CQI Reporting fading conditions - I | | Rel-8 | C13 | UE supporting F UTRA FDD (UI Category ≥ 2) | E performed once, in a chosen band supporting tested BW | |
| 9.3.2.1.1_ | FDD CQI Reporting fading conditions - I 1-0 (Release 9 and f | PUCCH | Rel-9 | C15 | UE supporting I UTRA FDD (UI category 1) | | |

| Clause | Title | Release | | Applicat | oility | Tested Bands / CA- | Additional Information |
|-----------------|--|---------|-----------|----------|--|---|------------------------|
| | | | Condition | С | omments | Configurations Selection | |
| | | | | | | supporting tested BW | |
| 9.3.2.1.2 | TDD CQI Reporting fading conditions - 1 1-0 | | Rel-8 | C14 | UE supporting l UTRA TDD (U Category ≥ 2) | | |
| 9.3.2.1.2_ | TDD CQI Reporting fading conditions - 1 1-0 (Release 9 and f | PUCCH | Rel-9 | C16 | UE supporting I UTRA TDD (U category 1) | Each 'Test Number' to be | |
| 9.3.2.2.1_ D | FDD CQI Reporting fading conditions - 1 1-1 for eDL-MIMO | PUCCH | Rel-10 | C25x | UE supporting I UTRA FDD and eDL-MIMO and Feature Group Indicator 103 (U Category ≥ 2) | E- Number' to d be performed once, in a | |
| 9.3.2.2.2_ D | TDD CQI Reporting fading conditions - 1 1-1 for eDL-MIMO | PUCCH | Rel-10 | C28y | UE supporting I UTRA TDD and eDL-MIMO and Feature Group Indicators 104 a 110 (UE Catego ≥ 2) | E- Each 'Test Number' to be performed once, in a chosen | |
| 9.3.3.1.1 | FDD CQI Reporting fading conditions ar frequency-selective interference - PUSC | nd | Rel-8 | C01 | UE supporting I UTRA FDD | Each 'Test Number' to be | |
| 9.3.3.1.2 | TDD CQI Reporting fading conditions ar frequency-selective interference - PUSC | nd | Rel-8 | C02 | UE supporting I UTRA TDD | Each 'Test Number' to be | |
| 9.3.4.1.1 | FDD CQI Reporting fading conditions - 1 2-0 | | Rel-9 | C32 | UE supporting I UTRA FDD and Feature Group Indicator 1 | Each 'Test Number' to | |

| Clause | Title | Release | | Applica | bility | Tested Bands / CA- | Additional Information |
|-----------|--|------------------|-----------|---------|---|---|------------------------|
| | | | Condition | | Comments | Configurations Selection | |
| | | | | | | supporting tested BW | |
| 9.3.4.1.2 | TDD CQI Reporting fading conditions - I 2-0 | g under PUSCH | Rel-9 | C37 | UE supporting I UTRA TDD and Feature Group Indicator 1 | | |
| 9.3.4.2.1 | FDD CQI Reporting fading conditions - I 2-0 | | Rel-9 | C36 | UE supporting I UTRA FDD and Feature Group Indicator 2 | | |
| 9.3.4.2.2 | TDD CQI Reporting fading conditions - I 2-0 | | Rel-9 | C38 | UE supporting I UTRA TDD and Feature Group Indicator 2 | Each 'Test Number' to be | |
| 9.3.5.1.1 | FDD CQI Reporting fading conditions - I 1-0 - Enhanced Perf Requirement Type A | PUCCH ormance | Rel-11 | C44 | UE supporting I UTRA FDD and the enhanced performance requirements ty A for LTE | d be performed once, in a | |
| 9.3.5.1.2 | TDD CQI Reporting fading conditions - I 1-0 - Enhanced Perf Requirement Type A | PUCCH ormance | Rel-11 | C45 | UE supporting I UTRA TDD and the enhanced performance requirements ty A for LTE | d be performed once, in a | |
| 9.3.5.2.1 | FDD CQI Reporting fading conditions - I 1-1 - Enhanced Perf Requirement Type A | PUCCH ormance | Rel-11 | C44z | UE supporting I UTRA FDD and the enhanced performance requirements ty A for LTE (UE Category ≥ 2) | E - Each 'Test Number' to be performed once, in a | |
| 9.3.5.2.2 | TDD CQI Reporting fading conditions - I 1-1 - Enhanced Perf Requirement Type A | PUCCH ormance | Rel-11 | C45i | UE supporting I UTRA TDD and the enhanced performance requirements ty A for LTE (UE | d be performed once, in a | |

| Clause | Title | Release | | Applicab | ility | | ted Bands / CA- | Additional Information |
|-----------------|--|------------|-----------|----------|--|---------------|--|------------------------|
| | | | Condition | Co | omments | | figurations election | |
| | | | | | Category ≥ 2) | | tested BW | |
| 9.3.6.1_F. 1 | FDD CQI Reporting fading conditions with CSI process for CoM | ith Single | Rel-11 | C50a | UE supporting I UTRA FDD and Maximum CSI processes of On on a component carrier within a band with PDSO transmission mo | e CH | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.3.6.1_F. 2 | FDD CQI Reporting fading conditions with CSI processes for Control of Control | ith Three | Rel-11 | C96 | UE supporting I UTRA FDD and Maximum CSI processes of Th on a component carrier within a band with PDSO transmission mo | ree CH | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.3.6.1_F. 3 | FDD CQI Reporting fading conditions with CSI processes for Control of Control | ith Four | Rel-11 | C97 | UE supporting I UTRA FDD and Maximum CSI processes of For on a component carrier within a band with PDSO transmission mo | d ur CH | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.3.6.2_F. 1 | TDD CQI Reporting fading conditions with CSI process for CoM | ith Single | Rel-11 | C51a | UE supporting I UTRA TDD and Maximum CSI processes of On on a component carrier within a band with PDSO transmission mo | d e CH | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.3.6.2_F. 2 | TDD CQI Reporting fading conditions with CSI processes for Control of Control | ith Three | Rel-11 | C98 | UE supporting I UTRA TDD and Maximum CSI processes of The on a component carrier within a band with PDSO transmission model | d ree | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.3.6.2_F. 3 | TDD CQI Reporting fading conditions with CSI processes for Control of Control | ith Four | Rel-11 | C99 | UE supporting I UTRA TDD and Maximum CSI processes of For on a component carrier within a band with PDSO | d ur | Each 'Test Number' to be performed once, in a chosen band supporting | |

| Clause | Title | Release | | Applicabi | lity | Tested Bands / CA- | Additional Information |
|-------------|--|----------------|-----------|-----------|--|---|------------------------|
| | | | Condition | Co | omments | Configurations Selection | |
| | | | | | transmission mo | de tested BW | |
| 9.3.8.1.1 | FDD CQI Reporting fading conditions - F 1-1 (Cell-Specific R Symbols) TM4 - En Receiver Type B | PUCCH eference | Rel-12 | C152 | UE supporting E UTRA FDD and the enhanced performance requirements typ B for LTE (UE Category ≥ 2) | Number' to be performed once, in a chosen band supporting tested BW | |
| 9.3.8.1.2 | TDD CQI Reporting fading conditions - F 1-1 (Cell-Specific R Symbols) TM4 - En Receiver Type B | PUCCH eference | Rel-12 | C153 | UE supporting E UTRA TDD and the enhanced performance requirements typ B for LTE (UE Category ≥ 2) | Number' to be performed | |
| 9.4.1.1.1 | FDD PMI Reporting PUSCH 3-1 (Single | | Rel-8 | C01 | UE supporting E UTRA FDD | Each 'Test Number' to be | |
| 9.4.1.1.2 | TDD PMI Reporting PUSCH 3-1 (Single | | Rel-8 | C02 | UE supporting E UTRA TDD | Each 'Test Number' to be | |
| 9.4.1.2.1 | FDD PMI Reporting PUCCH 2-1 (Single | | Rel-9 | C36 | UE supporting E UTRA FDD and Feature Group Indicator 2 | Each 'Test Number' to be | |
| 9.4.1.2.2 | TDD PMI Reporting PUCCH 2-1 (Single | | Rel-9 | C38 | UE supporting E UTRA TDD and Feature Group Indicator 2 | Each 'Test Number' to B- be | |
| 9.4.1.3.1_D | FDD PMI Reporting PUSCH 3-1 (Single eDL-MIMO | | Rel-10 | C25 | UE supporting E UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | Each 'Test Number' to | |

| Clause | Title | Release | | Applicat | oility | Tested Bands / CA- | Additional Information |
|-----------------|---|---------|------------|----------|--|--|------------------------|
| | | | Condition | С | omments | Configurations Selection | |
| | | | | | | supporting tested BW | |
| 9.4.1.3.2_ D | TDD PMI Reporting - PUSCH 3-1 (Single PMI) for eDL-MIMO | | Rel-10 | C26 | UE supporting I UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | d De | |
| 9.4.2.1.1 | FDD PMI Reporting PUSCH 1-2 (Multip | | Rel-8 only | C11 | UE supporting I UTRA FDD and operating bands supporting 20 MHz Bandwidtl (UE categories 2 3, 4, 5) | Number' to be performed once, in a chosen | |
| 9.4.2.1.1_ | FDD PMI Reporting PUSCH 1-2 (Multip (Release 9 and forward) | le PMI) | Rel-9 | C01 | UE supporting I UTRA FDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.4.2.1.2 | TDD PMI Reporting PUSCH 1-2 (Multip | | Rel-8 only | C12 | UE supporting I UTRA TDD and operating bands supporting 20 MHz Bandwidtl (UE categories 2 3, 4, 5) | Number' to be performed once, in a chosen | |
| 9.4.2.1.2_ 1 | TDD PMI Reporting PUSCH 1-2 (Multip (Release 9 and forw | le PMI) | Rel-9 | C02 | UE supporting I UTRA TDD | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.4.2.2.1 | FDD PMI Reporting PUSCH 2-2 (Multip | | Rel-9 | C32 | UE supporting I UTRA FDD and Feature Group Indicators 1 | performed once, in a chosen band supporting tested BW | |
| 9.4.2.2.2 | TDD PMI Reporting PUSCH 2-2 (Multip | | Rel-9 | C33 | UE supporting I UTRA TDD and Feature Group Indicators 1 | Each 'Test Number' to | |

| Clause | Title | Release | | Applicab | ility | | ed Bands / CA- | Additional Information |
|-----------------|---|---------|-------------------------|----------|---|--|--|------------------------|
| | | | Condition | C | omments | | igurations election | |
| | | | | | | t | tested BW | |
| 9.4.2.3.1_ D | FDD PMI Reporting - PUSCH 1-2 (Multiple PMI) for eDL-MIMO | | Rel-10 | C25 | UE supporting I UTRA FDD and eDL-MIMO and Feature Group Indicator 103 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.4.2.3.2_ D | TDD PMI Reporting PUSCH 1-2 (Multip for eDL-MIMO | | Rel-10 | C26 | UE supporting I UTRA TDD and eDL-MIMO and Feature Group Indicator 104 | E- N | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.1.1 | FDD RI Reporting - 1-1 | PUCCH | Rel-8 and Rel-9 only | C13a | UE supporting I UTRA FDD (UI Category ≥ 2) | E- E- E | Each 'Test Number' to be performed once, in a chosen band supporting | |
| 9.5.1.1_1 | FDD RI Reporting - 1-1 (Release 10) | PUCCH | Rel-10 only | C13 | UE supporting F UTRA FDD (UI Category ≥ 2) | E E E | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.1.1_2 | FDD RI Reporting- 1-1 (Release 11) | PUCCH | Rel-11 | C13b | UE supporting F UTRA FDD (UI Category ≥ 2) | E- E- E- E- F- F- F- F- F- F- F- T- T- T- T- T- T- T- T- T- T- T- T- T- | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.1.2 | TDD RI Reporting - 3-1 | PUSCH | Rel-8 and Rel-9 only | C14a | UE supporting I UTRA TDD (U Category ≥ 2) | E- E F | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.1.2_1 | TDD RI Reporting - 3-1 (Release 10) | PUSCH | Rel-10 only | C14 | UE supporting I UTRA TDD (U Category ≥ 2) | E- E F | Each 'Test Number' to be performed once, in a chosen band supporting | |

| Clause | Title | Release | | Applicab | ility | | sted Bands / CA- | Additional Information |
|-----------------|--|---------|-----------|----------------|---|--------------------|--|------------------------|
| | | | Condition | Co | omments | | nfigurations Selection | |
| | | | | | | | tested BW | |
| 9.5.1.2_2 | TDD RI Reporting- 3-1 (Release 11) | PUSCH | Rel-11 | C14b | UE supporting I UTRA TDD (U Category ≥ 2) | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.2.1_D | FDD RI Reporting - 1-1 for eDL-MIMO | PUCCH | Rel-10 | C25x | UE supporting I UTRA FDD and eDL-MIMO and Feature Group Indicators 103 (Category ≥ 2) | d d | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.2.2_D | TDD RI Reporting - 1-1 for eDL-MIMO | PUCCH | Rel-10 | C25a / C28y | UE supporting I UTRA TDD and eDL-MIMO and Feature Group Indicator 103 (U Category ≥ 2) | d i | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.3.1_C. 1 | FDD RI Reporting – 1-0 for eICIC (non-I ABS) | | Rel-10 | C29 | UE supporting I UTRA FDD and Feature Group Indicator 115 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.3.2_C. 1 | TDD RI Reporting - 1-0 for eICIC (non-I ABS) | | Rel-10 | C30 | UE supporting I UTRA TDD and Feature Group Indicator 115 | | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.4.1_E. 1 | FDD RI Reporting – 1-0 for feICIC (non- ABS) | | Rel-11 | C77 | UE supporting I UTRA FDD and CRS interference handling and Feature Group Indicator 115 (U Category ≥ 2) | d ee | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.4.2_E. 1 | TDD RI Reporting - 1-0 for feICIC (non- ABS) | | Rel-11 | C78 | UE supporting I UTRA TDD and CRS interference handling and ss- CCH interference handling and Feature Group Indicator 115(U | d ee - ce | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |

| Clause | Title | Release | | Applicab | ility | | ted Bands / CA- | Additional Information |
|-----------------|---|---------|-----------|----------|---|---------------------|--|--|
| | | | Condition | Ce | omments | | figurations Selection | |
| | FDD RI Reporting v | with | | | Category ≥ 2) UE supporting I | E- | | |
| 9.5.5.1_F. 1 | Single CSI processe CoMP | s for | Rel-11 | C50 | UTRA FDD and Maximum CSI processes of On on a component carrier within a band with PDSO transmission mo 10 (UE Categor 2) | e CH ode | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.5.1_F. 2 | FDD RI Reporting v Multiple CSI proces CoMP | | Rel-11 | C52 | UE supporting I UTRA FDD and Maximum CSI processes of Th or Four on a component carri within a band w PDSCH transmission mo 10 (UE Categor 2) | ree lier lith lode | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.5.2_F. 1 | TDD RI Reporting v Single CSI process f | | Rel-11 | C51 | UE supporting I UTRA TDD and Maximum CSI processes of On on a component carrier within a band with PDSO transmission mo 10 (UE Categor 2) | d e CH ode | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.5.5.2_F. 2 | TDD RI Reporting v Multiple CSI proces CoMP | | Rel-11 | C53 | UE supporting I UTRA TDD and Maximum CSI processes of Th or Four on a component carri within a band w PDSCH transmission mo 10 (UE Categor 2) | ree ier ith ode | Each 'Test Number' to be performed once, in a chosen band supporting tested BW | |
| 9.6.1.1_A. 1 | FDD CQI Reporting AWGN conditions - 1-0 for CA (2 DL C. | - PUCCH | Rel-10 | C108 | UE supporting I UTRA FDD and intra-band contiguous DL or inter-band Dl CA (UE Catego ≥ 3) | d CA L | Refer to 36.521-1 9.1.1.2 | Test execution not necessary if 9.6.1.1_A.2 is executed. |
| | | | Rel-11 | C103 | UE supporting I UTRA FDD and intra-band non- | | Refer to 36.521-1 9.1.1.2 | Test execution not |

| Clause | Title | Release | | Applicability CA- | | | Additional Information |
|-----------------|--|---------|-----------|-------------------|---|-------------------------------------|--|
| | | | Condition | Co | mments | Configurations Selection | |
| | | | | | contiguous DL CA(UE Categor 3) | y ≥ | necessary if 9.6.1.1_A.2 is executed. |
| | | | Rel-10 | C124 | UE supporting I UTRA FDD and 3DL with intraband contiguous CA, or 3DL with inter-band CA, of 3DL with intraband contiguous and inter-band C (UE Category > 100 Miles). | 36.521-1 9.1.1.2 s h or | |
| 9.6.1.1_A. 2 | FDD CQI Reporting AWGN conditions – 1-0 for CA (3 DL CA | - PUCCH | Rel-11 | C125 | UE supporting I UTRA FDD and 3DL with intra- band non- contiguous and inter-band CA, of 3DL with intra- band non- contiguous and intra-band contiguous CA (UE Category ≥ | or | |
| 9.6.1.2_A. 1 | TDD CQI Reporting AWGN conditions - 1-0 for CA (2DL CA | - PUCCH | Rel-10 | C114 | UE supporting I UTRA TDD and intra-band contiguous DL 0 (UE Category ≥ | Refer to 36.521-1 9.1.1.2 | Test execution not necessary if 9.6.1.2_A.2 is executed. |
| | TDD CQI Reporting under | | Rel-10 | C128 | UE supporting I UTRA TDD and 3DL with intra- band contiguous CA, or 3DL wit inter-band CA, of 3DL with intra- band contiguous and inter-band C (UE Category >= | 36.521-1 9.1.1.2 s h or | |
| 9.6.1.2_A. 2 | AWGN conditions - 1-0 for CA (3 DL C | - PUCCH | Rel-11 | C129 | UE supporting I UTRA TDD and 3DL with intra- band non- contiguous and inter-band CA, of 3DL with intra- band non- contiguous and intra-band contiguous CA (UE Category ≥ | 36.521-1 9.1.1.2 | |

| Clause | Title | Release | | Applicability | | Tested Bands / CA- | Additional Information |
|-----------|---|-----------|-----------|---------------|--|---|------------------------|
| | | | Condition | С | omments | Configurations Selection | |
| 9.6.1.3.1 | TDD FDD CA CQI Reporting under AW conditions – PUCCH FDD PCell (2DL CA | H 1-0 for | Rel-12 | C132 | UE supporting F UTRA FDD and TDD and 2DL C with FDD as PC (UE Category > | i CA Cell | |
| 9.6.1.3.2 | TDD FDD CA CQI Reporting under AW conditions – PUCCH FDD PCell (3DL CA | H 1-0 for | Rel-12 | C133 | UE supporting F UTRA FDD and TDD and 3DL (with FDD as PC (UE Category ≥ | l CA Cell | |
| 9.6.1.4.1 | TDD FDD CA CQI Reporting under AW conditions – PUCCH TDD PCell (2DL CA | H 1-0 for | Rel-12 | C134 | UE supporting F UTRA FDD and TDD and 2DL C with TDD as PC (UE Category ≥ | I CA Cell | |
| 9.6.1.4.2 | TDD FDD CA CQI Reporting under AW conditions – PUCCI TDD PCell (3DL CA | H 1-0 for | Rel-12 | C135 | UE supporting F UTRA FDD and TDD and 3DL (with TDD as PC (UE Category ≥ | l CA Cell | |
| 9.7.1.1 | FDD and Half duple CQI reporting defini under AWGN condi UE category 0 | tion | Rel-12 | C145 | UE supporting F UTRA FDD (UI category 0) | | |
| 9.7.1.2 | TDD CQI reporting definition under AW conditions for UE ca | | Rel-12 | C119 | UE supporting E UTRA TDD (UI category 0) | 3- | |
| | | | MBM | S Performa | ance Testing | · | |
| 10.1 | FDD MBMS perform (Fixed Reference Ch | nannel) | Rel-9 | C03 | UE supporting E UTRA FDD and MBMS | performed once, in a chosen band supporting tested BW | |
| 10.1_1 | FDD MBMS perform (Fixed Reference Characteristics) (Release 13 and forward) | nannel) | Rel-13 | C03 | UE supporting I UTRA FDD and MBMS | | |
| 10.2 | TDD MBMS perfor (Fixed Reference Ch | | Rel-9 | C04 | UE supporting E UTRA TDD and MBMS | | |

| Clause | Title | Release | Applicability | | Tested Bands / CA- | Additional Information | |
|--------|--|---------|---------------|-----|---|-----------------------------|--|
| | | | Condition | Co | mments | Configurations Selection | |
| 10.2_1 | TDD MBMS perfor (Fixed Reference Cl (Release 13 and forward) | nannel) | Rel-13 | C04 | UE supporting I UTRA TDD and MBMS | | |

Table 4.1-1a: Applicability of RF conformance test cases Conditions

| C01 | IF NOT(A.4.3-4a/1) AND A.4.1-1/1 THEN R ELSE N/A |
|---|--|
| C01h | IF NOT(A.4.3-4a/1) AND A.4.1-1/1 THEN R ELSE N/A IF NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.5-1/17) THEN R ELSE N/A |
| C02 | IF NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-1/1/1 HIEN R ELSE N/A |
| C02h | IF NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.5-1/17) THEN R ELSE N/A |
| C0211 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/1) THEN R ELSE N/A |
| C03 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/1) THEN R ELSE N/A |
| C04 | Void |
| | |
| C06 | Void |
| C07 | IF ((NOT(A.4.3-4a/1) AND A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/3) THEN R ELSE N/A |
| C08 | Void |
| C09 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-3a/1) THEN R ELSE N/A |
| C10 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-3a/1) THEN R ELSE N/A |
| C11 | IF A.4.1-1/1 AND A.4.3-3a/6 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5) THEN R ELSE N/A |
| C12 | IF A.4.1-1/2 AND A.4.3-3a/6 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5) THEN R ELSE N/A |
| C13 | IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C13a | IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5)) THEN R ELSE N/A |
| C13b | IF ((A.4.1-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 ORA.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C14 | IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C14a | IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5)) THEN R ELSE N/A |
| C14b | IF ((A.4.1-1/2) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 ORA.4.3-4/6 OR A.4.3-4/7 OR |
| <u> </u> | A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C15 | IF (A.4.1-1/1 AND A.4.3-4/1) THEN R ELSE N/A |
| C16 | IF (A.4.1-1/2 AND A.4.3-4/1) THEN R ELSE N/A |
| C17 | Void |
| C18 | Void |
| C19 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2) THEN R ELSE N/A |
| C19h | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.1-1/2 AND A.4.6.1-2/2) AND A.4.5-1/17) THEN R ELSE N/A |
| C20 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2)THEN R ELSE N/A |
| C20h | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2) AND A.4.5-1/17) THEN R ELSE N/A |
| C21 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1) THEN R ELSE N/A |
| C22 | Void |
| C23 | Void |
| C24 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.6.1-1/2) THEN R ELSE N/A |
| C25 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1) AND A.4.2-1/4 AND A.4.4-3/103) THEN R ELSE N/A |
| C25h | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1) AND A.4.2-1/4 AND A.4.4-3/103) AND A.4.5-1/17) THEN R ELSE N/A |
| C25a | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/103) THEN R ELSE N/A |
| C25x | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/103 AND (A.4.3-4/2 OR |
| | A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C26 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/104) THEN R ELSE N/A |
| C26h | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/104) AND A.4.5-1/17) THEN R ELSE N/A |
| C27 | Void |
| C28 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/104 AND A.4.4-3/110) THEN R ELSE N/A |
| C28y | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.2-1/4 AND A.4.4-3/104 AND A.4.4-3/110 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C29 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-3/115) THEN R ELSE N/A |
| C30 | |
| | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A |
| C31 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A |
| C31 C32 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A |
| C31 C32 C33 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A |
| C32 C33 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A |
| C32 C33 C34 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A |
| C32 C33 C34 C35 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A Void |
| C32 C33 C34 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A Void IF NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/2 THEN R ELSE N/A |
| C32 C33 C34 C35 C36 C37 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A Void IF NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/2 THEN R ELSE N/A IF NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1 THEN R ELSE N/A |
| C32 C33 C34 C35 C36 C37 C38 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A Void IF NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/2 THEN R ELSE N/A IF NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1 THEN R ELSE N/A IF NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/2 THEN R ELSE N/A |
| C32 C33 C34 C35 C36 C37 | IF (A.4.1-1/1 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/5) THEN R ELSE N/A Void IF NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.4-1/2 THEN R ELSE N/A IF NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-1/1 THEN R ELSE N/A |

| 0.44 | IF MOTAL AND A MADE A MADE A MADE A MADE A MADE A MADE AND A MADE |
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| C41 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.4-3/103 AND A.4.3-7/1) THEN R ELSE N/A |
| C42 | IF ((A.4.1-1/1) AND (NOT A.4.5-1/17) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A |
| C42h | IF ((A.4.1-1/1) AND (A.4.3-4/6 OR A.4.3-4/7) AND A.4.5-1/17 AND A.4.3-4a/8) THEN R ELSE N/A |
| C43 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND NOT A.4.6.2-2/1) THEN R ELSE N/A |
| C44 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-7/1) THEN R ELSE N/A |
| C44z | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-7/1 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 |
| | OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C45 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-7/1) THEN R ELSE N/A |
| C45i | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-7/1 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C46 | Void |
| C47 | Void |
| C48 | Void |
| C49 | Void |
| C50 | IF (A.4.1-1/1 AND A.4.5-1/8 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C50a | IF (A.4.1-1/1 AND A.4.5-1/8) THEN R ELSE N/A |
| C51 | IF (A.4.1-1/2 AND A.4.5-1/8 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR |
| | A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C51a | IF (A.4.1-1/2 AND A.4.5-1/8) THEN R ELSE N/A |
| C52 | IF (A.4.1-1/1 AND (A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C53 | IF (A.4.1-1/2 AND (A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C54 | IF (A.4.1-1/2 AND (A.4.3-4/1 OR A.4.3-4/2)) THEN R ELSE N/A |
| C55 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/6) THEN R ELSE N/A |
| C56 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/6) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/6) THEN R ELSE N/A |
| C57 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/6) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/6 AND A.4.3-8/2) THEN R ELSE N/A |
| C57 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/6 AND A.4.3-6/2) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/6 AND A.4.3-8/2) THEN R ELSE N/A |
| C59 | Void |
| C60 | Void |
| | |
| C61 C62 | Void IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND A.4.6.1-1/2) THEN R ELSE |
| C63 | N/A IF ((A.4.1-1/1) AND (A.4.6.1-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C64 | Void |
| C65 | Void |
| C66 | Void |
| C67 | Void |
| C68 | Void |
| C69 | IF ((A.4.1-1/1) AND (A.4.6.3-1/1) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A |
| C70 | IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE |
| 0.0 | N/A |
| C71 | Void |
| C72 | IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |
| C73 | IF ((A.4.1-1/2) AND (NOT A.4.5-1/17) AND (A.4.3-4/6 OR A.4.3-4/7)) THEN R ELSE N/A |
| C73h | IF ((A.4.1-1/2) AND (A.4.3-4/6 OR A.4.3-4/7) AND A.4.5-1/17 AND A.4.3-4a/8) THEN R ELSE N/A |
| C74 | IF ((A.4.1-1/2) AND (NOT A.4.5-1/17) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A |
| C74h | IF ((A.4.1-1/2) AND (A.4.6.1-1/1 OR A.4.6.1-1/2 OR A.4.6.3-1/1) AND A.4.5-1/17) THEN R ELSE N/A |
| C75 | IF ((A.4.1-1/2) AND (NOT A.4.5-1/17) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR |
| C76 | A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A IF A.4.1-1/1 AND (NOT A.4.5-1/17) AND (A.4.3-4/1 OR A.4.3-4/2 OR A.4.3-4/3 OR A.4.3 -4/4) THEN R |
| C77 | ELSE N/A IF (A.4.1-1/1 AND A4.5-2/1 AND A.4.4-3/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| Ī | NASAMENDAASAAAN ASAMMA LULNU LICHNIA LICHNIA |
| C78 | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2 AND A.4.4-3/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR |
| | IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2 AND A.4.4-3/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C79 | IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2 AND A.4.4-3/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A4.5-2/1) THEN R ELSE N/A |
| C79 C80 | IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2 AND A.4.4-3/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A4.5-2/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2) THEN R ELSE N/A |
| C79 | IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2 AND A.4.4-3/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A4.5-2/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND (A.4.1-1/2 AND A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/5 OR A.4.3-4/2 OR A.4.3-4/2 OR A.4.3-4/5 OR A.4.3-4/2 OR A.4.3-4/2 OR A.4.3-4/5 OR A.4.3-4/2 OR A |
| C79 C80 | IF (A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2 AND A.4.4-3/115 AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A4.5-2/1) THEN R ELSE N/A IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A4.5-2/1 AND A4.5-2/2) THEN R ELSE N/A |

| C83 | IF ((A.4.1-1/2) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7) AND (A.4.6.3-1/1)) THEN R ELSE N/A |
|--------------|---|
| C84 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.6.3-1/1) THEN R ELSE N/A |
| C85 | Void |
| C86 | Void |
| C87 | IF ((A.4.1-1/1) AND (A.4.6.3-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C88 | Void |
| C89 | Void |
| C90 | IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C91 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/6 AND A.4.4-3/103) THEN R ELSE N/A |
| C92 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.2-1/6 AND A.4.4-3/103) THEN R ELSE N/A |
| C93 | IF ((A.4.1-1/1) AND (NOT A.4.5-1/17) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A |
| C94 | Void |
| C95 | IF ((A.4.1-1/2) AND (A.4.6.2-1/1) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C96 | IF (A.4.1-1/1 AND A.4.5-1/11) THEN R ELSE N/A |
| C97 | IF (A.4.1-1/1 AND A.4.5-1/12) THEN R ELSE N/A |
| C98 | IF (A.4.1-1/2 AND A.4.5-1/11) THEN R ELSE N/A |
| C99 | IF (A.4.1-1/2 AND A.4.5-1/12) THEN R ELSE N/A |
| C100 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.5-1/13) THEN R ELSE N/A |
| C101 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C102 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C103 | IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C104 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |
| C105 | IF ((A.4.1-1/2) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |
| C106 | IF ((A.4.1-1/1) AND (A.4.6.2-1/1) AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |
| C107 | IF ((A.4.1-1/1) AND (NOT A.4.5-1/17) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10)) THEN R ELSE N/A |
| C107h | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND A.4.5-1/17) THEN R ELSE N/A |
| C108 | IF ((A.4.1-1/1) AND (A.4.6.1-1/1 or A.4.6.1-1/2 or A.4.6.3-1/1) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C109 | IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND (A.4.6.2-1/1 OR A.4.6.3-1/1)) THEN R ELSE N/A |
| C110 | IF (A.4.1-1/2 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8) AND (A.4.6.1-1/1 OR A.4.6.1-1/2)) THEN R ELSE N/A |
| C111 | IF A.4.1-1/2 AND (NOT A.4.5-1/17) AND (A.4.3-4/1 OR A.4.3-4/2 OR A.4.3-4/3 OR A.4.3.4/4) THEN R ELSE N/A |
| C112 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.3-4a/1) THEN R ELSE N/A |
| C113 | IF NOT(A.4.3-4a/1) THEN R ELSE N/A |
| C113h | IF NOT(A.4.3-4a/1) AND A.4.5-1/17) THEN R ELSE N/A |
| C114 | IF (A.4.1-1/2 AND A.4.6.1-1/2) AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR |
| C145 | A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10))THEN R ELSE N/A |
| C115 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.2-1/1 AND A.4.6.2-2/1) THEN R ELSE N/A |
| C116 C117 | IF ((A.4.1-1/1 OR A.4.1-1/2) AND A.4.6.3-1/1 AND A.4.6.3-2/1) THEN R ELSE N/A IF (A.4.1-1/1 AND (A.4.5-1/8 OR A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR |
| 0117 | A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C118 | IF (A.4.1-1/2 AND (A.4.5-1/8 OR A.4.5-1/11 OR A.4.5-1/12) AND (A.4.3-4/2 OR A.4.3-4/3 OR A.4.3-4/4 OR |
| 0110 | A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8)) THEN R ELSE N/A |
| C119 | IF A.4.1-1/2 AND A.4.3-4a /1 THEN R ELSE N/A |
| C120 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/5) AND A.4.6.3-1/5) THEN R ELSE N/A |
| C121 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4)) THEN R ELSE N/A |
| C122 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.3-1/2 OR A.4.6.2-1/2)) THEN R ELSE N/A |
| C122h | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 OR A.4.1-1/2) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4 OR |
| | A.4.6.3-1/2 OR A.4.6.2-1/2)) AND A.4.5-1/17) THEN R ELSE N/A |
| C123 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2) THEN R ELSE N/A |
| C124 | IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR Á.4.6.3-1/4) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 |
| | OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |

| C125 | IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR |
|---------|---|
| | A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C126 | IF (A.4.1-1/1 AND (NOT A.4.5-1/17) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C126h | IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.5-1/17)THEN R ELSE N/A |
| C127 | IF (A.4.1-1/1 AND (NOT A.4.5-1/17) AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/6 OR A.4.3-4/7 OR |
| | A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C128 | IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 |
| | OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C129 | IF (A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR |
| 0.20 | A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C130 | IF (A.4.1-1/2 AND (NOT A.4.5-1/17) AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND (A.4.3-4/6 OR |
| 0130 | A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| 04001- | |
| C130h | IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.5-1/17) THEN R ELSE N/A |
| C131 | IF (A.4.1-1/2 AND (NOT A.4.5-1/17) AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C132 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| 0.02 | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R |
| | ELSE N/A |
| C133 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR |
| | A.À.3-4/8 OR A.4.3-4/9 OR Á.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C134 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.3-4/3 OR A.4.3-4/4 OR A.4.3-4/5 OR |
| 0.0. | A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R |
| | ELSE N/A |
| C135 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND (A.4.3-4/5 OR A.4.3-4/6 OR A.4.3-4/7 OR |
| C135 | |
| 0.100 | A.4.3-4/8 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12)) THEN R ELSE N/A |
| C136 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE N/A |
| C137 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (A.4.3-4/3 OR A.4.3-4/4)) THEN R ELSE |
| | N/A |
| C138 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND (NOT A.4.5-1/17) AND (A.4.3-4/3 OR |
| | A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10) THEN R ELSE N/A |
| C138h | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND A.4.5-1/17)THEN R ELSE N/A |
| C139 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND (NOT A.4.5-1/17) AND (A.4.3-4/6 OR |
| 0.00 | A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) THEN R ELSE N/A |
| C139h | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15 AND A.4.5-1/17)THEN R ELSE N/A |
| | |
| C140 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND (NOT A.4.5-1/17) AND (A.4.3-4/3 OR |
| 0.1.101 | A.4.3-4/4 OR A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10) THEN R ELSE N/A |
| C140h | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND A.4.5-1/17)THEN R ELSE N/A |
| C141 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND (NOT A.4.5-1/17) AND (A.4.3-4/6 OR A.4.3-4/7 OR A.4.3-4/9 OR A.4.3-4/10 OR A.4.3-4/11 OR A.4.3-4/12) THEN R ELSE N/A |
| C4.44b | |
| C141h | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14 AND A.4.5-1/17) THEN R ELSE N/A |
| C142 | IF (NOT(A.4.3-4/1 OR A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-7/3) THEN R ELSE N/A |
| C143 | IF (NOT(A.4.3-4/1 OR A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-7/3) THEN R ELSE N/A |
| C144 | IF (NOT(A.4.3-4/1 OR A.4.3-4a/1) AND A.4.1-1/1 AND A.4.2-1/4 AND A.4.3-7/3 AND A.4.4-3/103) THEN R |
| | ELSE N/A |
| C145 | IF A.4.1-1/1 AND A.4.3-4a/1 THEN R ELSE N/A |
| C146 | IF (NOT(A.4.3-4a/1) AND (A.4.1-1/1 AND A.4.1-1/2) AND A.4.6.3-1/1) THEN R ELSE N/A |
| C147 | Void |
| C148 | Void |
| | |
| C149 | Void |
| C150 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-7/4) THEN R ELSE N/A |
| C151 | IF (NOT(A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-7/4) THEN R ELSE N/A |
| C152 | IF (NOT(A.4.3-4/1 OR A.4.3-4a/1) AND A.4.1-1/1 AND A.4.3-7/4) THEN R ELSE N/A |
| C153 | IF (NOT(A.4.3-4/1 OR A.4.3-4a/1) AND A.4.1-1/2 AND A.4.3-7/4) THEN R ELSE N/A |
| Note 1: | Cxxxh applicability is defined for small cell enhancements for physical layer related test. |
| | |

Table 4.1-1b: Tested Bands Selection Criteria

| Code | Selection | Comment |
|------|-------------------------------------|---|
| D01 | A.4.3-3 | All supported Bands |
| D02 | A.4.3-3 AND FDD | All supported FDD Bands |
| D03 | A.4.3-3 AND TDD | All supported TDD Bands |
| D04 | A.4.3-3 AND {14} | Band 14 if supported |
| D05 | A.4.3-3 AND A.4.5-3 | Bands supporting UL MIMO |
| D06 | A.4.3-3 AND NOT A.4.5-3 | Bands not supporting UL MIMO |
| D07 | A.4.3-3 AND A.4.5-4 | Bands supporting Multicluster PUSCH |
| D08 | A.4.3-3 AND NOT FALLBACK(A.4.6.1-3) | All supported Bands that are not part of contiguous CA configuration. |
| | | |

Note:

Band Selection is based on set theory. For each feature, item number shall correspond to the Band number. The result is the set of bands for which the test shall be conducted. The following operators are used:

AND: Set intersection (\bigcap). {1,2} AND {2,3} = {2} OR: Set union (\bigcup). {1,2} OR {2,3} = {1,2,3}

NOT: Set complement (\), full set being all bands. NOT{1} = {2 ... 64}
Also note that this is set without repetitions so {1} AND {1} = {1}

The following basic sets are used:

FDD: All FDD bands, currently {1...32} TDD: All TDD bands, currently {33...64}

{1,2}: Explicitly given band set

The following sets derived from pro-forma tables are also used:

A.4.X-Y: All bands supporting the feature defined in A.4.X-Y. For A.4.3-3, all supported bands. FALLBACK(A.4.6.X-Y): Fallback bands of supported CA Combinations defined in Table A.4.6.X-Y

Table 4.1-1c: Tested CA Configurations Selection Criteria

| Code | Selection | Comment |
|--------|--|---|
| E01 | UL(A.4.6.1-3) AND CARRIER_NO(2) | All supported intra-band contiguous CA Configurations with 2 carriers in both UL and DL |
| E02 | UL(A.4.6.2-3) AND CARRIER_NO(2) | All supported intra-band contiguous non-contiguous CA Configurations with 2 carriers in both UL and DL |
| E03 | UL(A.4.6.3-3) AND CARRIER_NO(2) | All supported inter-band CA Configurations with 2 carriers in both UL and DL |
| E04 | A.4.6.1-3 AND CARRIER_NO(2) AND NOT UL(A.4.6.1-3) | All supported intra-band contiguous CA Configurations with 2 carriers in DL but no CA in UL |
| E05 | A.4.6.2-3 AND CARRIER_NO(2) | All supported intra-band non-contiguous CA Configurations with 2 carriers in DL |
| E06 | A.4.6.3-3 AND CARRIER_NO(2) | All supported inter-band CA Configurations with 2 carriers in DL |
| E07 | ((A.4.6.1-3 AND NOT UL(A.4.6.1-3)) OR (A.4.6.2-3 AND NOT UL(A.4.6.2-3)) OR (A.4.6.3-3 AND NOT UL(A.4.6.3-3)) OR (A.4.6.3-4 AND NOT UL(A.4.6.3-4))) AND CARRIER_NO(3) | All supported 3DL CA without UL |
| E08 | E04 AND NOT DL_FALLBACKS | All supported intra-band contiguous CA Configurations with 2 carriers in DL but no CA in UL, that are not fallbacks of 3DL CA |
| E09 | E05 AND NOT DL_FALLBACKS | All supported intra-band non-contiguous CA Configurations with 2 carriers in DL that are not fallbacks of 3DL CA. |
| E10 | E06 AND NOT DL_FALLBACKS | All supported inter-band CA Configurations with 2 carriers in DL that are not fallbacks of 3DL CA |
| E11 | E04 AND NOT (FALLBACK(A.4.6.2-3) AND FALLBACK(A.4.6.3-3) AND FALLBACK(A.4.6.3-4)) | All supported intra-band contiguous CA Configurations with 2 carriers in DL but no CA in UL, that are not fallbacks of 3DL CA, except of class D intra-band 3DL CA. |
| E12 | E06 AND NOT (FALLBACK(A.4.6.2-3) AND FALLBACK(A.4.6.3-4)) | All supported inter-band CA Configurations with 2 carriers in DL that are not fallbacks of inter-band on inter-band+intra-band non-contiguous 3DL CA. |
| DL_FAL | FALLBACK(A.4.6.1-3) AND FALLBACK(A.4.6.2-3) AND | All DL Fallbacks of supported CA Configurations |
| LBACKS | FALLBACK(A.4.6.3-3) AND FALLBACK(A.4.6.3-4) | All 1000 ft 11 2 2 |
| E13 | E06 AND DL_ONLY_BAND | All supported inter-band CA Configurations with 2 carriers in DL where one of the bands is a DL-only band |

Note: CA Configuration Selection is based on set theory. Each CA Configuration is designated by its name, including bands and BW classes, e.g. CA_1A-5A. The following operators are used:

AND: Set intersection (1). {CA_1C,CA_1A-5A} AND {CA_1C, CA_2A-4A} = CA_1C

OR: Set union (U). {CA_1C,CA_1A-5A} OR {CA_1C, CA_2A-4A} = {CA_1C,CA_1A-5A, CA_2A-4A}

NOT: Set complement (\), full set being all possible CA Configurations

Also note that this is set without repetitions so $\{CA_1C\}$ AND $\{CA_1C\}$ = $\{CA_1C\}$

The following basic sets are used:

FDD: All FDD-only CA Configurations
TDD: All TDD-only CA Configurations
FDD-TDD: All mixed CA Configurations
{CA_1C}: Explicitly given CA Configurations

CARRIER_NO(n): All CA Configurations with n Carriers, e.g. for n=2 CA_1C and CA_1A-5A would be a part of this

set

BAND_NO(n): All CA Configurations containing n Bands, e.g., for n=2, CA_1A-5A and CA_1A-41C are part of this set BWCLASS(x): All CA Configurations containing BW Class x, e.g., for x=C, CA_1C and CA_1A-41C are part of this set DL_ONLY_BAND: All CA configurations containing a DL-only band, e.g. CA_20A-32A is part of this set

The following sets derived from pro-forma tables are also used:

A.4.6.X-Y: All supported DL CA Combinations defined in table A.4.6.X-Y

UL(A.4.6.X-Y): All DL CA Combinations that also support UL CA with any number of carriers >1, as per column 'Supported CA Bandwidth Class(es) in UL' defined in table A.4.6.X-Y.

UL_2CC(A.4.6.X-Y): All DL CA Combinations that also support 2 Carrier UL CA, as per column 'Supported CA Bandwidth Class(es) in UL' defined in table A.4.6.X-Y. Note that DL might support a larger number

'Supported CA Bandwidth Class(es) in UL' defined in table A.4.6.X-Y. Note that DL might support a larger number of carriers than UL.

UL_3CC(A.4.6.X-Y): All DL CA Combinations that also support 3 Carrier UL CA, as per column 'Supported CA Bandwidth Class(es) in UL' defined in table A.4.6.X-Y

FALLBACK(A.4.6.X-Y): Fallback DL CA Combinations of supported CA Combinations defined in Table A.4.6.X-Y FALLBACK_UL(A.4.6.X-Y): Fallback DL and UL CA Combinations of supported CA Combinations defined in Table A.4.6.X-Y. This set only includes Combinations with same CA Capability in UL and DL

Table 4.1-2: Default Fallback Bands and Fallback CA Configurations

| CA Configuration | Default Fallback Bands | Default Fallback CA Configurations |
|--|---------------------------|---------------------------------------|
| CA_XC (2 carrier intra-band contiguous) | Х | - |
| CA_XB (2 carrier intra-band contiguous) | X | - |
| CA_XA-YA (2 carrier inter.band) | X,Y | - |
| CA_XA-XA (2 carrier intra-band non-contiguous) | Х | - |
| CA_XD (3 carrier intra-band contiguous) | Х | CA_XC |
| CA_XA-YA-ZA(3 carrier inter.band) | X,Y,Z | CA_XA-YA, |
| | | CA_XA-ZA, |
| | | CA_YA-ZA |
| CA_XC-YA(3 carrier intra-band contiguous + inter-band) ² | X,Y | CA_XC, |
| | | CA_XA-YA |
| CA_XB-YA(3 carrier intra-band contiguous + inter-band) ² | X,Y | CA_XB, |
| | | CA_XA-YA |
| CA_XA-XA-YA(3 carrier intra-band non-contiguous + inter- | X,Y | CA_XA-YA, |
| band) ² | | CA_XA-XA |
| CA_XC-XA(3 carrier intra-band non-contiguous + intra-band | X | CA_XC, |
| contiguous) ² | | CA_XA-XA |
| Note 1: Table used for deriving default fallbacks in sections A Note 2: Also applicable for different band orderings (e.g., YA | | |

4.2 RRM conformance test cases

Table 4.2-1: Applicability of RRM conformance test cases, ref. TS 36.521-3 [2]

| Clause | Title | Releas e | | Applicability | Additional | Additional Information | |
|---------|---|-------------|-----------|--|----------------------------|------------------------|--|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| E-UTRA | N RRC_IDLE State Mobility | | | | · | | |
| 4.2.1 | E-UTRAN FDD - FDD cell reselection intra frequency case | Rel-8 | C01 | UE supporting E-UTRA FDD | | | |
| 4.2.2 | E-UTRAN TDD - TDD cell reselection intra frequency case | Rel-8 | C02 | UE supporting E-UTRA TDD | | | |
| 4.2.3 | E-UTRAN FDD - FDD cell reselection inter frequency case | Rel-8 | C01 | UE supporting E-UTRA FDD | | | |
| 4.2.4 | E-UTRAN FDD - TDD cell reselection inter frequency case | Rel-9 | C03 | UE supporting E-UTRA FDD and E-UTRA TDD | | | |
| 4.2.5 | E-UTRAN TDD - FDD cell re- selection inter frequency case | Rel-9 | C03 | UE supporting E-UTRA FDD and E-UTRA TDD | | | |
| 4.2.6 | E-UTRAN TDD - TDD cell re- selection inter frequency case | Rel-8 | C02 | UE supporting E-UTRA TDD | | | |
| 4.2.7 | E-UTRAN FDD – FDD Inter frequency case in the existence of non-allowed CSG cell | Rel-9 | C01 | UE supporting E-UTRA FDD | | | |
| 4.2.8 | E-UTRAN TDD – TDD Inter frequency case in the existence of non-allowed CSG cell | Rel-9 | C02 | UE supporting E-UTRA TDD | | | |
| 4.2.9 | E-UTRAN FDD-FDD intra- frequency Cell Re-selection case for 5MHz bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | | |
| 4.3.1.1 | E-UTRA FDD - UTRAN FDD cell re-selection | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|---------|--|-------------|-----------|---|----------------------------|----------------------|
| | | - | Condition | Comments | Number of TC Executions | Release on other RAT |
| 4.3.1.2 | E-UTRA FDD - UTRAN FDD cell re-selection: UTRA FDD is of lower priority | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 4.3.1.3 | E-UTRAN FDD - UTRAN FDD cell re-selection in fading propagation conditions: UTRA FDD is of lower priority | Rel-8 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 4.3.1.4 | E-UTRAN FDD - UTRAN FDD cell re-selection: UTRA FDD is of lower priority for 5MHz bandwidth | Rel-8 | C53 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and UTRA FDD | | |
| 4.3.2 | E-UTRAN FDD - UTRAN TDD cell re-selection | Rel-8 | C06 | UE supporting E-UTRA FDD and UTRA TDD | | Rel-9 UTRA TDD |
| 4.3.3 | E-UTRAN TDD - UTRAN FDD cell re-selection | Rel-8 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| 4.3.4.1 | E-UTRA TDD - UTRAN TDD cell re-selection | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | | Rel-9 UTRA TDD |
| 4.3.4.2 | E-UTRAN TDD - UTRAN TDD cell re-selection: UTRA is of lower priority | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | | Rel-9 UTRA TDD |
| 4.3.4.3 | EUTRA TDD-UTRA TDD cell reselection in fading propagation conditions: UTRA TDD is of lower priority | Rel-8 | C05 | UE supporting E-UTRA TDD and UTRA TDD | | Rel-9 UTRA TDD |
| 4.4.1 | E-UTRAN FDD - GSM cell reselection | Rel-8 | C08 | UE supporting E-UTRA FDD and GSM | | |
| 4.4.2 | E-UTRAN TDD - GSM cell reselection | Rel-8 | C09 | UE supporting E-UTRA TDD and GSM | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|---------|--|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 4.5.1.1 | E-UTRAN FDD - HRPD Cell reselection: HRPD is of lower priority | Rel-8 | C10 | UE supporting E-UTRA FDD and cdma2000 HRPD | | |
| 4.5.2.1 | E-UTRAN TDD - HRPD Cell Reselection: HRPD is of Lower Priority | Rel-9 | C34 | UE supporting E-UTRA TDD and cdma2000 HRPD | | |
| 4.6.1.1 | E-UTRAN FDD - cdma2000 1xRTT Cell re-selection: cdma2000 1x is of lower priority | Rel-8 | C11 | UE supporting E-UTRA FDD and cdma2000 1xRTT | | |
| 4.6.2.1 | E-UTRAN TDD-cdma2000 1X Cell Reselection: cdma2000 1X is of Lower Priority | Rel-9 | C35 | UE supporting E-UTRA TDD and cdma2000 1xRTT | | |
| E-UTRA | N RRC_CONNECTED State Mobil | ity | | | | 1 |
| 5.1.1 | E-UTRAN FDD - FDD Handover intra frequency case | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 5.1.2 | E-UTRAN TDD - TDD Handover intra frequency case | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 5.1.3 | E-UTRAN FDD - FDD Handover inter frequency case | Rel-8 | C01d | UE supporting E-UTRA FDD and Feature Group Indicators 5, 13 and 25 | | |
| 5.1.4 | E-UTRAN TDD - TDD Handover inter frequency case | Rel-8 | C02d | UE supporting E-UTRA TDD and Feature Group Indicators 5, 13 and 25 | | |
| 5.1.5 | E-UTRAN FDD - FDD inter frequency handover: unknown target cell | Rel-8 | C01a | UE supporting E-UTRA FDD and Feature Group Indicators 13 and 25 | | |
| 5.1.6 | E-UTRAN TDD-TDD inter frequency handover: unknown target cell | Rel-8 | C02a | UE supporting E-UTRA TDD and Feature Group Indicators 13 and 25 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 5.1.7 | E-UTRAN FDD – TDD handover inter frequency case | Rel-9 | C21 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 5, 25 and 30 | | |
| 5.1.8 | E-UTRAN TDD – FDD handover inter frequency case | Rel-9 | C21 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 5, 25 and 30 | | |
| 5.1.9 | E-UTRAN FDD-FDD Intra frequency handover for 5MHz bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 5.2.1 | E-UTRAN FDD - UTRAN FDD handover | Rel-8 | C04a | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 8 and 22 | | |
| 5.2.2 | E-UTRAN TDD - UTRAN FDD handover | Rel-8 | C07a | UE supporting E-UTRA TDD and UTRA FDD and Feature Group Indicators 8 and 22 | | |
| 5.2.3 | E-UTRAN FDD - GSM handover | Rel-8 | C08e | UE supporting E-UTRA FDD and GSM and inter- RAT PS handover to GERAN and Feature Group Indicators 9, 15 and 23 | | |
| 5.2.4 | E-UTRAN TDD - UTRAN TDD handover | Rel-8 | C05a | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 8 and 22 | | Rel-9 UTRA TDD |
| 5.2.5 | E-UTRAN FDD - UTRAN TDD handover | Rel-8 | C06a | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 8 and 22 | | Rel-9 UTRA TDD |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 5.2.6 | E-UTRA TDD - GSM handover | Rel-8 | C09f | UE supporting E-UTRA TDD and GSM and inter- RAT PS handover to GERAN and Feature Group Indicators 9, 15 and 23 | | |
| 5.2.7 | E-UTRAN FDD - UTRAN FDD handover: unknown target cell | Rel-8 | C04a | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 8 and 22 | | |
| 5.2.8 | E-UTRAN FDD - GSM handover: unknown target cell | Rel-8 | C08a | UE supporting E-UTRA FDD and GSM and inter- RAT PS handover to GERAN and inter-RAT PS handover to GERAN and Feature Group Indicators 9 and 23 | | |
| 5.2.9 | E-UTRAN TDD - GSM handover: unknown target cell | Rel-8 | C09b | UE supporting E-UTRA TDD and GSM and Feature Group Indicators 9 and 23 | | |
| 5.2.10 | E-UTRAN TDD - UTRAN TDD handover: unknown target cell | Rel-8 | C05a | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 8 and 22 | | Rel-9 UTRA TDD |
| 5.2.11 | E-UTRAN FDD - UTRAN FDD handover for 5MHz Bandwidth | Rel-8 | C54 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and UTRA FDD and Feature Group Indicators 8 and 22 | | |
| 5.3.1 | E-UTRAN FDD - HRPD Handover | Rel-8 | C10a | UE supporting E-UTRA FDD and cdma2000 HRPD and Feature Group Indicators 12 and 26 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|---------|--|-------------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 5.3.2 | E-UTRAN FDD - cdma2000 1xRTT handover | Rel-8 | C11a | UE supporting E-UTRA FDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24 | | |
| 5.3.3 | E-UTRAN FDD - HRPD handover: unknown target cell | Rel-8 | C10a | UE supporting E-UTRA FDD and cdma2000 HRPD and Feature Group Indicators 12 and 26 | | |
| 5.3.4 | E-UTRAN FDD - cdma2000 1xRTT handover: unknown target cell | Rel-8 | C11a | UE supporting E-UTRA FDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24 | | |
| 5.3.5 | E-UTRAN TDD-HRPD Handover | Rel-9 | C36 | UE supporting E-UTRA TDD and cdma2000 HRPD and Feature Group Indicators 12 and 26. | | |
| 5.3.6 | E-UTRAN TDD-cdma2000 1X Handover | Rel-9 | C37 | UE supporting E-UTRA TDD and cdma2000 1xRTT and Feature Group Indicators 11 and 24. | | |
| RRC Con | nnection Mobility Control | | | | | |
| 6.1.1 | E-UTRAN FDD Intra-frequency RRC Re-establishment | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 6.1.2 | E-UTRAN FDD Inter-frequency RRC Re-establishment | Rel-8 | C01b | UE supporting E-UTRA FDD and Feature Group Indicator 25 | | |
| 6.1.3 | E-UTRAN TDD Intra-frequency RRC Re-establishment | Rel-8 | C02 | UE supporting E-UTRA TDD | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 6.1.4 | E-UTRAN TDD Inter-frequency RRC Re-establishment | Rel-8 | C02b | UE supporting E-UTRA TDD and Feature Group Indicator 25 | | |
| 6.1.5 | E-UTRAN FDD Intra-frequency RRC Re-establishment for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 6.1.8 | E-UTRAN TDD Intra-frequency RRC Re-establishment for UE category 0 | Rel-12 | C93 | UE supporting E-UTRA TDD and UE Category 0 | | |
| 6.2.1 | E-UTRAN FDD - Contention Based Random Access Test | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 6.2.2 | E-UTRAN FDD - Non- Contention Based Random Access Test | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 6.2.3 | E-UTRAN TDD - Contention Based Random Access Test | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 6.2.4 | E-UTRAN TDD - Non- Contention Based Random Access Test | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 6.2.5 | E-UTRAN FDD - Contention Based Random Access Test for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 6.2.6 | E-UTRAN FDD - Non- Contention Based Random Access Test for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 6.2.7 | E-UTRAN FDD - Non- Contention Based Random Access Test For SCell in sTAG | Rel-12 | C61 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 6.2.8 | E-UTRAN TDD - Non- Contention Based Random Access Test For SCell in sTAG | Rel-12 | C62 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances | | |
| 6.3.1 | Redirection from E-UTRAN FDD to UTRAN FDD | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 6.3.2 | Redirection from E-UTRAN TDD to UTRAN FDD | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| 6.3.3 | Redirection from E-UTRAN FDD to GERAN when System Information is provided | Rel-9 | C27 | UE supporting E-UTRA FDD and GERAN | | |
| 6.3.4 | Redirection from E-UTRAN TDD to GERAN when System Information is provided | Rel-9 | C28 | UE supporting E-UTRA TDD and GERAN | | |
| 6.3.5 | E-UTRA TDD RRC connection release redirection to UTRA TDD | Rel-9 | C26 | UE supporting E-UTRA TDD and UTRA TDD | | |
| 6.3.6 | E-UTRA FDD RRC connection release redirection to UTRA TDD | Rel-9 | C25 | UE supporting E-UTRA FDD and UTRA TDD | | |
| 6.3.7 | E-UTRA TDD RRC connection release redirection to UTRA TDD without SI provided | Rel-9 | C26 | UE supporting E-UTRA TDD and UTRA TDD | | |
| 6.3.8 | E-UTRA FDD RRC connection release redirection to UTRA TDD without SI provided | Rel-9 | C25 | UE supporting E-UTRA FDD and UTRA TDD | | |
| 6.3.9 | Redirection from E-UTRAN FDD to UTRAN FDD without System Information | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 6.3.10 | Redirection from E-UTRAN FDD to GERAN when System Information is not provided | Rel-9 | C27 | UE supporting E-UTRA FDD and GERAN | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|----------|--|---------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 6.3.11 | Redirection from E-UTRAN TDD to GERAN when System Information is not provided | Rel-9 | C28 | UE supporting E-UTRA TDD and GERAN | | |
| 6.3.12 | E-UTRAN TDD RRC connection release redirection to UTRAN FDD without SI provided | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| Timing a | nd Signalling Characteristics | ı | | | | • |
| 7.1.1 | E-UTRAN FDD - UE Transmit Timing Accuracy | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 7.1.1_1 | E-UTRAN FDD - UE Transmit Timing Accuracy (Non DRx UE) | Rel-8 only | C23 | UE supporting E-UTRA FDD but not supporting Feature Group Indicator 5 | | |
| 7.1.2 | E-UTRAN TDD - UE Transmit Timing Accuracy | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 7.1.2_1 | E-UTRAN TDD - UE Transmit Timing Accuracy (Non DRx UE) | Rel-8 only | C24 | UE supporting E-UTRA TDD but not supporting Feature Group Indicator 5 | | |
| 7.1.3 | E-UTRAN FDD – UE Transmit Timing Accuracy Tests for SCell | Rel-11 | C57 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and Feature Group Indicator 5 | | |
| 7.1.3_1 | E-UTRAN FDD – UE Transmit Timing Accuracy Tests for SCell (Release 12 and forward) | Rel-12 | C57 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and Feature Group Indicator 5 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|---------|---|-------------|-----------|--|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.1.4 | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell | Rel-11 | C58 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and Feature Group Indicator 5 | Either TC 7.1.4 or TC 7.1.4A shall be executed. (Note 1) | |
| 7.1.4A | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell for 20 MHz +10 MHz bandwidth | Rel-11 | C58 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and Feature Group Indicator 5 | Either TC 7.1.4 or TC 7.1.4A shall be executed. (Note 1) | |
| 7.1.4_1 | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell (Release 12 and forward) | Rel-12 | C58 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and Feature Group Indicator 5 | | |
| 7.1.5 | E-UTRAN FDD - UE Transmit Timing Accuracy Tests for 5MHz Bandwidth | Rel-8 | C56 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and Feature Group Indicator 5 | | |
| 7.1.6 | E-UTRAN FDD - UE Transmit Timing Accuracy Tests for SCell in sTAG | Rel-11 | C63 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances and Feature Group Indicator 5 | | |
| 7.1.7 | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell in sTAG | Rel-11 | C64 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5 | Either TC 7.1.7 or TC 7.1.7A or TC 7.1.7B shall be executed. (Note 1) | |
| 7.1.7A | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell in sTAG for 20MHz +20MHz bandwidth | Rel-11 | C64 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5 | Either TC 7.1.7 or TC 7.1.7A or TC 7.1.7B shall be executed. (Note 1) | |

| Clause | Clause Title R | | | Applicability | Additional Information | |
|--------|--|--------|-----------|---|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.1.7B | E-UTRAN TDD – UE Transmit Timing Accuracy Tests for SCell in sTAG for 20MHz +10MHz bandwidth | Rel-11 | C64 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advance and Feature Group Indicator 5 | Either TC 7.1.7 or TC 7.1.7A or TC 7.1.7B shall be executed. (Note 1) | |
| 7.2.1 | E-UTRAN FDD - UE Timing Advance Adjustment Accuracy | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 7.2.2 | E-UTRAN TDD - UE Timing Advance Adjustment Accuracy | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 7.2.3 | E-UTRAN FDD - UE Timing Advance Adjustment Accuracy Test for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 7.2.4 | E-UTRAN FDD - UE Timing Advance Adjustment Accuracy Test For SCell in sTAG | Rel-12 | C61 | UE supporting E-UTRA FDD and Uplink Carrier Aggregation and multiple timing advances | | |
| 7.2.5 | E-UTRAN TDD - UE Timing Advance Adjustment Accuracy Test For SCell in sTAG | Rel-11 | C62 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances | Either TC 7.2.5 or TC 7.2.5A or TC 7.2.5B shall be executed. (Note 1) | |
| 7.2.5A | E-UTRAN TDD - UE Timing Advance Adjustment Accuracy Test for SCell in sTAG for 20MHz +20MHz bandwidth | Rel-11 | C62 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances | Either TC 7.2.5 or TC 7.2.5A or TC 7.2.5B shall be executed. (Note 1) | |
| 7.2.5B | E-UTRAN TDD - UE Timing Advance Adjustment Accuracy Test for SCell in sTAG for 20MHz +10MHz bandwidth | Rel-11 | C62 | UE supporting E-UTRA TDD and Uplink Carrier Aggregation and multiple timing advances | Either TC 7.2.5 or TC 7.2.5A or TC 7.2.5B shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.3.1 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-Sync | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 7.3.2 | E-UTRAN FDD Radio Link Monitoring Test for In-Sync | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 7.3.3 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-Sync | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 7.3.4 | E-UTRAN TDD Radio Link Monitoring Test for In-Sync | Rel-8 | C02 | UE supporting E-UTRA TDD | | |
| 7.3.5 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync in DRX | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 7.3.6 | E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 7.3.7 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync in DRX | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 7.3.8 | E-UTRAN TDD Radio Link Monitoring Test for In-sync in DRX | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 7.3.9 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.3.10 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 7.3.11 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 7.3.12 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with Non MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 7.3.13 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 7.3.14 | E-UTRAN TDD Radio Link Monitoring Test for Out-of-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 7.3.15 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|--|-------------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.3.16 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 7.3.19 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non- MBSFN ABS (feICIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 | | |
| 7.3.20 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and Non- MBSFN ABS (feICIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 | | |
| 7.3.21 | E-UTRAN FDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and MBSFN ABS (feICIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 | | |
| 7.3.22 | E-UTRAN TDD Radio Link Monitoring Test for In-sync under Time Domain Measurement Resource Restriction with CRS assistance information and MBSFN ABS (feICIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 | | |
| 7.3.23 | E-UTRAN FDD Radio Link Monitoring Test for Out-of-sync for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 7.3.24 | E-UTRAN FDD Radio Link Monitoring Test for In-sync for 5MHz Bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 7.3.25 | E-UTRAN FDD Radio Link Monitoring Test for In-sync in DRX for 5MHz Bandwidth | Rel-8 | C56 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and Feature Group Indicator 5 | | |
| UE Meas | urements Procedures | | L | | | |
| 8.1.1 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-8 | C01 | UE supporting E-UTRA FDD | | |
| 8.1.2 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 8.1.3 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX | Rel-8 | C01c | UE supporting E-UTRA FDD and Feature Group Indicator 5 | | |
| 8.1.4 | Void | | | | | |
| 8.1.5 | E-UTRAN FDD - FDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C13 | UE supporting E-UTRA FDD, CSG and intra- frequency SI acquisition for HO | | |

| Clause | Title | Releas e | Applicability | | Additional Information | |
|--------|--|-------------|---------------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.1.6 | E-UTRAN FDD - FDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C13 | UE supporting E-UTRA FDD, CSG and intra- frequency SI acquisition for HO | | |
| 8.1.7 | E-UTRAN FDD-FDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 8.1.8 | E-UTRAN FDD-FDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 | | |
| 8.1.9 | E-UTRAN FDD-FDD intra frequency event triggered reporting under fading propagation conditions in asynchronous cells for 5MHz bandwidth | Rel-8 | C49 | UE supporting E-UTRA FDD and only E-UTRA Band 31 | | |
| 8.1.10 | E-UTRAN FDD-FDD intra frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for 5MHz bandwidth | Rel-8 | C56 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and Feature Group Indicator 5 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.1.11 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in asynchronous cells for UE category 0 | Rel-12 | C94 | UE supporting E-UTRA FD-FDD and UE Category 0 | | |
| 8.1.12 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 0 | Rel-12 | C95 | UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 0 | | |
| 8.1.13 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 0 | Rel-12 | C95 | UE supporting E-UTRA FD-FDD and Feature Group Indicator 5 and UE Category 0 | | |
| 8.1.17 | E-UTRAN TDD-TDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells for UE category 0 | Rel-12 | C96 | UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 0 | | |
| 8.1.18 | E-UTRAN TDD-TDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX for UE category 0 | Rel-12 | C96 | UE supporting E-UTRA TDD and Feature Group Indicator 5 and UE Category 0 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|--|-------------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.2.1 | E-UTRAN TDD-TDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 8.2.2 | E-UTRAN TDD-TDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX | Rel-8 | C02c | UE supporting E-UTRA TDD and Feature Group Indicator 5 | | |
| 8.2.3 | E-UTRAN TDD - TDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C15 | UE supporting E-UTRA TDD, CSG and intra- frequency SI acquisition for HO. | | |
| 8.2.4 | E-UTRAN TDD - TDD Intra- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C15 | UE supporting E-UTRA TDD, CSG and intra- frequency SI acquisition for HO | | |
| 8.2.5 | E-UTRAN TDD-TDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 8.2.6 | E-UTRAN TDD-TDD Intra- Frequency Event-Triggered Reporting under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|---|--|------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other |
| 8.3.1 | E-UTRAN FDD-FDD inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-8 | C01b | UE supporting E-UTRA FDD and Feature Group Indicator 25 | It is not necessary for CA UEs to be tested in this test if 8.20.1 case is executed. | |
| 8.3.2 | E-UTRAN FDD-FDD inter- frequency event triggered reporting when DRX is used under fading propagation conditions in asynchronous cells | Rel-8 | C01e | UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25 | | |
| 8.3.3 | E-UTRAN FDD-FDD inter frequency event triggered reporting under AWGN propagation conditions in asynchronous cells with DRX when L3 filtering is used | Rel-8 | C01e | UE supporting E-UTRA FDD and Feature Group Indicators 5 and 25 | | |
| 8.3.4 | E-UTRAN FDD - FDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C14 | UE supporting E-UTRA FDD, CSG and inter- frequency SI acquisition for HO | | |
| 8.3.5 | E-UTRAN FDD - FDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C14 | UE supporting E-UTRA FDD, CSG and inter- frequency SI acquisition for HO. | | |
| 8.3.6 | E-UTRAN FDD-FDD Inter- frequency event triggered reporting without measurement gaps under AWGN propagation conditions in asynchronous cells | Rel-10 | C47 | UE supporting E-UTRA FDD and Feature Group Indicator 25 and Measurement without gaps | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other |
| 8.4.1 | E-UTRAN TDD-TDD inter- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-8 | C02b | UE supporting E-UTRA TDD and Feature Group Indicator 25 | It is not necessary for CA UEs to be tested in this test if 8.20.2 case is executed. | |
| 8.4.2 | E-UTRAN TDD-TDD inter- frequency event triggered reporting when DRX is used under fading propagation conditions in synchronous cells | Rel-8 | C02e | UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25 | | |
| 8.4.3 | E-UTRAN TDD-TDD inter- frequency event triggered reporting under AWGN propagation conditions in synchronous cells with DRX when L3 filtering is used | Rel-8 | C02e | UE supporting E-UTRA TDD and Feature Group Indicators 5 and 25 | | |
| 8.4.4 | E-UTRAN TDD - TDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C16 | UE supporting E-UTRA TDD, CSG and inter- frequency SI acquisition for HO. | | |
| 8.4.5 | E-UTRAN TDD - TDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps with DRX | Rel-9 | C16 | UE supporting E-UTRA TDD, CSG and inter- frequency SI acquisition for HO. | | |
| 8.5.1 | E-UTRAN FDD-UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | C04g | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 15 and 22 | It is not necessary for CA UEs to be tested in this test if 8.20.3 case is executed. | |
| 8.5.2 | E-UTRAN FDD-UTRAN FDD SON ANR cell search reporting under AWGN propagation conditions | Rel-8 | C04f | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 5, 19 and 22 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.5.3 | E-UTRAN FDD - UTRAN FDD event triggered reporting when DRX is used under fading propagation conditions | Rel-8 | C04d | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 5, 15 and 22 | | |
| 8.5.4 | E-UTRAN FDD - UTRAN FDD enhanced cell identification under AWGN propagation conditions | Rel-9 | C29 | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicator 15 | | |
| 8.5.6 | E-UTRAN FDD - UTRAN FDD event triggered reporting without measurement gaps under AWGN propagation conditions | Rel-10 | C48 | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicator 15 and 22 and Measurement without gaps | | |
| 8.5.7 | E-UTRAN FDD - UTRAN FDD event triggered reporting under fading propagation conditions for 5MHz bandwidth | Rel-8 | C55 | UE supporting E-UTRA FDD and only E-UTRA Band 31 and UTRA FDD and Feature Group Indicators 15 and 22 | | |
| 8.6.1 | E-UTRAN TDD-UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | С07ь | UE supporting E-UTRA TDD and UTRA FDD and Feature Group Indicators 15 and 22 | | |
| 8.7.1 | E-UTRAN TDD-UTRAN TDD event triggered reporting under fading propagation conditions | Rel-8 Only | C05b | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 15 and 22 | It is not necessary for CA UEs to be tested in this test if 8.20.4 case is executed. | |
| | | Rel-9 | C83 | UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD Feature Group Indicators 15 and 22 | It is not necessary for CA UEs to be tested in this test if 8.20.4 case is executed. | |

| Clause | Title | Releas e | Applicability | | Additional Information | |
|--------|--|---------------|---------------|--|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| | | Rel-9 | C79 | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 15 and 39 | It is not necessary for CA UEs to be tested in this test if 8.20.4 case is executed | |
| 8.7.2 | E-UTRAN TDD - UTRAN TDD cell search when DRX is used under fading propagation conditions | Rel-8 Only | C05d | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 5, 15 and 22 | | Rel-9 UTRA TDD |
| | | Rel-9 | C84 | UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicators 5, 15 and 22 | | Rel-9 UTRA TDD |
| | | Rel-9 | C80 | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 5, 15 and 39 | | Rel-9 UTRA TDD |
| 8.7.3 | E-UTRAN TDD - UTRAN TDD SON ANR cell search reporting under AWGN propagation conditions | Rel-8 Only | C05b | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicator 22 | | Rel-9 UTRA TDD |
| | Conditions | Rel-9 | C83 | UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicator 22 | | Rel-9 UTRA TDD |
| | | Rel-9 | C81 | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicator 39 | | Rel-9 UTRA TDD |

| Clause | Title | Releas e | | Applicability | | Additional Information | |
|--------|--|---------------|-----------|--|----------------------------|------------------------|--|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 8.7.4 | E-UTRAN TDD - UTRAN TDD enhanced cell identification under AWGN propagation conditions | Rel-9 | C79 | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicator 15 and 39 | | | |
| | | Rel-9 | C31 | UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicator 15 and 22 | | | |
| 8.8.1 | E-UTRAN FDD-GSM event triggered reporting in AWGN | Rel-8 | C08f | UE supporting E-UTRA FDD and GSM and Feature Group Indicator s 15 and 23 | | | |
| 8.8.2 | E-UTRAN FDD - GSM event triggered reporting when DRX is used in AWGN | Rel-8 | C08d | UE supporting E-UTRA FDD and GSM and Feature Group Indicators 5, 15 and 23 | | | |
| 8.9.1 | E-UTRAN FDD-UTRAN TDD event triggered reporting in fading propagation conditions | Rel-8 Only | С06Ь | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 15 and 22 | | Rel-9 UTRA TDD | |
| | | Rel-9 | C85 | UE supporting E-UTRA FDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicators 15 and 22 | | Rel-9 UTRA TDD | |
| | | Rel-9 | C77 | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 15 and 39 | | Rel-9 UTRA TDD | |

| Clause | Title | Releas e | Applicability | | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.9.2 | E-UTRAN FDD - UTRAN TDD enhanced cell identification under AWGN propagation conditions | Rel-9 | C78 | UE supporting E-UTRA FDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicator 15 and 22 | | |
| | | Rel-9 | C77 | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 15 and 39 | | |
| 8.10.1 | E-UTRAN TDD-GSM event triggered reporting in AWGN | Rel-8 | C09g | UE supporting E-UTRA TDD and GSM and Feature Group Indicators 15 and 23 | | |
| 8.10.2 | E-UTRAN TDD - GSM event triggered reporting when DRX is used in AWGN | Rel-8 | C09e | UE supporting E-UTRA TDD and GSM and Feature Group Indicators 5, 15 and 23 | | |
| 8.11.1 | Multiple E-UTRAN FDD-FDD Inter-frequency event triggered reporting under fading propagation conditions | Rel-8 | C01b | UE supporting E-UTRA FDD and Feature Group Indicator 25 | | |
| 8.11.2 | E-UTRAN TDD - E-UTRAN TDD and E-UTRAN TDD Inter- frequency event triggered reporting under fading propagation conditions | Rel-8 | C02b | UE supporting E-UTRA TDD and Feature Group Indicator 25 | | |
| 8.11.3 | E-UTRAN FDD-FDD Inter- frequency and UTRAN FDD event triggered reporting under fading propagation conditions | Rel-8 | C04e | UE supporting E-UTRA FDD and UTRA FDD and Feature Group Indicators 22 and 25 | | |

| Clause Title | | Releas e | | Applicability | Additional Information | |
|--------------|---|---------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.11.4 | InterRAT E-UTRA TDD to E- UTRA TDD and UTRA TDD cell search | Rel-8 Only | C05e | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 22 and 25 | | |
| | | Rel-9 | C86 | UE supporting E-UTRA TDD and UTRA TDD and not supporting UTRA FDD and Feature Group Indicators 22 and 25 | | |
| | | Rel-9 | C82 | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 25 and 39 | | |
| 8.11.5 | Combined E-UTRAN FDD - E- UTRA FDD and GSM cell search; E-UTRA cells in fading; GSM cell in static propagation conditions | Rel-8 | С08Ь | UE supporting E-UTRA FDD and GSM and Feature Group Indicator 23 and 25 | | |
| 8.11.6 | Combined E-UTRAN TDD - E- UTRA TDD and GSM cell search; E-UTRA cells in fading; GSM cell in static propagation conditions | Rel-8 | C09a | UE supporting E-UTRA TDD and GSM and Feature Group Indicator 23 and 25 | | |
| 8.12.1 | Void | | | | | |
| 8.13.1 | Void | | | | | |
| 8.14.1 | E-UTRAN TDD-FDD Inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-9 | C22 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicator 25 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.14.2 | E-UTRAN TDD-FDD Inter- frequency event triggered reporting when DRX is used under fading propagation conditions in synchronous cells | Rel-9 | C38 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 4 and 25 | | |
| 8.14.3 | E-UTRAN TDD - FDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C39 | UE supporting E-UTRA FDD and E-UTRA TDD, CSG and inter-frequency SI acquisition for HO and Feature Group Indicator 25 | | |
| 8.15.1 | E-UTRAN FDD-TDD Inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-9 | C22 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicator 25 | | |
| 8.15.2 | E-UTRAN FDD-TDD Inter- frequency event triggered reporting when DRX is used under fading propagation conditions in asynchronous cells | Rel-9 | C38 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 4 and 25 | | |
| 8.15.3 | E-UTRAN FDD - TDD Inter- frequency identification of a new CGI of E-UTRA cell using autonomous gaps | Rel-9 | C39 | UE supporting E-UTRA FDD and E-UTRA TDD, CSG and inter-frequency SI acquisition for HO and Feature Group Indicator 25 | | |
| 8.16.1 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | |

| Clause | Title | Releas e | Applicability | | Additional Information | | |
|--------|--|-------------|---------------|---|---|----------------------|--|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 8.16.2 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | | |
| 8.16.3 | E-UTRAN FDD-FDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | | |
| 8.16.4 | E-UTRANTDD-TDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | | |
| 8.16.5 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 20 MHz bandwidth | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | | |
| 8.16.6 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 20 MHz bandwidth | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|---------|--|-------------|-----------|---|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.7 | E-UTRA FDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 20 MHz bandwidth | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | |
| 8.16.8 | E-UTRAN TDD Event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 20 MHz bandwidth | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.16.9 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 10MHz+5MHz | Rel-11 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | |
| 8.16.10 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 10MHz+5MHz | Rel-11 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.11 | E-UTRAN FDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 10MHz+5MHz | Rel-11 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|---------|--|-------------|-----------|---|---|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.12 | E-UTRAN TDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 10MHz+5MHz | Rel-11 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.16.13 | E-UTRAN FDD event triggered reporting under deactivated SCell in non-DRX for 5 MHz+5MHz | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.1 or TC 8.16.5 or TC 8.16.9 or TC 8.16.13 shall be executed. (Note 1) | |
| 8.16.14 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 5 MHz+5MHz | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.15 | E-UTRA FDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 5MHz+5MHz bandwidth | Rel-10 | C32 | UE supporting E-UTRA FDD and CA and Feature Group Indicator 111 | Either TC 8.16.3 or TC 8.16.7 or TC 8.16.11 or TC 8.16.15 shall be executed. (Note 1) | |
| 8.16.16 | E-UTRA TDD event triggered reporting on deactivated SCell with PCell interruption in non-DRX for 5MHz+5MHz bandwidth | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.17 | E-UTRAN FDD activation and deactivation of known SCell in non-DRX | Rel-10 | C32b | UE supporting E-UTRA FDD and CA and Feature Group Indicator 25 | | |
| 8.16.18 | E-UTRAN TDD activation and deactivation of known SCell in non-DRX | Rel-10 | C33b | UE supporting E-UTRA TDD and CA and Feature Group Indicator 25 | Either TC 8.16.18 or TC 8.16.18A shall be executed. (Note 1) | |
| 8.16.18 A | E-UTRAN TDD activation and deactivation of known SCell in non-DRX for 20MHz +20MHz bandwidth | Rel-10 | C33b | UE supporting E-UTRA TDD and CA and Feature Group Indicator 25 | Either TC 8.16.18 or TC 8.16.18A shall be executed. (Note 1) | |
| 8.16.21 | E-UTRAN TDD event triggered reporting under deactivated SCell in non-DRX for 20MHz+10MHz | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.2 or TC 8.16.6 or TC 8.16.10 or TC 8.16.14 or TC 8.16.21 shall be executed. (Note 1) | |
| 8.16.22 | E-UTRAN TDD event triggered reporting on deactivating SCell with PCell interruption in non-DRX for 20MHz+10MHz | Rel-10 | C33 | UE supporting E-UTRA TDD and CA and Feature Group Indicator 111 | Either TC 8.16.4 or TC 8.16.8 or TC 8.16.12 or TC 8.16.16 or TC 8.16.22 shall be executed. (Note 1) | |
| 8.16.23 | E-UTRAN TDD-FDD CA event triggered reporting under deactivated SCell in non-DRX with PCell in FDD | Rel-12 | C67 | UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell and Feature Group Indicator 111 | | |
| 8.16.24 | E-UTRAN TDD-FDD CA event triggered reporting under deactivated SCell in non-DRX with PCell in TDD | Rel-12 | C68 | UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell and Feature Group Indicator 111 | | |

| Clause | Title | Releas e | Applicability | | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.25 | E-UTRAN TDD-FDD CA event triggered reporting on deactivated SCell with PCell interruption in non-DRX with PCell in FDD | Rel-12 | C67 | UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell and Feature Group Indicator 111 | | |
| 8.16.26 | E-UTRAN TDD-FDD CA event triggered reporting on deactivated SCell with PCell interruption in non-DRX with PCell in TDD | Rel-12 | C68 | UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell and Feature Group Indicator 111 | | |
| 8.16.27 | E-UTRAN TDD-FDD 3 DL CA Event Triggered Reporting under Deactivated SCells in Non-DRX with PCell in FDD | Rel-12 | C69 | UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell | | |
| 8.16.28 | E-UTRAN TDD-FDD 3DL CA Event Triggered Reporting under Deactivated SCells in Non-DRX with PCell in TDD | Rel-12 | C70 | UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell | | |
| 8.16.29 | 3DL FDD CA Event Triggered Reporting under Deactivated SCells in Non-DRX | Rel-10 | C71 | UE supporting E-UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | |
| | | Rel-11 | C72 | UE supporting E-UTRA FDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |

| Clause | Title | Releas e | | Applicability | | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 8.16.30 3DL TDD CA Event Triggered Reporting under Deactivated SCells in Non-DRX | Reporting under Deactivated | Rel-10 | C73 | UE supporting E-UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | | |
| | | Rel-11 | C74 | UE supporting E-UTRA TDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | | |
| 8.16.31 | E-UTRAN TDD-FDD 3DL CA Event Triggered Reporting on Deactivated SCell with PCell and SCell Interruptions in Non-DRX and with PCell in FDD | Rel-12 | C69 | UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell | | | |
| 8.16.32 | E-UTRAN TDD-FDD 3DL CA Event Triggered Reporting on Deactivated SCell with PCell and SCell Interruptions in Non-DRX and with PCell in TDD | Rel-12 | C70 | UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell | | | |
| 8.16.33 | E-UTRAN FDD 3DL CA Event Triggered Reporting on Deactivated SCell with PCell and SCell Interruptions in Non-DRX | Rel-10 | C71 | UE supporting E-UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| | | Rel-11 | C72 | UE supporting E-UTRA FDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |
| 8.16.34 | E-UTRAN TDD 3 DL CA Event Triggered Reporting on Deactivated SCell with PCell and SCell Interruptions in Non-DRX | Rel-10 | C73 | UE supporting E-UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | |
| | | Rel-11 | C74 | UE supporting E-UTRA TDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |
| 8.16.35 | E-UTRAN TDD-FDD 3 DL CA activation and deactivation of known SCell in non-DRX with PCell in FDD | Rel-12 | C69 | UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell | | |
| 8.16.36 | E-UTRAN TDD-FDD 3 DL CA activation and deactivation of known SCell in non-DRX with PCell in TDD | Rel-12 | C70 | UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.37 | 3DL FDD CA activation and deactivation of known SCell in non-DRX | Rel-10 | C71 | UE supporting E-UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | |
| | | Rel-11 | C72 | UE supporting E-UTRA FDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |
| 8.16.38 | 3DL TDD CA activation and deactivation of known SCell in non-DRX | Rel-10 | C73 | UE supporting E-UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | |
| | | Rel-11 | C74 | UE supporting E-UTRA TDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | - | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.16.41 | 8.16.41 3DL FDD CA activation and deactivation of unknown SCell in non-DRX | Rel-10 | C91 | UE supporting E-UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA and Feature Group Indicator 25 | | |
| | | Rel-11 | C92 | UE supporting E-UTRA FDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA and Feature Group Indicator 25 | | |
| 8.18.1 | E-UTRAN TDD-HRPD event triggered reporting under fading propagation conditions | Rel-9 | C40 | UE supporting E-UTRA TDD and cdma2000 HRPD and Feature Group Indicator 15 | | |
| 8.19.1 | E-UTRAN TDD-CDMA2000 1X event triggered reporting under fading propagation conditions | Rel-9 | C41 | UE supporting E-UTRA TDD and cdma2000 1xRTT and Feature Group Indicator 15 | | |
| 8.20.1 | E-UTRAN FDD-FDD Inter- frequency event triggered reporting under fading propagation conditions in asynchronous cells | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | | |
| 8.20.2 | E-UTRAN TDD-TDD Inter- frequency event triggered reporting under fading propagation conditions in synchronous cells | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 8.20.2 or TC 8.20.2A or TC 8.20.2B shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.20.2A | E-UTRAN TDD-TDD Inter- frequency event triggered reporting under fading propagation conditions in synchronous cells for 20 MHz +20 MHz bandwidth | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 8.20.2 or TC 8.20.2A or TC 8.20.2B shall be executed. (Note 1) | |
| 8.20.2B | E-UTRAN TDD-TDD Inter- frequency event triggered reporting under fading propagation conditions in synchronous cells for 20 MHz +10 MHz bandwidth | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 8.20.2 or TC 8.20.2A or TC 8.20.2B shall be executed. (Note 1) | |
| 8.20.3 | E-UTRAN FDD - UTRAN FDD event triggered reporting under fading propagation conditions | Rel-10 | C43 | UE supporting E-UTRA FDD, CA and UTRA FDD and Feature Group Indicator 15 | | |
| 8.20.4 | E-UTRAN TDD to UTRAN TDD cell search under fading propagation conditions | Rel-10 | C44 | UE supporting E-UTRA TDD, CA and UTRA TDD and Feature Group Indicator 15 | Either TC 8.20.4 or TC 8.20.4A or TC 8.20.4B shall be executed. (Note 1) | |
| 8.20.4A | E-UTRAN TDD to UTRAN TDD cell search under fading propagation conditions for 20 MHz + 20 MHz bandwidth | Rel-10 | C44 | UE supporting E-UTRA TDD, CA and UTRA TDD and Feature Group Indicator 15 | Either TC 8.20.4 or TC 8.20.4A or TC 8.20.4B shall be executed. (Note 1) | |
| 8.20.4B | E-UTRAN TDD to UTRAN TDD cell search under fading propagation conditions for 20 MHz + 10 MHz bandwidth | Rel-10 | C44 | UE supporting E-UTRA TDD, CA and UTRA TDD and Feature Group Indicator 15 | Either TC 8.20.4 or TC 8.20.4A or TC 8.20.4B shall be executed. (Note 1) | |

| Clause | Title | Releas e | Applicability | | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 8.22.1 | E-UTRAN FDD-FDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells in DRX based on CRS based discovery signal | Rel-12 | C01ch | UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicator 5 | | |
| 8.22.2 | E-UTRAN TDD-TDD intra- frequency event triggered reporting under fading propagation conditions in synchronous cells with DRX | Rel-12 | C02ch | UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicator 5 | | |
| 8.22.3 | E-UTRAN FDD-FDD inter- frequency event triggered reporting under fading propagation conditions in DRX based on CRS based discovery signal | Rel-12 | C01eh | UE supporting E-UTRA FDD and CRS based discovery signals measurement and Feature Group Indicators 5 and 25 | | |
| 8.22.4 | E-UTRAN TDD-TDD inter- frequency event triggered reporting under fading propagation conditions in DRX based on CRS based discovery signal | Rel-12 | C02eh | UE supporting E-UTRA TDD and CRS based discovery signals measurement and Feature Group Indicators 5 and 25 | | |
| Measurei | ment Performance Requirements | | | | | • |
| 9.1.1.1 | FDD Intra Frequency Absolute RSRP Accuracy | Rel-8 to Rel- | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.1.1.1 __ | FDD Intra Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |

| Clause | Title | Releas e | | Applicability | Additional | Information |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.1.2 | FDD Intra Frequency Relative Accuracy of RSRP | Rel-8 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.1.2.1 | TDD Intra Frequency Absolute RSRP Accuracy | Rel-8 to Rel- | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.1.2.1_ | TDD Intra Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.1.2.2 | TDD Intra Frequency Relative Accuracy of RSRP | Rel-8 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.1.3.1 | FDD - FDD Inter Frequency Absolute RSRP Accuracy | Rel-8 to Rel- 11 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.1.3.1 __ | FDD - FDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.1.3.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRP | Rel-8 to Rel- 11 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.1.3.2_ 1 | FDD - FDD Inter Frequency Relative Accuracy of RSRP (Rel-12 and forward) | Rel-12 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.1.4.1 | TDD - TDD Inter Frequency Absolute RSRP Accuracy | Rel-8 to Rel- 11 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.4.1 __ | TDD - TDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |

| Clause | Title | Releas e | Applicability | | Additional | Information |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.4.2 | TDD - TDD Inter Frequency Relative Accuracy of RSRP | Rel-8 to Rel- | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.4.2 ₁ | TDD - TDD Inter Frequency Relative Accuracy of RSRP (Rel-12 and forward) | Rel-12 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.5.1 | FDD - TDD Inter Frequency Absolute RSRP Accuracy | Rel-9 to Rel- 11 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.5.1_ | FDD - TDD Inter Frequency Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.5.2 | FDD - TDD Inter Frequency Relative Accuracy of RSRP | Rel-9 to Rel- 11 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.5.2_ | FDD - TDD Inter Frequency Relative Accuracy of RSRP (Rel-12 and forward) | Rel-12 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.1.6.1 | FDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation | Rel-10 and Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | | |
| 9.1.6.1_ | FDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1) | | | |
| 9.1.6.2 | FDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation | Rel-10 and Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | | | |
| 9.1.6.2_ | FDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1) | | | |
| 9.1.7.1 | TDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | | | |
| 9.1.7.1_ | TDD Absolute RSRP Accuracy E-UTRA for Carrier Aggregation (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | | | |

| Clause | Title | Releas e | Applicability | | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 9.1.7.2 | TDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | | |
| 9.1.7.2_ | TDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1) | | |
| 9.1.8.1 | FDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 and Rel-11 only | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | | |
| 9.1.8.1_ | FDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) (Rel-12 and forward) | Rel-12 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | | |
| 9.1.8.2 | FDD Relative RSRP under Time- Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.9.1 | TDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 and Rel-11 only | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.9.1_ | TDD Absolute RSRP Accuracy under Time-Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) (Rel-12 and forward) | Rel-12 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.9.2 | TDD Relative RSRP under Time- Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.10.1 | FDD Absolute RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 and Rel-11 only | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.1.10.1 _1 | FDD Absolute RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) (Rel-12 and forward) | Rel-12 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.1.10.2 | FDD Relative RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.1.11.1 | TDD Absolute RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 and Rel-11 only | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.11.1 | TDD Absolute RSRP under Time-Domain Measurement Resource Restriction with MBSFN ABS (eICIC) (Rel-12 and forward) | Rel-12 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.11.2 | TDD Relative RSRP under Time- Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.1.12.1 | FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 and Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | |
| 9.1.12.1 | FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1) | |
| 9.1.12.2 | FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 and Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.12.2 | FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1) | |
| 9.1.13.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | |
| 9.1.13.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | |
| 9.1.13.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 9.1.13.2 _1 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20 MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1) | | |
| 9.1.14.1 | FDD Intra Frequency Absolute RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) | Rel-11 only | C59 | UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 | | | |
| 9.1.14.1 _1 | FDD Intra Frequency Absolute RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) (Rel-12 and forward) | Rel-12 | C59 | UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 | | | |
| 9.1.14.2 | FDD Intra Frequency Relative RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 | | | |
| 9.1.15.1 | TDD Intra Frequency Absolute RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) | Rel-11 only | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 | | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.15.1 _1 | TDD Intra Frequency Absolute RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS (feICIC) (Rel-12 and forward) | Rel-12 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 | | |
| 9.1.15.2 | TDD Intra Frequency Relative RSRP Accuracy under Time- Domain Measurement Resource Restriction with CRS Assistance Information and Non-MBSFN ABS | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 | | |
| 9.1.16.1 | FDD Intra Frequency Absolute RSRP Accuracy for 5MHz Bandwidth | Rel-8 to Rel- 11 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |
| 9.1.16.1 _1 | FDD Intra Frequency Absolute RSRP Accuracy for 5MHz Bandwidth (Rel-12 and forward) | Rel-12 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |
| 9.1.16.2 | FDD Intra Frequency Relative Accuracy of RSRP for 5MHz Bandwidth | Rel-8 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |
| 9.1.17.1 | FDD - FDD Inter Frequency Absolute RSRP Accuracy for 5MHz Bandwidth | Rel-8 to Rel- 11 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.1.17.1 _1 | FDD - FDD Inter Frequency Absolute RSRP Accuracy for 5MHz Bandwidth (Rel-12 and forward) | Rel-12 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.17.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRP for 5MHz Bandwidth | Rel-8 to Rel- 11 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.1.17.2 _1 | FDD - FDD Inter Frequency Relative Accuracy of RSRP for 5MHz Bandwidth (Rel-12 and forward) | Rel-12 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.1.18.1 | FDD Absolute RSRP Accuracy for E-UTRA for Carrier Aggregation for 10MHz + 5MHz | Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | |
| 9.1.18.1 _1 | FDD Absolute RSRP Accuracy for E-UTRA for Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1) | |
| 9.1.18.2 | FDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation for 10MHz + 5MHz | Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | |
| 9.1.18.2 _1 | FDD Relative RSRP Accuracy E- UTRA for Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1) | |

| Clause | Title | Releas e | Applicability | | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 9.1.19.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz | Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | | |
| 9.1.19.1 _1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | | |
| 9.1.19.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz | Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | | |
| 9.1.19.2 _1 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 10MHz + 5MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1) | | |
| 9.1.20.1 | FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth | Rel-10 and Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1 or TC 9.1.12.1 or TC 9.1.18.1 or TC 9.1.20.1 shall be executed. (Note 1) | | |

| Clause | Title | Releas e | | Applicability | | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | | |
| 9.1.20.1 | FDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.1_1 or TC 9.1.12.1_1 or TC 9.1.18.1_1 or TC 9.1.20.1_1 shall be executed. (Note 1) | | | |
| 9.1.20.2 | FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth | Rel-10 and Rel-11 only | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2 or TC 9.1.12.2 or TC 9.1.18.2 or TC 9.1.20.2 shall be executed. (Note 1) | | | |
| 9.1.20.2 | FDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz bandwidth (Rel-12 and forward) | Rel-12 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.1.6.2_1 or TC 9.1.12.2_1 or TC 9.1.18.2_1 or TC 9.1.20.2_1 shall be executed. (Note 1) | | | |
| 9.1.21.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | | | |
| 9.1.21_1 | TDD RSRP Accuracy for E- UTRAN Carrier Aggregation for 5MHz + 5MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1_1 or TC 9.1.13.1_1 or TC 9.1.19.1_1 or TC 9.1.21.1_1 shall be executed. (Note 1) | | | |

| Clause | Title | Releas e | | Applicability | | Information |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.21.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | |
| 9.1.21.2 _1 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 5MHz + 5MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1) | |
| 9.1.22 | FDD-TDD RSRP Accuracy E- UTRA for Carrier Aggregation with PCell in FDD | Rel-12 | C67 | UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell | | |
| 9.1.23 | FDD-TDD RSRP Accuracy E- UTRA for Carrier Aggregation with PCell in TDD | Rel-12 | C68 | UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell | | |
| 9.1.24.1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.1 or TC 9.1.13.1 or TC 9.1.19.1 or TC 9.1.21.1 or TC 9.1.24.1 shall be executed. (Note 1) | |
| 9.1.24.1 _1 | TDD Absolute RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | | |

| Clause | Title | Releas e | Applicability | | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 9.1.24.2 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz | Rel-10 and Rel-11 only | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2 or TC 9.1.13.2 or TC 9.1.19.2 or TC 9.1.21.2 or TC 9.1.24.2 shall be executed. (Note 1) | | |
| 9.1.24.2 _1 | TDD Relative RSRP Accuracy for E-UTRA Carrier Aggregation for 20MHz + 10MHz (Rel-12 and forward) | Rel-12 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.1.7.2_1 or TC 9.1.13.2_1 or TC 9.1.19.2_1 or TC 9.1.21.2_1 or TC 9.1.24.2_1 shall be executed. (Note 1) | | |
| 9.1.37 | 3DL PCell in FDD RSRP for E- UTRAN in Carrier Aggregation | Rel-12 | C69 | UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell | | | |
| 9.1.38 | 3DL PCell in TDD RSRP for E- UTRAN in Carrier Aggregation | Rel-12 | C70 | UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell | | | |
| 9.1.39 | 3DL FDD RSRP for E-UTRAN in Carrier Aggregation | Rel-10 and Rel-11 only | C71 | UE supporting E-UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| | | Rel-11 only | C72 | UE supporting E-UTRA FDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |
| 9.1.39_1 | 3DL FDD RSRP for E-UTRAN in Carrier Aggregation(Rel-12 and forward) | Rel-12 | C75 | UE supporting E-UTRA FDD and 3DL CA | | |
| 9.1.40 | 3DL TDD RSRP for E-UTRAN in Carrier Aggregation | Rel-10 and Rel-11 only | C73 | UE supporting E-UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DLwith intra-band contiguous and inter-band CA | | |
| | | Rel-11 only | C74 | UE supporting E-UTRA TDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |
| 9.1.40_1 | 3DL TDD RSRP for E-UTRAN in Carrier Aggregation (Rel-12 and forward) | Rel-12 | C76 | UE supporting E-UTRA TDD and 3DL CA | | |
| 9.1.41.1 | FD-FDD Intra Frequency Absolute RSRP Accuracy for UE category 0 | Rel-12 | C88 | UE supporting E-UTRA FD-FDD (UE Category 0) and Feature Group Indicator 16 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.1.41.2 | FD-FDD Intra Frequency Relative RSRP Accuracy for UE category 0 | Rel-12 | C88 | UE supporting E-UTRA FD-FDD (UE Category 0) and Feature Group Indicator 16 | | |
| 9.1.42.1 | HD-FDD Intra Frequency Absolute RSRP Accuracy for UE category 0 | Rel-12 | C89 | UE supporting E-UTRA HD-FDD (UE category 0) and Feature Group Indicator 16 | | |
| 9.1.42.2 | HD-FDD Intra Frequency Relative RSRP Accuracy for UE category 0 | Rel-12 | C89 | UE supporting E-UTRA HD-FDD (UE category 0) and Feature Group Indicator 16 | | |
| 9.1.43.1 | TDD Intra Frequency Absolute RSRP Accuracy for UE category 0 | Rel-12 | C90 | UE supporting E-UTRA TDD (UE Category 0) and Feature Group Indicator 16 | | |
| 9.1.43.2 | TDD Intra Frequency Relative RSRP Accuracy for UE category 0 | Rel-12 | C90 | UE supporting E-UTRA TDD (UE Category 0) and Feature Group Indicator 16 | | |
| 9.2.1.1 | FDD Intra Frequency Absolute RSRQ Accuracy | Rel-8 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.2.2.1 | TDD Intra Frequency Absolute RSRQ Accuracy | Rel-8 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.2.3.1 | FDD - FDD Inter Frequency Absolute RSRQ Accuracy | Rel-8 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |
| 9.2.3.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRQ | Rel-8 | C01g | UE supporting E-UTRA FDD and Feature Group Indicators 16 and 25 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.4.1 | TDD - TDD Inter Frequency Absolute RSRQ Accuracy | Rel-8 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.4.2 | TDD -TDD Inter Frequency Relative Accuracy of RSRQ | Rel-8 | C02g | UE supporting E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.4A.1 | FDD - TDD Inter Frequency Absolute RSRQ Accuracy | Rel-9 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.4A.2 | FDD - TDD Inter Frequency Relative Accuracy of RSRQ | Rel-9 | C42 | UE supporting E-UTRA FDD and E-UTRA TDD and Feature Group Indicators 16 and 25 | | |
| 9.2.5.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | |
| 9.2.5.2 | FDD Relative RSRQ Accuracy E- UTRA for Carrier Aggregation | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | |
| 9.2.6.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | |

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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.6.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | |
| 9.2.7.1 | FDD RSRQ under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.2.8.1 | TDD RSRQ under Time Domain Measurement Resource Restriction with Non-MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.2.9.1 | FDD Absolute RSRQ under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C45 | UE supporting E-UTRA FDD and Feature Group Indicator 115 | | |
| 9.2.10.1 | TDD Absolute RSRQ under Time Domain Measurement Resource Restriction with MBSFN ABS (eICIC) | Rel-10 | C46 | UE supporting E-UTRA TDD and Feature Group Indicator 115 | | |
| 9.2.11.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.11.2 | FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | |
| 9.2.12.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | |
| 9.2.12.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | |
| 9.2.13.1 | FDD RSRQ Accuracy under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non- MBSFN ABS (feICIC) | Rel-11 | C59 | UE supporting E-UTRA FDD and CRS interference handling and Feature Group Indicator 115 | | |
| 9.2.14.1 | TDD RSRQ Accuracy under Time Domain Measurement Resource Restriction with CRS Assistance Information and Non- MBSFN ABS (feICIC) | Rel-11 | C60 | UE supporting E-UTRA TDD and CRS interference handling and ss-CCH interference handling and Feature Group Indicator 115 | | |
| 9.2.17.1 | FDD Intra Frequency Absolute RSRQ Accuracy for 5MHz Bandwidth | Rel-8 | C50 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicator 16 | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.18.1 | FDD - FDD Inter Frequency Absolute RSRQ Accuracy for 5MHz Bandwidth | Rel-8 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.2.18.2 | FDD - FDD Inter Frequency Relative Accuracy of RSRQ for 5MHz Bandwidth | Rel-8 | C51 | UE supporting E-UTRA FDD and E-UTRA Band 31 and Feature Group Indicators 16 and 25 | | |
| 9.2.19.1 | FDD-FDD Inter Frequency absolute WB-RSRQ | Rel-11 | C01h | UE supporting E-UTRA FDD and WB-RSRQ measurement and Feature Group Indicators 16 and 25 | | |
| 9.2.20.1 | TDD-TDD Inter Frequency absolute WB-RSRQ | Rel-11 | C02h | UE supporting E-UTRA TDD and WB-RSRQ measurement and Feature Group Indicators 16 and 25 | | |
| 9.2.21.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | |
| 9.2.21.2 | FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | |

| Clause | Title | Releas e | | Applicability | | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | | |
| 9.2.22.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | | | |
| 9.2.22.2 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 10MHz+5MHz | Rel-11 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | | | |
| 9.2.23.1 | FDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.1 or TC 9.2.11.1 or TC 9.2.21.1 or TC 9.2.23.1 shall be executed. (Note 1) | | | |
| 9.2.23.2 | FDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C18 | UE supporting E-UTRA FDD and CA | Either TC 9.2.5.2 or TC 9.2.11.2 or TC 9.2.21.2 or TC 9.2.23.2 shall be executed. (Note 1) | | | |
| 9.2.24.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | | | |

| Clause | Title | Releas e | Applicability | | Additional Information | | |
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| | | | Condition | Comments | Number of TC Executions | Release on other RAT | |
| 9.2.24.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 5MHz+5MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | | |
| 9.2.25.1 | Absolute RSRQ Accuracy for E- UTRAN TDD-FDD Carrier Aggregation with PCell in FDD | Rel-12 | C67 | UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell | | | |
| 9.2.25.2 | Relative RSRQ Accuracy for E- UTRAN TDD-FDD Carrier Aggregation with PCell in FDD | Rel-12 | C67 | UE supporting E-UTRA FDD and TDD and 2DL CA with FDD as PCell | | | |
| 9.2.26.1 | Absolute RSRQ Accuracy for E- UTRAN TDD-FDD Carrier Aggregation with PCell in TDD | Rel-12 | C68 | UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell | | | |
| 9.2.26.2 | Relative RSRQ Accuracy for E- UTRAN TDD-FDD Carrier Aggregation with PCell in TDD | Rel-12 | C68 | UE supporting E-UTRA FDD and TDD and 2DL CA with TDD as PCell | | | |
| 9.2.27.1 | TDD Absolute RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz+10MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.1 or TC 9.2.12.1 or TC 9.2.22.1 or TC 9.2.24.1 or TC 9.2.27.1 shall be executed. (Note 1) | | |
| 9.2.27.2 | TDD Relative RSRQ Accuracy for E-UTRA Carrier Aggregation for 20MHz+10MHz | Rel-10 | C19 | UE supporting E-UTRA TDD and CA | Either TC 9.2.6.2 or TC 9.2.12.2 or TC 9.2.22.2 or TC 9.2.24.2 or TC 9.2.27.2 shall be executed. (Note 1) | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|--------|---|-------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.2.38 | 3DL PCell in FDD RSRQ for E- UTRAN in Carrier Aggregation | Rel-12 | C69 | UE supporting E-UTRA FDD and TDD and 3DL CA with FDD as PCell | | |
| 9.2.39 | 3 DL PCell in TDD RSRQ for E- UTRAN in Carrier Aggregation | Rel-12 | C70 | UE supporting E-UTRA FDD and TDD and 3DL CA with TDD as PCell | | |
| 9.2.40 | 3 DL FDD RSRQ for E-UTRAN in Carrier Aggregation | Rel-10 | C71 | UE supporting E-UTRA FDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | |
| | | Rel-11 | C72 | UE supporting E-UTRA FDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |
| 9.2.41 | 3DL TDD RSRQ for E-UTRAN in Carrier Aggregation | Rel-10 | C73 | UE supporting E-UTRA TDD and 3DL with intra- band contiguous CA, or 3DL with inter-band CA, or 3DL with intra-band contiguous and inter-band CA | | |
| | | Rel-11 | C74 | UE supporting E-UTRA TDD and 3DL with intra- band non-contiguous and inter-band CA, or 3DL with intra-band non-contiguous and intra-band contiguous CA | | |

| Clause | Title | Releas e | | Applicability | Additional Information | |
|---------|---|---------------------------------|-----------|--|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.3.1 | E-UTRAN FDD - UTRA FDD CPICH RSCP absolute accuracy | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 9.3.2 | E-UTRAN TDD - UTRA FDD CPICH RSCP absolute accuracy | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| 9.3.3 | E-UTRAN FDD - UTRA FDD CPICH RSCP absolute accuracy for 5MHz bandwidth | Rel-8 | C52 | UE supporting E-UTRA FDD and E-UTRA Band 31 and UTRA FDD | | |
| 9.4.1 | E-UTRAN FDD - UTRA FDD CPICH Ec/No absolute accuracy | Rel-9 | C04 | UE supporting E-UTRA FDD and UTRA FDD | | |
| 9.4.2 | E-UTRAN TDD - UTRA FDD CPICH Ec/No absolute accuracy | Rel-9 | C07 | UE supporting E-UTRA TDD and UTRA FDD | | |
| 9.4.3 | E-UTRAN FDD - UTRA FDD CPICH Ec/No absolute accuracy for 5MHz bandwidth | Rel-8 | C52 | UE supporting E-UTRA FDD and E-UTRA Band 31 and UTRA FDD | | |
| 9.5.1 | E-UTRAN FDD - UTRA TDD PCCPCH RSCP absolute accuracy | Rel-9 | C65 | UE supporting E-UTRA FDD and UTRA TDD and Feature Group Indicators 39 | | |
| 9.5.2 | E-UTRAN TDD - UTRA TDD PCCPCH RSCP absolute accuracy | Rel-9 | C66 | UE supporting E-UTRA TDD and UTRA TDD and Feature Group Indicators 39 | | |
| 9.6.1 | GSM RSSI accuracy for E- UTRAN FDD | Rel-9 | C08g | UE supporting E-UTRA FDD and GSM and Feature Group Indicator 16 and 23 | | |
| 9.6.2 | GSM RSSI accuracy for E- UTRAN TDD | Rel-9 | C09h | UE supporting E-UTRA TDD and GSM and Feature Group Indicator 16 and 23 | | |
| 9.9.1.1 | FDD Intra Frequency Serving Cell Absolute RSRP Accuracy | Rel-10 and Rel-11 only | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |

| Clause | Title | Releas e | | Applicability | | Information |
|----------------------|--|---------------------------------|-----------|---|----------------------------|----------------------|
| | | | Condition | Comments | Number of TC Executions | Release on other RAT |
| 9.9.1.1 ₁ | FDD Intra Frequency Serving Cell Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.9.1.2 | FDD Intra Frequency Serving Cell Absolute RSRQ Accuracy | Rel-10 | C01f | UE supporting E-UTRA FDD and Feature Group Indicator 16 | | |
| 9.9.2.1 | TDD Intra Frequency Serving Cell Absolute RSRP Accuracy | Rel-10 and Rel-11 only | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.9.2.1_ | TDD Intra Frequency Serving Cell Absolute RSRP Accuracy (Rel-12 and forward) | Rel-12 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |
| 9.9.2.2 | TDD Intra Frequency Serving Cell Absolute RSRQ Accuracy | Rel-10 | C02f | UE supporting E-UTRA TDD and Feature Group Indicator 16 | | |

Table 4.2-1a: Applicability of RRM conformance test cases Conditions

| C01 | IF A.4.1-1/1 THEN R ELSE N/A |
|---------|---|
| C01a | IF (A.4.1-1/1 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A |
| C01b | IF (A.4.1-1/1 AND A.4.4-1/25) THEN R ELSE N/A |
| C01c | IF (A.4.1-1/1 AND A.4.4-1/5) THEN R ELSE N/A |
| C01ch | IF (A.4.1-1/1 AND A.4.5-1/8 AND A.4.4-1/5) THEN R ELSE N/A |
| C01d | IF (A.4.1-1/1 AND A.4.4-1/5 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A |
| C01d | IF (A.4.1-1/1 AND A.4.4-1/5 AND A.4.4-1/25) THEN R ELSE N/A |
| | |
| C01eh | IF (A.4.1-1/1 AND A.4.5-1/8 AND A.4.4-1/5 AND A.4.4-1/25) THEN R ELSE N/A |
| C01f | IF (A.4.1-1/1 AND A.4.4-1/16) THEN R ELSE N/A |
| C01g | IF (A.4.1-1/1 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C01h | IF (A.4.1-1/1 AND A.4.4-1/16 AND A.4.4-1/25 AND A.4.5-1/7) THEN R ELSE N/A |
| C02 | IF A.4.1-1/2 THEN R ELSE N/A |
| C02a | IF (A.4.1-1/2 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A |
| C02b | IF (A.4.1-1/2 AND A.4.4-1/25) THEN R ELSE N/A |
| C02c | IF (A.4.1-1/2 AND A.4.4-1/5) THEN R ELSE N/A |
| C02ch | IF (A.4.1-1/2 AND A.4.5-1/8 AND A.4.4-1/5) THEN R ELSE N/A |
| C02d | |
| | IF (A.4.1-1/2 AND A.4.4-1/5 AND A.4.4-1/13 AND A.4.4-1/25) THEN R ELSE N/A |
| C02e | IF (A.4.1-1/2 AND A.4.4-1/5 AND A.4.4-1/25) THEN R ELSE N/A |
| C02eh | IF (A.4.1-1/2 AND A.4.5-1/8 AND A.4.4-1/5 AND A.4.4-1/25) THEN R ELSE N/A |
| C02f | IF (A.4.1-1/2 AND A.4.4-1/16) THEN R ELSE N/A |
| C02g | IF (A.4.1-1/2 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C02h | IF (A.4.1-1/2 AND A.4.4-1/16 AND A.4.4-1/25 AND A.4.5-1/7) THEN R ELSE N/A |
| C03 | IF (A.4.1-1/1 AND A.4.1-1/2) THEN R ELSE N/A |
| C04 | IF (A.4.1-1/1 AND A.4.1-1/3) THEN R ELSE N/A |
| C04a | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C04b | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/22) THEN R ELSE N/A |
| C04c | Void |
| C04c | |
| | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C04e | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/22 AND A.4.4-1/25) THEN R ELSE N/A |
| C04f | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/5 AND A.4.4-1/19 AND A.4.4-1/22) THEN R ELSE N/A |
| C04g | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C05 | IF (A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A |
| C05a | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C05b | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/15 AND A.4.4-1/25) THEN R ELSE N/A |
| C05c | Void |
| C05d | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/25) THEN R ELSE N/A |
| C05e | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/22 AND A.4.4-1/25) THEN R ELSE N/A |
| C06 | IF (A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A |
| C06a | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C06b | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C07 | IF (A.4.1-1/2 AND A.4.1-1/3) THEN R ELSE N/A |
| | IF (A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C07a | |
| C07b | IF (A.4.1-1/2 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C07c | Void |
| C08 | IF (A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A |
| C08a | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1/9 AND A.4.4-1/23) THEN R ELSE N/A |
| C08b | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/23 AND A.4.4-1/25) THEN R ELSE N/A |
| C08c | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/22) THEN R ELSE N/A |
| C08d | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C08e | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1/9 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE |
| | N/À |
| C08f | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C08g | IF (A.4.1-1/1 AND A.4.1-1/5 AND A.4.4-1/16 AND A.4.4-1/23) THEN R ELSE N/A |
| C09 | IF (A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A |
| C09a | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/23 AND A.4.4-1/25) THEN R ELSE N/A |
| C09a | |
| | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1/9 AND A.4.4-1/23) THEN R ELSE N/A |
| C09c | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/22) THEN R ELSE N/A |
| C09d | Void |
| C09e | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C09f | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.5-1/16 AND A.4.4-1/9 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE |
| <u></u> | N/A |
| C09g | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/15 AND A.4.4-1/23) THEN R ELSE N/A |
| C09h | IF (A.4.1-1/2 AND A.4.1-1/5 AND A.4.4-1/16 AND A.4.4-1/23) THEN R ELSE N/A |
| - | , |

| C10 | IF (A.4.1-1/1 AND A.4.1-1/6) THEN R ELSE N/A |
|---|--|
| C10a | IF (A.4.1-1/1 AND A.4.1-1/6 AND A.4.4-1/12 AND A.4.4-1/26) THEN R ELSE N/A |
| C11 | IF (A.4.1-1/1 AND A.4.1-1/7) THEN R ELSE N/A |
| C11a | IF (A.4.1-1/1 AND A.4.1-1/7 AND A.4.4-1/11 AND A.4.4-1/24) THEN R ELSE N/A |
| C12 | Void |
| C13 | IF (A.4.1-1/1 AND A.4.5-1/1 AND A.4.5-1/2) THEN R ELSE N/A |
| C14 | IF (A.4.1-1/1 AND A.4.5-1/1 AND A.4.5-1/3) THEN R ELSE N/A |
| | |
| C15 | IF (A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/2) THEN R ELSE N/A |
| C16 | IF (A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/3) THEN R ELSE N/A |
| C17 | Void |
| C18 | IF (A.4.1-1/1 AND A.4.2-1/2) THEN R ELSE N/A |
| C19 | IF (A.4.1-1/2 AND A.4.2-1/2) THEN R ELSE N/A |
| C20 | Void |
| C21 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/5 AND A.4.4-1/25 AND A.4.4-1/30) THEN R ELSE N/A |
| C22 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/25) THEN R ELSE N/A |
| | |
| C23 | IF (A.4.1-1/1 AND NOT A.4.4-1/5) THEN R ELSE N/A |
| C24 | IF (A.4.1-1/2 AND NOT A.4.4-1/5) THEN R ELSE N/A |
| C25 | IF (A.4.1-1/1 AND A.4.1-1/4) THEN R ELSE N/A |
| C26 | IF (A.4.1-1/2 AND A.4.1-1/4) THEN R ELSE N/A |
| C27 | IF (A.4.1-1/1 AND A.4.1-1/5) THEN R ELSE N/A |
| C28 | IF (A.4.1-1/2 AND A.4.1-1/5) THEN R ELSE N/A |
| C29 | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15) THEN R ELSE N/A |
| C30 | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/15) THEN R ELSE N/A |
| C31 | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/15) THEN R ELSE N/A |
| C32 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/10) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-3/111) THEN R ELSE N/A |
| | |
| C32a | Void |
| C32b | IF (A.4.1-1/1 AND A.4.2-1/2 AND A.4.4-1/25) THEN R ELSE N/A |
| C33 | IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-3/111) THEN R ELSE N/A |
| C33a | Void |
| C33b | IF (A.4.1-1/2 AND A.4.2-1/2 AND A.4.4-1/25) THEN R ELSE N/A |
| C34 | IF (A.4.1-1/2 AND A.4.1-1/6) THEN R ELSE N/A |
| C35 | IF (A.4.1-1/2 AND A.4.1-1/7) THEN R ELSE N/A |
| C36 | IF (A.4.1-1/2 AND A.4.1-1/6 AND A.4.4-1/12 AND A.4.4-1/26) THEN R ELSE N/A |
| C37 | IF (A.4.1-1/2 AND A.4.1-1/7 AND A.4.4-1/11 AND A.4.4-1/24) THEN R ELSE N/A |
| C38 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/4 AND A.4.4-1/25) THEN R ELSE N/A |
| C39 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.5-1/1 AND A.4.5-1/3 AND A.4.4-1/25) THEN R ELSE N/A |
| C40 | IF (A.4.1-1/2 AND A.4.1-1/6 AND A.4.4-1/15) THEN R ELSE N/A |
| C40 | |
| | IF (A.4.1-1/2 AND A.4.1-1/7 AND A.4.4-1/15) THEN R ELSE N/A |
| C42 | IF (A.4.1-1/1 AND A.4.1-1/2 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C43 | IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.2-1/2 AND A.4.4-1/15) THEN R ELSE N/A |
| C44 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.2-1/2 AND A.4.4-1/15) THEN R ELSE N/A |
| C45 | |
| C46 | IF (A.4.1-1/1 AND A.4.4-3/115) THEN R ELSE N/A |
| | IF (A.4.1-1/1 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A |
| C47 | |
| | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A |
| C47 C48 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A |
| C47 C48 C49 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A |
| C47 C48 C49 C50 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.4-3/115) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16 AND A.4.4-1/25) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND (A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) OR (A.4.6.1-2/2)) OR (A.4.6.1-1/2) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.1-1/2)) OR (A.4.6.1-1/2) OR A.4.6.1-1/2) |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/2 AND A.4.5-2/1 AND A.4.3-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1) OR (A.4.6.1-1/2 AND A.4.6.3-1/1 AND A.4.6.3-2/1) OR (A.4.6.3-1/1 AND A.4.6.3- |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.1-1/2 AND A.4.6.2-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C60 C61 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/8 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND (((A.4.6.1-1/1 AND A.4.6.1-1/2)) THEN R ELSE N/A IF (A.4.1-1/1 AND (((A.4.6.1-1/1 AND A.4.5-2/2 AND A.4.4-3/115)) THEN R ELSE N/A IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1)) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1) AND A.4.6.1-2/3) THEN R ELSE N/A IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1)) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/3) THEN R ELSE N/A |
| C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 | IF (A.4.1-1/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.4-1/25 AND NOT A.4.5-1/4) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22 AND NOT A.4.5-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/16) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.4-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.3-3/31 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.1-1/3 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/6 AND A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/2 AND ((A.4.6.1-1/1 OR A.4.6.1-1/2) AND (A.4.6.1-2/1 OR A.4.6.1-2/2)) AND A.4.4-1/5) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.5-2/2 AND A.4.4-3/115) THEN R ELSE N/A IF (A.4.1-1/1 AND A.4.5-2/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.3-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.2-2/1) OR (A.4.6.1-1/2 AND A.4.6.2-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND A.4.6.3-1/1 AND A.4.6.3-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND |

| C64 | IF (A.4.1-1/2 AND (((A.4.6.1-1/1 AND A.4.6.1-2/1) OR (A.4.6.1-1/2 AND A.4.6.1-2/2)) OR (A.4.6.2-1/1 AND |
|---------|---|
| | A.4.6.2-2/1) OR (A.4.6.3-1/1 AND A.4.6.3-2/1)) AND A.4.5-2/3 AND A.4.4-1/5) THEN R ELSE N/A |
| C65 | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-2/39) THEN R ELSE N/A |
| C66 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-2/39) THEN R ELSE N/A |
| C67 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/15 AND A.4.4-3/111) THEN R ELSE N/A |
| C68 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/1 AND A.4.5-1/14 AND A.4.4-3/111) THEN R ELSE N/A |
| C69 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/15) THEN R ELSE N/A |
| C70 | IF ((A.4.1-1/1 AND A.4.1-1/2) AND A.4.6-1/2 AND A.4.5-1/14) THEN R ELSE N/A |
| C71 | IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4)) THEN R ELSE N/A |
| C72 | IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2)) THEN R ELSE N/A |
| C73 | IF (A.4.1-1/2 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4)) THEN R ELSE N/A |
| C74 | IF (A.4.1-1/2 AND (A.4.6.3-1/2 OR A.4.6.2-1/2)) THEN R ELSE N/A |
| C75 | IF (A.4.1-1/1 AND A.4.6-1/2) THEN ELSE N/A |
| C76 | IF (A.4.1-1/2 AND A.4.6-1/2) THEN ELSE N/A |
| C77 | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/15 AND A.4.4-2/39) THEN R ELSE N/A |
| C78 | IF (A.4.1-1/1 AND A.4.1-1/4 AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C79 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/15 AND A.4.4-2/39) THEN R ELSE N/A |
| C80 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-2/39) THEN R ELSE N/A |
| C81 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-2/39) THEN R ELSE N/A |
| C82 | IF (A.4.1-1/2 AND A.4.1-1/4 AND A.4.4-1/25 AND A.4.4-2/39) THEN R ELSE N/A |
| C83 | IF (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1/15 AND A.4.4-1/25) THEN R ELSE N/A |
| C84 | IF (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1/5 AND A.4.4-1/15 AND A.4.4-1/25) THEN R |
| | ELSE N/A |
| C85 | IF (A.4.1-1/1 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1/15 AND A.4.4-1/22) THEN R ELSE N/A |
| C86 | IF (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1/22 AND A.4.4-1/25) THEN R ELSE N/A |
| C87 | IF (A.4.1-1/2 AND (A.4.1-1/4 AND NOT A.4.1-1/3) AND A.4.4-1/15) THEN R ELSE N/A |
| C88 | IF (A.4.1-1/1 AND A.4.3-4a/1 AND A.4.4-1/16) THEN R ELSE N/A |
| C89 | IF (A.4.1-1/1 AND A.4.3-4a/1 AND A.4.3-7/2 AND A.4.4-1/16) THEN R ELSE N/A |
| C90 | IF (A.4.1-1/2 AND A.4.3-4a /1 AND A.4.4-1/16) THEN R ELSE N/A |
| C91 | IF (A.4.1-1/1 AND (A.4.6.1-1/3 OR A.4.6.3-1/3 OR A.4.6.3-1/4) AND A.4.4-1/25) THEN R ELSE N/A |
| C92 | IF (A.4.1-1/1 AND (A.4.6.3-1/2 OR A.4.6.2-1/2) AND A.4.4-1/25) THEN R ELSE N/A |
| C93 | IF A.4.1-1/2 AND A.4.3-4a/1 THEN R ELSE N/A |
| C94 | IF A.4.1-1/1 AND A.4.3-4a/1 THEN R ELSE N/A |
| C95 | IF A.4.1-1/1 AND A.4.4-1/5 AND A.4.3-4a/1 THEN R ELSE N/A |
| C96 | IF A.4.1-1/2 AND A.4.4-1/5 AND A.4.3-4a/1 THEN R ELSE N/A |
| Note 1: | Cxxxh applicability is defined for small cell enhancements for physical layer related test. |
| | |

Table 4.2-1b: Number of TC Executions - Notes

Note 1: The Carrier Aggregation TCs verify the same core requirement(s) however with different channel bandwidth configurations, this according to the guidance in TS 36.521-3, Annex C.3.3 [2].

Annex A (normative): ICS proforma for E-UTRA User Equipment

Notwithstanding the provisions of the copyright related to the text of the present document, The Organizational Partners of 3GPP grant that users of the present document may freely reproduce the ICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed ICS.

A.1 Guidance for completing the ICS proforma

A.1.1 Purposes and structure

The purpose of this ICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in relevant specifications may provide information about the implementation in a standardised manner

The ICS proforma is subdivided into clauses for the following categories of information:

- instructions for completing the ICS proforma;
- identification of the implementation;
- identification of the protocol;
- ICS proforma tables (for example: UE implementation types, Teleservices, etc).

A.1.2 Abbreviations and conventions

The ICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [4].

Item column

The item column contains a number which identifies the item in the table.

Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

Reference column

The reference column gives reference to the relevant 3GPP core specifications.

Release column

The release column indicates the earliest release from which the capability or option is relevant.

Comments column

This column is left blank for particular use by the reader of the present document.

References to items

For each possible item answer (answer in the support column) within the ICS proforma there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.4.1-1/2 is the reference to the answer of item 2 in table A.4.1-1.

A.1.3 Instructions for completing the ICS proforma

The supplier of the implementation may complete the ICS proforma in each of the spaces provided. More detailed instructions are given at the beginning of the different clauses of the ICS proforma.

A.2 Identification of the User Equipment

Identification of the User Equipment should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

| | Date of the statement |
|------------------|---|
| A.2.2 UEUT name: | User Equipment Under Test (UEUT) identification |
| | |
| Hardware co | nfiguration: |
| | |
| Software con | figuration: |
| | |
| | |
| | |

E-mail address:

| A.2.3 | Product supplier |
|----------------|--|
| Name: | |
| Address: | |
| | |
| | |
| Telephone i | |
| Facsimile n | umber: |
| E-mail addr | ress: |
| | |
| Additional i | information: |
| | |
| | |
| A.2.4 Name: | Client |
| | |
| Address: | |
| | |
| Telephone i | number: |
| Facility | ······································ |
| Facsimile n | umber. |

| Additional informa | tion: |
|--------------------|------------------|
| | |
| A.2.5 ICS | S contact person |
| Telephone number | |
| Facsimile number: | |
| E-mail address: | |
| Additional informa | tion: |
| ••••• | |

A.3 Identification of the protocol

This ICS proforma applies to the 3GPP standards listed in the normative references clause of the present document.

A.4 ICS proforma tables

A.4.1 UE Implementation Types

Table A.4.1-1: UE Radio Technologies

| Item | UE Radio Technologies | Ref. | Release | Comments |
|------|-----------------------|-----------|---------|----------|
| 1 | E-UTRA FDD | 36.101 | Rel-8 | |
| 2 | E-UTRA TDD | 36.101 | Rel-8 | |
| 3 | UTRA FDD | 25.101 | Rel-99 | |
| 4 | UTRA TDD | 25.102 | Rel-99 | |
| 5 | GSM | 45.005 | Rel-99 | |
| 6 | cdma2000 HRPD | C.S0024-A | Rel-8 | |
| 7 | cdma2000 1xRTT | C.S0002-A | Rel-8 | |

A.4.2 UE Service Capabilities

Table A.4.2-1: UE Radio Technologies

| Item | UE Radio Technologies | Ref. | Release | Comments |
|------|-------------------------|---------------------------------|---------|----------|
| 1 | LTE MBMS | 36.101 | Rel-9 | |
| 2 | LTE CA | 36.101 | Rel-10 | |
| 3 | UL-MIMO | 36.306 subclause 4.3.4.6 | Rel-10 | |
| 4 | eDL-MIMO | 36.306 subclause 4.3.4.7 | Rel-10 | |
| 5 | Enhanced Dual Layer TDD | 36.306 subclause 4.3.4.5 | Rel-9 | |
| 6 | EPDCCH | 36.306 subclause 4.3.4.18 | Rel-11 | |
| 7 | FDD – TDD CA | 36.306 subclause 4.3.4.28 | Rel-12 | |

A.4.3 Baseline Implementation Capabilities

Table A.4.3-1: Supported protocols

| Item | Supported protocols | Ref. | Release | Comments |
|------|----------------------------------|-------------------|---------|----------|
| 1 | EPS Mobility Management | 24.301, 5 | Rel-8 | |
| 2 | EPS Session Management | 24.301, 6 | Rel-8 | |
| 3 | GPRS Mobility Management | 23.060 | R99 | |
| 4 | Radio Resource Control | 36.331 | Rel-8 | |
| 5 | Packet Data Convergence Protocol | 36.323 | Rel-8 | |
| 6 | Radio Link Control | 36.322 | Rel-8 | |
| 7 | Medium Access Control | 36.321 | Rel-8 | |
| 8 | Physical Layer | 36.201, 36.302 | Rel-8 | |

Table A.4.3-2: Special Conformance Testing Functions

| Item | Special Conformance Testing Functions | Ref. | Release | Comments |
|------|--|--------|---------|----------|
| 1 | UE test loop | 36.509 | Rel-8 | |
| | Max UE test loop UL RLC SDU size 65535 bits | 36.509 | Rel-8 | |

Table A.4.3-3: RF Baseline Implementation Capabilities

| Item | RF Baseline Implementation Capabilities | Ref. | Release | Comments |
|------|--|--------------|---------|-------------|
| 1 | Frequency band: 1920-1980, 2110-2170 MHz | 36.101, 5.5 | Rel-8 | FDD Band 1 |
| 2 | Frequency band: 1850-1910, 1930-1990 MHz | 36.101, 5.5 | Rel-8 | FDD Band 2 |
| 3 | Frequency band: 1710-1785, 1805-1880 MHz | 36.101, 5.5 | Rel-8 | FDD Band 3 |
| 4 | Frequency band: 1710-1755, 2110-2155 MHz | 36.101, 5.5 | Rel-8 | FDD Band 4 |
| 5 | Frequency band: 824-849, 869-894 MHz | 36.101, 5.5 | Rel-8 | FDD Band 5 |
| 6 | Frequency band: 830-840, 875-885 MHz | 36.101, 5.5 | Rel-8 | FDD Band 6 |
| 7 | Frequency band: 2500-2570, 2620-2690 MHz | 36.101, 5.5 | Rel-8 | FDD Band 7 |
| 8 | Frequency band: 880-915, 925-960 MHz | 36.101, 5.5 | Rel-8 | FDD Band 8 |
| 9 | Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz | 36.101, 5.5 | Rel-8 | FDD Band 9 |
| 10 | Frequency band: 1710-1770, 2110-2170 MHz | 36.101, 5.5 | Rel-8 | FDD Band 10 |
| 11 | Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz | 36.101, 5.5 | Rel-8 | FDD Band 11 |
| 12 | Frequency band: 699-716, 729-746 MHz | 36.101, 5.5 | Rel-8 | FDD Band 12 |
| 13 | Frequency band: 777-787, 746-756 MHz | 36.101, 5.5 | Rel-8 | FDD Band 13 |
| 14 | Frequency band: 788-798, 758-768 MHz | 36.101, 5.5 | Rel-8 | FDD Band 14 |
| 15 | Reserved | 36.101, 5.5 | Rel-8 | FDD Band 15 |
| 16 | Reserved | 36.101, 5.5 | Rel-8 | FDD Band 16 |
| 17 | Frequency band: 704-716, 734-746 MHz | 36.101, 5.5 | Rel-8 | FDD Band 17 |
| 18 | Frequency band: 815-830, 860-875 MHz | 36.101, 5.5 | Rel-9 | FDD Band 18 |
| 19 | Frequency band: 830-845, 875-890 MHz | 36.101, 5.5 | Rel-9 | FDD Band 19 |
| 20 | Frequency band: 832-862, 791-821MHz | 36.101, 5.5 | Rel-9 | FDD Band 20 |
| 21 | Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz | 36.101, 5.5 | Rel-9 | FDD Band 21 |
| 22 | Frequency band: 3410-3490, 3510-3590 MHz | 36.101, 5.5 | Rel-10 | FDD Band 22 |
| 23 | Frequency band: 2000-2020, 2180-2200 MHz | 36.101, 5.5 | Rel-10 | FDD Band 23 |
| 24 | Frequency band: 1626.5-1660.5, 1525-1559 MHz | 36.101, 5.5 | Rel-10 | FDD Band 24 |
| 25 | Frequency band: 1850-1915, 1930-1995 MHz | 36.101, 5.5 | Rel-10 | FDD Band 25 |
| 26 | Frequency band: 814-849, 859-894 MHz | 36.101, 5.5 | Rel-11 | FDD Band 26 |
| 27 | Frequency band: 807-824, 852-869 MHz | 36.101, 5.5 | Rel-11 | FDD Band 27 |
| 28 | Frequency band: 703-748, 758-803 MHz | 36.101, 5.5 | Rel-11 | FDD Band 28 |
| 29 | Frequency band: N/A, 717-728 MHz | 36.101, 5. 5 | Rel-11 | FDD Band 29 |
| 30 | Frequency band: 2305-2315, 2350-2360 MHz | 36.101, 5.5 | Rel-12 | FDD Band 30 |
| 31 | Frequency band: 452.5-457.5, 462.5-467.5 MHz | 36.101, 5.5 | Rel-12 | FDD Band 31 |
| 32 | Frequency band: N/A, 1452-1496 MHz | 36.101, 5.5 | Rel-12 | FDD Band 32 |
| | | | | <u> </u> |

| 33 | Frequency band: 1900-1920, 1900-1920 MHz | 36.101, 5.5 | Rel-8 | TDD Band 33 | |
|-------|--|-------------|--------|-------------|--|
| 34 | Frequency band: 2010-2025, 2010-2025 MHz | 36.101, 5.5 | Rel-8 | TDD Band 34 | |
| 35 | Frequency band: 1850-1910, 1850-1910 MHz | 36.101, 5.5 | Rel-8 | TDD Band 35 | |
| 36 | Frequency band: 1930-1990, 1930-1990 MHz | 36.101, 5.5 | Rel-8 | TDD Band 36 | |
| 37 | Frequency band: 1910-1930, 1910-1930 MHz | 36.101, 5.5 | Rel-8 | TDD Band 37 | |
| 38 | Frequency band: 2570-2620, 2570-2620 MHz | 36.101, 5.5 | Rel-8 | TDD Band 38 | |
| 39 | Frequency band: 1880-1920, 1880-1920 MHz | 36.101, 5.5 | Rel-8 | TDD Band 39 | |
| 40 | Frequency band: 2300-2400, 2300-2400 MHz | 36.101, 5.5 | Rel-8 | TDD Band 40 | |
| 41 | Frequency band: 2496-2690, 2496-2690 MHz | 36.101, 5.5 | Rel-10 | TDD Band 41 | |
| 42 | Frequency band: 3400-3600, 3400-3600 MHz | 36.101, 5.5 | Rel-10 | TDD Band 42 | |
| 43 | Frequency band: 3600-3800, 3600-3800 MHz | 36.101, 5.5 | Rel-10 | TDD Band 43 | |
| 44 | Frequency band: 703-803, 703-803 MHz | 36.101, 5.5 | Rel-11 | TDD Band 44 | |
| Note: | Note: The values indicated in column "Release" are to be understood as the specifications release version in which a band was introduced and not as a mandate that a UE conforming to particular release shall support a particular band. For further guidance to release independent bands see TS 36.307 [16] | | | | |

Table A.4.3-3a: RF Additional Baseline Implementation Capabilities

| Item | RF Additional Baseline Implementation Capabilities | Ref. | Comments |
|------|--|------------------|--|
| 1 | Support of 1.4 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 1.4 MHz Bandwidth: 2, 3, 4, 5, 8, 12, 23, 25, 26, 27, 31, 35, 36 |
| 2 | Support of 3 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 3 MHz Bandwidth: 2, 3, 4, 5, 8, 12, 23, 25, 26, 27, 28, 31, 35, 36, 44 |
| 3 | Support of 5 MHz channel bandwidth | 36.101, 5.6.1 | All operating bands support 5 MHz Bandwidth |
| 4 | Support of 10 MHz channel bandwidth | 36.101, 5.6.1 | All operating bands support 10 MHz Bandwidth except band 31 |
| 5 | Support of 15 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 15 MHz Bandwidth: 1, 2, 3, 4, 7, 9, 10, 18, 19, 20, 21, 22, 23, 25, 26, 28, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 |
| 6 | Support of 20 MHz channel bandwidth | 36.101, 5.6.1 | Operating bands supporting 20MHz Bandwidth: 1, 2, 3, 4, 7, 9, 10, 20, 22, 23, 25, 28, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44 |

Table A.4.3-3b: Additional UE Power Class implementation Capabilities

| Item | RF baseline UE Baseline implementation capability | Ref. | Comments |
|------|---|---------|-----------------------|
| 1 | UE Power Class 1 | 36.101, | Applicable to Band 14 |
| | | 6.2.2 | |
| 2 | UE Power Class 3 | 36.101, | All applicable E-UTRA |
| | | 6.2.2 | bands |

Table A.4.3-4: UE Category

| Item | UE Category | Ref. | Release | Comments |
|------|-------------|-------------|---------|-------------------------|
| 1 | Category 1 | 36.306, 4.1 | Rel-8 | |
| 2 | Category 2 | 36.306, 4.1 | Rel-8 | |
| 3 | Category 3 | 36.306, 4.1 | Rel-8 | |
| 4 | Category 4 | 36.306, 4.1 | Rel-8 | |
| 5 | Category 5 | 36.306, 4.1 | Rel-8 | Support for 64QAM in UL |
| 6 | Category 6 | 36.306, 4.1 | Rel-10 | |
| 7 | Category 7 | 36.306, 4.1 | Rel-10 | |
| 8 | Category 8 | 36.306, 4.1 | Rel-10 | Support for 64QAM in UL |
| 9 | Category 9 | 36.306, 4.1 | Rel-11 | |
| 10 | Category 10 | 36.306, 4.1 | Rel-11 | |
| 11 | Category 11 | 36.306, 4.1 | Rel-11 | |
| 12 | Category 12 | 36.306, 4.1 | Rel-11 | |

Table A.4.3-4a: UE Downlink Category

| Item | UE Category | Ref. | Release | Comments |
|------|----------------|--------------|---------|--|
| 1 | Category DL 0 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 0 |
| 2 | Category DL 6 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 5 |
| 3 | Category DL 7 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 13 |
| 4 | Category DL 9 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 5 |
| 5 | Category DL 10 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 13 |
| 6 | Category DL 11 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 5 |
| 7 | Category DL 12 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 13 |
| 8 | Category DL 13 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 |
| 9 | Category DL 14 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 8 |
| 10 | Category DL 15 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 |
| 11 | Category DL 16 | 36.306, 4.1A | Rel-12 | Only in combination with Category UL 3 or Category UL 5 or Category UL 7 or Category UL 13 |

Table A.4.3-4b: UE Uplink Category

| Item | UE Category | Ref. | Release | Comments |
|------|----------------|--------------|---------|--|
| 1 | Category UL 0 | 36.306, 4.1A | Rel-12 | Only in combination with Category DL 0 |
| 2 | Category UL 3 | 36.306, 4.1A | Rel-12 | Only in combination with Category DL 13, Category DL 15 or Category DL 16 |
| 3 | Category UL 5 | 36.306, 4.1A | Rel-12 | Only in combination with Category DL 6, Category DL 9, Category DL 11, Category DL 13, Category DL 15 or Category DL 16 |
| 4 | Category UL 7 | 36.306, 4.1A | Rel-12 | Only in combination with Category DL 13, Category DL 15 or Category DL 16 |
| 5 | Category UL 8 | 36.306, 4.1A | Rel-12 | Only in combination with Category DL 14 |
| 6 | Category UL 13 | 36.306, 4.1A | Rel-12 | Only in combination with Category DL 7, Category DL 10, Category DL 12, Category DL 13, Category DL 15 or Category DL 16 |

Table A.4.3-5: Void

Table A.4.3-6: Void

Table A.4.3-7: Additional capabilities

| Item | Additional capabilities | Ref. | Release | Comments |
|------|--|--|---------|--|
| 1 | Enhanced performance requirements type A for LTE | 36.101, Clause 8 | Rel-11 | Support for Enhanced performance requirements |
| | 212 | Ciddoo o | | type A |
| 2 | Support of Type B Half-duplex FDD operation | 36.211, 6,2,5 | Rel-12 | Support of Half-duplex FDD operation type B for |
| | | 36.306, 4.2.6 | | category 0 ÜE |
| 3 | Enhanced performance requirements type C for LTE | 36.101, Clause 8 | Rel-12 | Support for Enhanced performance requirements type C |
| 4 | Enhanced performance requirements type B for LTE | 36.101, Clause 8 36.306, 4.3.4.35 | Rel-12 | Support for Enhanced performance requirements type B |

Table A.4.3-8: Void

A.4.4 Feature group indicators

In Table A.4.4-1, a 'VoLTE capable UE' corresponds to a UE that is capable of the "Voice domain preference for E-UTRAN" defined in TS 24.301 [15] being set to "IMS PS voice only", "IMS PS voice preferred, CS voice as secondary" or "CS voice preferred, IMS PS voice as secondary" (Ref TS 36.331 [14], clause B.1).

Note 1: From Rel-11 onwards 3GPP TSG RAN has discontinued the usage of FGI bits. Instead it has introduced a different mechanism to accomplish the same purposes based on the principles described in TS 36.306 [17] clause 4. This new principles where applicable have been catered for in section A.4.5, e.g. Table A.4.5-2.

Table A.4.4-1: Feature group indicators 1-32

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|-------|---|---------|-------------------|---------------|---|
| 1 | Support of - Intra-subframe frequency hopping for PUSCH scheduled by UL grant - DCI format 3a (TPC commands for PUCCH and PUSCH with single bit power adjustments) - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 – UE selected subband CQI without PMI - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 – UE selected subband CQI with multiple PMI | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_1 | Corresponding to the Index of Indicator, the leftmost binary bit 1. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|---|---|---------|-------------------|---------------|---|
| 2 | Support of - Simultaneous CQI and ACK/NACK on PUCCH, i.e. PUCCH format 2a and 2b - Absolute TPC command for PUSCH - Resource allocation type 1 for PDSCH - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 – UE selected subband CQI without PMI - Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 – UE selected subband CQI with single PMI | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_2 | Corresponding to the Index of Indicator, the leftmost binary bit 2. Set to true if supporting all functionalities in the feature group. |
| 3 | Support of - Semi-persistent scheduling - TTI bundling - 5bit RLC UM SN - 7bit PDCP SN Support of | - can only be set to 1 if the UE has set bit number 7 to 1. | Yes, if UE | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_3 | Corresponding to the Index of Indicator, the leftmost binary bit 3. Set to true if supporting all functionalities in the feature group. |
| | - 5bit RLC UM SN | set to 1 if the | | Rel-10 | | | |

| Item | Additional information | | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|---|---|----------------|-------------------|---------------|---|
| | - 7bit PDCP SN | to 1. | Yes, if UE supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN. | Rel-11 | | | |
| 4 | Support of - Short DRX cycle | - can only be set to 1 if the UE has set bit number 5 to 1. | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_4 | Corresponding to the Index of Indicator, the leftmost binary bit 4. Set to true if supporting all functionalities in the feature group. |
| 5 | Support of - Long DRX cycle - DRX command MAC control element | | Yes | Rel-8 Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_5 | Corresponding to the Index of Indicator, the leftmost binary bit 5. Set to true if supporting all functionalities in the feature group. |
| 6 | Support of - Prioritized bit rate | | Yes | Rel-8 Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_6 | Corresponding to the Index of Indicator, the leftmost binary bit 6. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|---|---|--------------------|-------------------|---------------|---|
| 7 | Support of - RLC UM | | Yes, if UE supports VoLTE Yes, if UE supports VoLTE. Yes, if UE supports SRVCC to EUTRAN from GERAN. | Rel-9 Rel-11 | 36.331, Annex B.1 | pc_FeatrGrp_7 | Corresponding to the Index of Indicator, the leftmost binary bit 7. Set to true if supporting all functionalities in the feature group. |
| 8 | Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH PS handover Support of - EUTRA RRC_CONNECTED to UTRA FDD or UTRA TDD CELL_DCH PS handover, if the UE supports either only UTRAN FDD or only UTRAN TDD - EUTRA RRC_CONNECTED to UTRA FDD CELL_DCH PS handover, if the UE supports both UTRAN FDD and UTRAN TDD | - can only be set to 1 if the UE has set bit number 22 to 1 | Yes, if UE supports UTRA | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_8 | Corresponding to the Index of Indicator, the leftmost binary bit 8. Set to true if supporting all functionalities in the feature group. |
| 9 | Support of - EUTRA RRC_CONNECTED to GERAN GSM_Dedicated handover | - related to SR-VCC | | Rel-8 to Rel-10 | 36.331, Annex B.1 | pc_FeatrGrp_9 | Corresponding to the Index of Indicator, the leftmost binary bit 9. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|--|---|--------|-------------------|----------------|--|
| | | - can only be set to 1 if the UE has set bit number 23 to 1 | | Rel-11 | | | Set to true if supporting all functionalities in the feature group. |
| 10 | Support of - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order - EUTRA RRC_CONNECTED to GERAN (Packet_)Idle by Cell Change Order with NACC (Network Assisted Cell Change) | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_10 | Corresponding to the Index of Indicator, the leftmost binary bit 10. Set to true if supporting all functionalities in the feature group. |
| 11 | Support of - EUTRA RRC_CONNECTED to CDMA2000 1xRTT CS Active handover | - can only be set to 1 if the UE has sets bit number 24 to 1 | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_11 | Corresponding to the Index of Indicator, the leftmost binary bit 11. Set to true if supporting all functionalities in the feature group. |
| 12 | Support of - EUTRA RRC_CONNECTED to CDMA2000 HRPD Active handover | - can only be set to 1 if the UE has set bit number 26 to 1 | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_12 | Corresponding to the Index of Indicator, the leftmost binary bit 12. Set to true if supporting all functionalities in the feature group. |
| 13 | Support of | - can only be set to 1 if the | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_13 | Corresponding to the Index of Indicator, the |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|-------------------------------------|---|---------|-------------------|----------------|--|
| | - Inter-frequency handover (within FDD or TDD) | UE has set bit number 25 to 1 | Yes, unless UE only supports band 13 | Rel-9 | | | leftmost binary bit 13. Set to true if supporting all functionalities in the feature group. |
| 14 | Support of | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_14 | Corresponding to the Index of Indicator, the |
| | Measurement reporting event: Event A4 - Neighbour > threshold Measurement reporting event: Event A5 - Serving < threshold 1 & Neighbour > threshold2 | | Yes | Rel-9 | | | leftmost binary bit 14. Set to true if supporting all functionalities in the feature group. |
| 15 | Support of - Measurement reporting event: Event B1 - Neighbour > threshold for | - can only be set to 1 if the | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_15 | Corresponding to the Index of Indicator, the |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|---|---|-------|-------------------|----------------|--|
| | UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Measurement reporting event: Event B1 - Neighbour > threshold for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively | least one of the bit number 22, 23, 24, 26 or 39 to 1. - even if the | UTRAN TDD or GERAN or 1xRTT or HRPD | Rel-9 | | | leftmost binary bit 15. Set to true if supporting all functionalities in the feature group. |
| 16 | Support of - Intra-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells; - Inter-frequency periodical measurement reporting where triggerType | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_16 | Corresponding to the Index of Indicator, the leftmost binary bit 16. Set to true if supporting all |

| ltem | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|-------|---|-------|------|----------|---------------------------------------|
| | is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportStrongestCells</i> , if the UE has set bit number 25 to 1; and - Inter-RAT periodical measurement reporting where <i>triggerType</i> is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportStrongestCells</i> for UTRAN, GERAN, 1xRTT or HRPD, if the UE has set bit number 22, 23, 24 or 26 to 1, respectively. | | Yes | Rel-9 | | | functionalities in the feature group. |
| | NOTE: Event triggered periodical reporting (i.e. with <i>triggerType</i> set to <i>event</i> and with <i>reportAmount</i> > 1) is a mandatory functionality of event triggered reporting and therefore not the subject of this bit. | | | | | | |
| | Support of | | | | | | |
| | - Intra-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells | | | | | | |
| | - Inter-frequency periodical measurement reporting where <i>triggerType</i> is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportStrongestCells</i> , if the UE has set bit number 25 to 1 | | | | | | |
| | - Inter-RAT periodical measurement reporting where <i>triggerType</i> is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportStrongestCells</i> for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 | | | | | | |
| | - Inter-RAT periodical measurement reporting where <i>triggerType</i> is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportStrongestCells</i> for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively | ET | ş <i>ı</i> | | | | |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|---|---|----------------|-------------------|----------------|--|
| 17 | Support of Intra-frequency ANR features including: - Intra-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells - Intra-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 to 1. | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_17 | Corresponding to the Index of Indicator, the leftmost binary bit 17. Set to true if supporting all functionalities in the feature group. |
| 18 | Support of Inter-frequency ANR features including: - Inter-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells - Inter-frequency periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 to 1. | | Rel-8 Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_18 | Corresponding to the Index of Indicator, the leftmost binary bit 18. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|---|---|---------|-------------------|----------------|--|
| 19 | - Inter-RAT periodical measurement reporting where <i>triggerType</i> is set to <i>periodical</i> and <i>purpose</i> is set to <i>reportStrongestCells</i> for GERAN, if the UE has set bit number 23 to 1 - Inter-RAT periodical measurement reporting where <i>triggerType</i> is set | - can only be set to 1 if the UE has set bit number 5 to 1 and the UE has set at least one of the bit number 22, 23, 24 or 26 to 1. | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_19 | Corresponding to the Index of Indicator, the leftmost binary bit 19. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|--|---|---------|------|----------|----------|
| | Support of Inter-RAT ANR features including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells for GERAN, if the UE has set bit number 23 to 1 - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRAN TDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON for 1xRTT or HRPD, if the UE has set bit number 24 or 26 to 1, respectively - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI for UTRAN FDD or UTRAN TDD, if the UE supports either only UTRAN FDD or only UTRANTDD and has set bit number 22 to 1 - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI for UTRAN FDD or UTRAN TDD, if the UE supports both UTRAN FDD and UTRAN TDD and has set bit number 22 or 39 to 1, respectively - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI for GERAN, 1xRTT or HRPD, if the UE has set bit number 23, 24 or 26 to 1, respectively | - can only be set to 1 if the UE has set bit number 5 to 1 and the UE has set at least one of the bit number 22, 39, 23, 24 or 26 to 1. - even if the UE sets bits 33 to 37, it shall still set bit 19 to 1 if inter-RAT ANR features are tested for all RATs for which inter-RAT measuremen t reporting is indicated as tested | | Rel-9 | | | |

| Item | Additional information | | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments | |
|------|--|--|---|-------|-------------------|----------|---|--|
| | If bit number 7 is set to "0": - SRB1 and SRB2 for DCCH + 8x AM DRB If bit number 7 is set to "1": | - Regardless of what bit number 7 and bit number 20 is set to, UE | | Rel-8 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 20. Set to true if supporting all functionalities in the | |
| | - SRB1 and SRB2 for DCCH + 8x AM DRB - SRB1 and SRB2 for DCCH + 5x AM DRB + 3x UM DRB | shall support at least SRB1 and SRB2 for DCCH + 4x | Yes | Rel-9 | | | feature group. | |
| | NOTE: UE which indicate support for a DRB combination also support all subsets of the DRB combination. Therefore, release of DRB(s) never results in an unsupported DRB combination. | AM DRB | AM DRB - Regardless of what bit number 20 is set to, if bit number 7 is set to "1", UE shall support at least SRB1 and SRB2 for DCCH + 4x AM DRB + 1x UM | | | | | |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|-------|---|---------|-------------------|----------------|--|
| | Support of $\label{eq:continuous} \ - \ Predefined \ intra- \ and \ inter-subframe \ frequency \ hopping \ for \ PUSCH \ with \ N_sb > 1$ $\ - \ Predefined \ inter-subframe \ frequency \ hopping \ for \ PUSCH \ with \ N_sb > 1$ | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_21 | Corresponding to the Index of Indicator, the leftmost binary bit 21. Set to true if supporting all functionalities in the feature group. |
| | Support of - UTRAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode Support of - UTRAN FDD or UTRAN TDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports either only UTRAN FDD or only UTRAN TDD - UTRAN FDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports both UTRAN FDD and UTRAN TDD | | Yes for FDD, if UE supports UTRA FDD | Rel-8 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 22. Set to true if supporting all functionalities in the feature group. |
| | Support of - GERAN measurements, reporting and measurement reporting event B2 in E-UTRA connected mode | | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_23 | Corresponding to the Index of Indicator, the leftmost binary bit 23. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|------------------------|---|-------|-------------------|----------------|--|
| | Support of - 1xRTT measurements, reporting and measurement reporting event B2 in E-UTRA connected mode | | Yes, if UE supports enhanced 1xRTT CSFB | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_24 | Corresponding to the Index of Indicator, the leftmost binary bit 24. Set to true if supporting all functionalities in the feature group. |
| 25 | Support of - Inter-frequency measurements and reporting in E-UTRA connected mode NOTE: The UE setting this bit to 1 and indicating support for FDD and TDD frequency bands in the UE capability signalling implements and is tested for FDD measurements while the UE is in TDD, and for TDD measurements while the UE is in FDD. | | Yes, unless UE only supports band 13 | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_25 | Corresponding to the Index of Indicator, the leftmost binary bit 25. Set to true if supporting all functionalities in the feature group. |
| 26 | Support of - HRPD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode | | Yes, if UE supports HRPD | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_26 | Corresponding to the Index of Indicator, the leftmost binary bit 26. Set to true if supporting all functionalities in the feature group. |
| 27 | Support of - EUTRA RRC_CONNECTED to UTRA CELL_DCH CS handover | - related to SR-VCC | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_27 | Corresponding to the Index of Indicator, the |

| Item | Additional information | | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|-----------------|---|-------|-------------------|----------------|---|
| | Support of - EUTRA RRC_CONNECTED to UTRA FDD or UTRA TDD CELL_DCH CS handover, if the UE supports either only UTRAN FDD or only UTRAN TDD - EUTRA RRC_CONNECTED to UTRA FDD CELL_DCH CS handover, if the UE supports both UTRAN FDD and UTRAN TDD | set to 1 if the | VoLTE and | Rel-9 | | | leftmost binary bit 27. Set to true if supporting all functionalities in the feature group. |
| 28 | Support of - TTI bundling | | Yes for FDD | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_28 | Corresponding to the Index of Indicator, the leftmost binary bit 28. Set to true if supporting all functionalities in the feature group. |
| 29 | Support of - Semi-Persistent Scheduling | | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_29 | Corresponding to the Index of Indicator, the leftmost binary bit 29. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|---|--|---|--------------------|-------------------|----------------|---|
| 30 | Support of - Handover between FDD and TDD | - can only be set to 1 if the UE has set bit number 13 to 1 | | Rel-8 | 36.331, Annex B.1 | pc_FeatrGrp_30 | Corresponding to the Index of Indicator, the leftmost binary bit 30. Set to true if supporting all functionalities in the feature group. |
| 31 | Support of - Indicates whether the UE supports the mechanisms defined for cells broadcasting multi band information i.e. comprehending multiBandInfoList, disregarding in RRC_CONNECTED the related system information fields and understanding the EARFCN signalling for all bands, that overlap with the bands supported by the UE, and that are defined in the earliest version of TS 36.101 [42] that includes all UE supported bands. | - In this release of the protocol, this bit will never be mandated to be set to 1 - This FGI bit concerns an optional release independent feature (as it was difficult to introduce this from REL-8 when using regular UE capability signalling) | Yes | Rel-8 Rel-9 Rel-10 | 36.331, Annex B.1 | pc_FeatrGrp_31 | Corresponding to the Index of Indicator, the leftmost binary bit 31. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | | Ref. | Mnemonic | Comments |
|------|------------------------|-------|---|-------|-------------------|----------|--|
| 32 | Undefined | | | Rel-8 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 32. |

Table A.4.4-2: Feature group indicators 33-64

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|---|---|---------|-------------------|----------------|--|
| 33 | Inter-RAT ANR features for UTRAN including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and bit number 22 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_33 | Corresponding to the Index of Indicator, the leftmost binary bit 33. Set to true if supporting all functionalities in the feature group. |
| 34 | Inter-RAT ANR features for GERAN including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCells - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and bit number 23 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_34 | Corresponding to the Index of Indicator, the leftmost binary bit 34. Set to true if supporting all functionalities in the feature group. |
| 35 | Inter-RAT ANR features for 1xRTT including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and bit number 24 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_35 | Corresponding to the Index of Indicator, the leftmost binary bit 35. Set to true if supporting all functionalities in the feature group. |
| 36 | Inter-RAT ANR features for HRPD including: - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON - Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and bit number 26 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_36 | Corresponding to the Index of Indicator, the leftmost binary bit 36. Set to true if supporting all functionalities in the feature group. |

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| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|---|--|---|---------|-------------------|----------------|---|
| 37 | Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportStrongestCellsForSON Inter-RAT periodical measurement reporting where triggerType is set to periodical and purpose is set to reportCGI | - can only be set to 1 if the UE has set bit number 5 and at least one of the bit number 22 (for UEs supporting only UTRA TDD) or the bit number 39 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_37 | Corresponding to the Index of Indicator, the leftmost binary bit 37. Set to true if supporting all functionalities in the feature group. |
| 38 | TDD | - can only be set to 1 if the UE has set bit number 39 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_38 | Corresponding to the Index of Indicator, the leftmost binary bit 38. Set to true if supporting all functionalities in the feature group. |
| 39 | -UTRAN TDD measurements, reporting and measurement reporting event B2 in E-UTRA connected mode, if the UE supports both UTRAN FDD and UTRAN TDD | | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_39 | Corresponding to the Index of Indicator, the leftmost binary bit 39. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|--|---|---------|-------------------|----------------|---|
| | -EUTRA RRC_CONNECTED to UTRA TDD CELL_DCH CS handover, if the UE supports both UTRAN FDD and UTRAN TDD | - related to SR-VCC - can only be set to 1 if the UE has set bit number 38 to 1. | | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_40 | Corresponding to the Index of Indicator, the leftmost binary bit 40. Set to true if supporting all functionalities in the feature group. |
| | Measurement reporting event: Event B1 - Neighbour > threshold for UTRAN FDD, if the UE supports UTRAN FDD and has set bit number 22 to 1 | | Yes for FDD, unless UE has set bit number 15 to 1 | Rel-9 | 36.331, Annex B.1 | pc_FeatrGrp_41 | Corresponding to the Index of Indicator, the leftmost binary bit 41. Set to true if supporting all functionalities in the feature group. |
| 42 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 42. |
| 43 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 43. |
| 44 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 44. |
| 45 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 45. |
| 46 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 46. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|------------------------|-------|---|---------|-------------------|----------|--|
| 47 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 47. |
| 48 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 48. |
| 49 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 49. |
| 50 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 50. |
| 51 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 51. |
| 52 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 52. |
| 53 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 53. |
| 54 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 54. |
| 55 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 55. |
| 56 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 56. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|------------------------|-------|---|---------|-------------------|----------|--|
| 57 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 57. |
| 58 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 58. |
| 59 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 59. |
| 60 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 60. |
| 61 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 61. |
| 62 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 62. |
| 63 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 63. |
| 64 | Undefined | | | Rel-9 | 36.331, Annex B.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 64. |

Table A.4.4-3: Feature group indicators 101-132

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|---|---|---------|-------------------|-----------------|---|
| 101 | - DMRS with OCC (orthogonal cover code) and SGH (sequence group hopping) disabling | - if the UE supports two or more layers for spatial multiplexing in UL, this bit shall be set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_101 | Corresponding to the Index of Indicator, the leftmost binary bit 101. Set to true if supporting all functionalities in the feature group. |
| | | - If a category 0 UE does not support this feature, this bit shall be set to 0. | | Rel-12 | | | |
| 102 | - Trigger type 1 SRS (aperiodic SRS) transmission (Up to X ports) | | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_102 | Corresponding to the Index of Indicator, the leftmost binary bit 102. Set to true if supporting all functionalities in the feature group. |
| | NOTE: X = number of supported layers on given band | | | | | | |
| 103 | - PDSCH transmission mode 9 when up to 4 CSI reference signal ports are configured | - for Category 8 UEs, this bit shall be set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_103 | Corresponding to the Index of Indicator, the leftmost binary bit 103. Set to true if supporting all functionalities in the feature group. |
| 104 | - PDSCH transmission mode 9 for TDD when 8 CSI reference signal ports are configured | - if the UE does not support TDD, this bit is irrelevant (capability signalling exists for FDD for this feature), and this bit shall be set to 0. - for Category 8 UEs, this bit shall be set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_104 | Corresponding to the Index of Indicator, the leftmost binary bit 104. Set to true if supporting all functionalities in the feature group. |
| 105 | Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-0 – UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured Periodic CQI/PMI/RI reporting on PUCCH: Mode 2-1 – UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured | - this bit can be set to 1 only if indices 2 (Table B.1-1) and 103 are set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_105 | Corresponding to the Index of Indicator, the leftmost binary bit 105. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|--|---|---------|-------------------|-----------------|---|
| | | - For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if index 2 is set to 1 for both FDD and TDD, and index 103 is set to 1 either for FDD and TDD. | | Rel-12 | | | |
| 106 | - Periodic CQI/PMI/RI/PTI reporting on PUCCH: Mode 2-1 – UE selected subband CQI with single PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9-With-8Tx-FDD- r10 is set to "supported") and if index 2 (Table B.1-1) is set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_106 | Corresponding to the Index of Indicator, the leftmost binary bit 106. Set to true if supporting all functionalities in the feature group. |
| | | - For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to "supported", and if index 2 is set to 1 for both FDD and TDD. | | Rel-12 | | | |
| 107 | Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-0 – UE selected subband CQI without PMI, when PDSCH transmission mode 9 is configured Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 – UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and up to 4 CSI reference signal ports are configured | - this bit can be set to 1 only if indices 1 (Table B.1-1) and 103 are set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_107 | Corresponding to the Index of Indicator, the leftmost binary bit 107. Set to true if supporting all functionalities in the feature group. |
| 108 | - Aperiodic CQI/PMI/RI reporting on PUSCH: Mode 2-2 – UE selected subband CQI with multiple PMI, when PDSCH transmission mode 9 and 8 CSI reference signal ports are configured | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9-With-8Tx-FDD- r10 is set to "supported") and if index 1 (Table B.1-1) is set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_108 | Corresponding to the Index of Indicator, the leftmost binary bit 108. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|--|--|---|---------|-------------------|-----------------|---|
| 109 | - Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 1 | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9-With-8Tx-FDD- r10 is set to "supported"). | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_109 | Corresponding to the Index of Indicator, the leftmost binary bit 109. Set to true if supporting all functionalities in the feature group. |
| | | - For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to "supported". | | Rel-12 | | | |
| 110 | - Periodic CQI/PMI/RI reporting on PUCCH Mode 1-1, submode 2 | - this bit can be set to 1 only if the UE supports PDSCH transmission mode 9 with 8 CSI reference signal ports (i.e., for TDD, if index 104 is set to 1, and for FDD, if tm9-With-8Tx-FDD- r10 is set to "supported"). | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_110 | Corresponding to the Index of Indicator, the leftmost binary bit 110. Set to true if supporting all functionalities in the feature group. |
| | | - For UEs capable of TDD-FDD CA, this bit can be set to 1 for both FDD and TDD if either index 104 is set to 1 or tm9-With-8Tx-FDD-r10 is set to "supported". | | Rel-12 | | | |
| 111 | - Measurement reporting trigger Event A6 | - this bit can be set to 1 only if the UE supports carrier aggregation. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_111 | Corresponding to the Index of Indicator, the leftmost binary bit 111. Set to true if supporting all functionalities in the feature group. |
| 112 | - SCell addition within the Handover to EUTRA procedure | - this bit can be set to 1 only if the UE supports carrier aggregation and the Handover to EUTRA procedure. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_112 | Corresponding to the Index of Indicator, the leftmost binary bit 112. Set to true if supporting all functionalities in the feature group. |

| Item | Additional information | Notes | If indicated "Yes" the | Release | Ref. | Mnemonic | Comments |
|------|--|--|--|---------|-------------------|-----------------|---|
| | | | feature shall be implemented and successfully tested for the corresponding release | | | | |
| 113 | - Trigger type 0 SRS (periodic SRS) transmission on X Serving Cells NOTE: X = number of supported component carriers in a given band combination | - this bit can be set to 1 only if the UE supports carrier aggregation in UL. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_113 | Corresponding to the Index of Indicator, the leftmost binary bit 113. Set to true if supporting all functionalities in the feature group. |
| 114 | - Reporting of both UTRA CPICH RSCP and Ec/N0 in a Measurement Report | - this bit can be set to 1 only if index 22 (Table B.1-1) is set to 1. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_114 | Corresponding to the Index of Indicator, the leftmost binary bit 114. Set to true if supporting all functionalities in the feature group. |
| 115 | - time domain ICIC RLM/RRM measurement subframe restriction for the serving cell - time domain ICIC RRM measurement subframe restriction for neighbour cells - time domain ICIC CSI measurement subframe restriction | | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_115 | Corresponding to the Index of Indicator, the leftmost binary bit 115. Set to true if supporting all functionalities in the feature group. |
| 116 | - Relative transmit phase continuity for spatial multiplexing in UL | - this bit can be set to 1 only if the UE supports two or more layers for spatial multiplexing in UL. | | Rel-10 | 36.331, Annex C.1 | pc_FeatrGrp_116 | Corresponding to the Index of Indicator, the leftmost binary bit 116. Set to true if supporting all functionalities in the feature group. |
| 117 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 117. |
| 118 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 118. |
| 119 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 119. |
| 120 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 120. |
| 121 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 121. |
| 122 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 122. |

| Item | Additional information | Notes | If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release | Release | Ref. | Mnemonic | Comments |
|------|------------------------|-------|---|---------|-------------------|----------|---|
| 123 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 123. |
| 124 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 124. |
| 125 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 125. |
| 126 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 126. |
| 127 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 127. |
| 128 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 128. |
| 129 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 129. |
| 130 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 130. |
| 131 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 131. |
| 132 | Undefined | | | Rel-10 | 36.331, Annex C.1 | | Corresponding to the Index of Indicator, the leftmost binary bit 132. |

A.4.5 Additional information

Table A.4.5-1: Additional UE radio access capabilities

| Item | Additional capabilities | Ref. | Release | Comments |
|------|--|----------------------------|---------|---|
| 1 | Support of CSG | 36.331, Annex B.2 | Rel-8 | |
| 2 | Support of intra-frequency SI acquisition for HO | 36.306, 4.3.11.1 | Rel-9 | |
| 3 | Support of inter-frequency SI acquisition for HO | 36.306, 4.3.11.2 | Rel-9 | |
| 4 | Need for inter-frequency gaps (Note 1) | 36.306, 4.3.6.1 | Rel-8 | |
| 5 | Need for inter-RAT gaps (Note 1) | 36.306, 4.3.6.1 | Rel-8 | |
| 6 | Support of E-UTRA Band 31 only | 36.133, A.3.7.2 | Rel-12 | |
| 7 | Support of rsrqMeasWideband | 36.306, 4.3.6.2 | Rel-11 | |
| 8 | Support of Maximum CSI processes of One on a component carrier within a band with PDSCH transmission mode 10 | 36.306, 4.3.5.5 | Rel-11 | |
| 9 | Void | | | |
| 10 | Disable E-UTRA capability if IMSVoIP not supported by the network | 23.221 7.2a, 24.301 4.5 | Rel-8 | pc_Disable_E- UTRA_NOIMSVoIP |
| 11 | Support of Maximum CSI processes of Three on a component carrier within a band with PDSCH transmission mode 10 | 36.306, 4.3.5.5 | Rel-11 | |
| 12 | Support of Maximum CSI processes of Four on a component carrier within a band with PDSCH transmission mode 10 | 36.306, 4.3.5.5 | Rel-11 | |
| 13 | Support of multiClusterPUSCH-WithinCC-r10 | 36.306, 4.3.4.13 | Rel-10 | |
| 14 | Support of FDD-TDD CA with PCell in TDD band | 36.306, 4.3.4.28 | | The UE may not send the IE tdd-FDD-CA-PCellDuplex-r12 |
| 15 | Support of FDD-TDD CA with PCell in FDD band | 36.306, 4.3.4.28 | | The UE may not send the IE tdd-FDD-CA-PCellDuplex-r12 |
| 16 | Support of interRAT-PS-HO-ToGERAN | 36.306, 4.3.7.11 | Rel-8 | |
| 17 | Void | | | |
| 18 | Support of 256QAM in DL | 36.306, 4.3.5.7 | Rel-12 | |
| 19 | Support CRS based discovery signals measurement | 36.306,4.3.6.9 | Rel-12 | |
| 20 | Support CSI-RS based discovery signals measurement | 36.306,4.3.6.10 | Rel-12 | |

| 21 | Support the behaviour on DL signals and physical | 36.306,4.3.4.38 | Rel-12 | | | | |
|--------|--|-----------------|--------|---|--|--|--|
| | channels when SCell is deactivated and discovery | | | | | | |
| | signals measurement is configured | | | | | | |
| | | | | | | | |
| Note 1 | Note 1: Need for inter-frequency gaps or inter-RAT gaps indicates that the UE does not support corresponding | | | | | | |
| | measurement without gaps. | | | - | | | |

Table A.4.5-2: Additional UE radio access capabilities (Mandatory for Rel-11 and onward)

| Item | Additional capabilities | Ref. | Release | Status (Note 1) | Support (Note 2) | Comments |
|--|--|---------------------|---------|--------------------|---------------------|---------------------------------------|
| 1 | UE supports CRS interference handling | 36.306, 4.3.4.15 | Rel-11 | O.01 | | This is a Rel-11 Mandatory feature |
| 2 | UE supports ss-CCH interference handling | 36.306, 4.3.4.20 | Rel-11 | O.01 | | This is a Rel-11 Mandatory feature |
| Note 1: From Rel-11 onwards 3GPP TSG RAN has discontinued the usage of FGI bits (see A.4.4). Instead it has introduced a different mechanism to accomplish the same purposes based on the following principles (TS 36 306 [17] clause 4): For optional features, the LIE radio access capability parameter indicates whether the | | | | | | |

introduced a different mechanism to accomplish the same purposes based on the following principles (TS 36.306 [17] clause 4): 'For optional features, the UE radio access capability parameter indicates whether the feature has been implemented and successfully tested. For mandatory features with the UE radio access capability parameter, the parameter indicates whether the feature has been successfully tested.'

Reflecting this situation, in the present table the status for Mandatory features would be indicated as conditional Optional (O.xx) until IOT testing availability is ensured. The decision when IOT testing availability can be considered ensured is made by 3GPP TSG RAN. After the 3GPP TSG RAN decision that IOT testing is available, the status of the capability parameter will be changed to Mandatory (M) and the release from which this requirement apply would be explicitly stated.

Note 2: If indicated "Yes" the feature shall be implemented and successfully tested for the corresponding release.

Table A.4.5-2a: Additional UE radio access capabilities Conditions

| O.01 | IF The feature has been IOT-ed THEN Support shall be indicated ELSE Support shall not be indicated |
|------|--|
| 0.01 | ii The realtie has been to real trich oupport shall be indicated be oupport shall not be indicated |

Table A.4.5-3: UL MIMO Capabilities

| Item | RF Baseline Implementation Capabilities | Ref. | Comments |
|------|--|--------------|-------------|
| 1 | Frequency band: 1920-1980, 2110-2170 MHz | 36.101, 5.5 | FDD Band 1 |
| 2 | Frequency band: 1850-1910, 1930-1990 MHz | 36.101, 5.5 | FDD Band 2 |
| 3 | Frequency band: 1710-1785, 1805-1880 MHz | 36.101, 5.5 | FDD Band 3 |
| 4 | Frequency band: 1710-1755, 2110-2155 MHz | 36.101, 5.5 | FDD Band 4 |
| 5 | Frequency band: 824-849, 869-894 MHz | 36.101, 5.5 | FDD Band 5 |
| 6 | Frequency band: 830-840, 875-885 MHz | 36.101, 5.5 | FDD Band 6 |
| 7 | Frequency band: 2500-2570, 2620-2690 MHz | 36.101, 5.5 | FDD Band 7 |
| 8 | Frequency band: 880-915, 925-960 MHz | 36.101, 5.5 | FDD Band 8 |
| 9 | Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz | 36.101, 5.5 | FDD Band 9 |
| 10 | Frequency band: 1710-1770, 2110-2170 MHz | 36.101, 5.5 | FDD Band 10 |
| 11 | Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz | 36.101, 5.5 | FDD Band 11 |
| 12 | Frequency band: 699-716, 729-746 MHz | 36.101, 5.5 | FDD Band 12 |
| 13 | Frequency band: 777-787, 746-756 MHz | 36.101, 5.5 | FDD Band 13 |
| 14 | Frequency band: 788-798, 758-768 MHz | 36.101, 5.5 | FDD Band 14 |
| 15 | Reserved | 36.101, 5.5 | FDD Band 15 |
| 16 | Reserved | 36.101, 5.5 | FDD Band 16 |
| 17 | Frequency band: 704-716, 734-746 MHz | 36.101, 5.5 | FDD Band 17 |
| 18 | Frequency band: 815-830, 860-875 MHz | 36.101, 5.5 | FDD Band 18 |
| 19 | Frequency band: 830-845, 875-890 MHz | 36.101, 5.5 | FDD Band 19 |
| 20 | Frequency band: 832-862, 791-821MHz | 36.101, 5.5 | FDD Band 20 |
| 21 | Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz | 36.101, 5.5 | FDD Band 21 |
| 22 | Frequency band: 3410-3490, 3510-3590 MHz | 36.101, 5.5 | FDD Band 22 |
| 23 | Frequency band: 2000-2020, 2180-2200 MHz | 36.101, 5.5 | FDD Band 23 |
| 24 | Frequency band: 1626.5-1660.5, 1525-1559 MHz | 36.101, 5.5 | FDD Band 24 |
| 25 | Frequency band: 1850-1915, 1930-1995 MHz | 36.101, 5.5 | FDD Band 25 |
| 26 | Frequency band: 814-849, 859-894 MHz | 36.101, 5.5 | FDD Band 26 |
| 27 | Frequency band: 807-824, 852-869 MHz | 36.101, 5.5 | FDD Band 27 |
| 28 | Frequency band: 703-748, 758-803 MHz | 36.101, 5.5 | FDD Band 28 |
| 29 | Frequency band: N/A, 717-728 MHz | 36.101, 5. 5 | FDD Band 29 |
| 30 | Frequency band: 2305-2315, 2350-2360 MHz | 36.101, 5.5 | FDD Band 30 |
| 31 | Frequency band: 452.5-457.5, 462.5-467.5 MHz | 36.101, 5.5 | FDD Band 31 |
| | | | |
| | | 1 | |

| 33 | Frequency band: 1900-1920, 1900-1920 MHz | 36.101, 5.5 | TDD Band 33 |
|----|--|-------------|-------------|
| 34 | Frequency band: 2010-2025, 2010-2025 MHz | 36.101, 5.5 | TDD Band 34 |
| 35 | Frequency band: 1850-1910, 1850-1910 MHz | 36.101, 5.5 | TDD Band 35 |
| 36 | Frequency band: 1930-1990, 1930-1990 MHz | 36.101, 5.5 | TDD Band 36 |
| 37 | Frequency band: 1910-1930, 1910-1930 MHz | 36.101, 5.5 | TDD Band 37 |
| 38 | Frequency band: 2570-2620, 2570-2620 MHz | 36.101, 5.5 | TDD Band 38 |
| 39 | Frequency band: 1880-1920, 1880-1920 MHz | 36.101, 5.5 | TDD Band 39 |
| 40 | Frequency band: 2300-2400, 2300-2400 MHz | 36.101, 5.5 | TDD Band 40 |
| 41 | Frequency band: 2496-2690, 2496-2690 MHz | 36.101, 5.5 | TDD Band 41 |
| 42 | Frequency band: 3400-3600, 3400-3600 MHz | 36.101, 5.5 | TDD Band 42 |
| 43 | Frequency band: 3600-3800, 3600-3800 MHz | 36.101, 5.5 | TDD Band 43 |
| 44 | Frequency band: 703-803, 703-803 MHz | 36.101, 5.5 | TDD Band 44 |

Table A.4.5-4: nonContiguousUL-RA-WithinCC-Info-r10 Capabilities (required for MultiClusterPUSCH-WithinCC-r10)

| Item | RF Baseline Implementation Capabilities | Ref. | Comments |
|------|--|--------------|-------------|
| 1 | Frequency band: 1920-1980, 2110-2170 MHz | 36.101, 5.5 | FDD Band 1 |
| 2 | Frequency band: 1850-1910, 1930-1990 MHz | 36.101, 5.5 | FDD Band 2 |
| 3 | Frequency band: 1710-1785, 1805-1880 MHz | 36.101, 5.5 | FDD Band 3 |
| 4 | Frequency band: 1710-1755, 2110-2155 MHz | 36.101, 5.5 | FDD Band 4 |
| 5 | Frequency band: 824-849, 869-894 MHz | 36.101, 5.5 | FDD Band 5 |
| 6 | Frequency band: 830-840, 875-885 MHz | 36.101, 5.5 | FDD Band 6 |
| 7 | Frequency band: 2500-2570, 2620-2690 MHz | 36.101, 5.5 | FDD Band 7 |
| 8 | Frequency band: 880-915, 925-960 MHz | 36.101, 5.5 | FDD Band 8 |
| 9 | Frequency band: 1749.9-1784.9, 1844.9-1879.9 MHz | 36.101, 5.5 | FDD Band 9 |
| 10 | Frequency band: 1710-1770, 2110-2170 MHz | 36.101, 5.5 | FDD Band 10 |
| 11 | Frequency band: 1427.9-1447.9, 1475.9-1495.9 MHz | 36.101, 5.5 | FDD Band 11 |
| 12 | Frequency band: 699-716, 729-746 MHz | 36.101, 5.5 | FDD Band 12 |
| 13 | Frequency band: 777-787, 746-756 MHz | 36.101, 5.5 | FDD Band 13 |
| 14 | Frequency band: 788-798, 758-768 MHz | 36.101, 5.5 | FDD Band 14 |
| 15 | Reserved | 36.101, 5.5 | FDD Band 15 |
| 16 | Reserved | 36.101, 5.5 | FDD Band 16 |
| 17 | Frequency band: 704-716, 734-746 MHz | 36.101, 5.5 | FDD Band 17 |
| 18 | Frequency band: 815-830, 860-875 MHz | 36.101, 5.5 | FDD Band 18 |
| 19 | Frequency band: 830-845, 875-890 MHz | 36.101, 5.5 | FDD Band 19 |
| 20 | Frequency band: 832-862, 791-821MHz | 36.101, 5.5 | FDD Band 20 |
| 21 | Frequency band: 1447.9-1462.9, 1495.9-1510.9 MHz | 36.101, 5.5 | FDD Band 21 |
| 22 | Frequency band: 3410-3490, 3510-3590 MHz | 36.101, 5.5 | FDD Band 22 |
| 23 | Frequency band: 2000-2020, 2180-2200 MHz | 36.101, 5.5 | FDD Band 23 |
| 24 | Frequency band: 1626.5-1660.5, 1525-1559 MHz | 36.101, 5.5 | FDD Band 24 |
| 25 | Frequency band: 1850-1915, 1930-1995 MHz | 36.101, 5.5 | FDD Band 25 |
| 26 | Frequency band: 814-849, 859-894 MHz | 36.101, 5.5 | FDD Band 26 |
| 27 | Frequency band: 807-824, 852-869 MHz | 36.101, 5.5 | FDD Band 27 |
| 28 | Frequency band: 703-748, 758-803 MHz | 36.101, 5.5 | FDD Band 28 |
| 29 | Frequency band: N/A, 717-728 MHz | 36.101, 5. 5 | FDD Band 29 |
| 30 | Frequency band: 2305-2315, 2350-2360 MHz | 36.101, 5.5 | FDD Band 30 |
| 31 | Frequency band: 452.5-457.5, 462.5-467.5 MHz | 36.101, 5.5 | FDD Band 31 |

| 33 | Frequency band: 1900-1920, 1900-1920 MHz | 36.101, 5.5 | TDD Band 33 |
|----|--|-------------|-------------|
| 34 | Frequency band: 2010-2025, 2010-2025 MHz | 36.101, 5.5 | TDD Band 34 |
| 35 | Frequency band: 1850-1910, 1850-1910 MHz | 36.101, 5.5 | TDD Band 35 |
| 36 | Frequency band: 1930-1990, 1930-1990 MHz | 36.101, 5.5 | TDD Band 36 |
| 37 | Frequency band: 1910-1930, 1910-1930 MHz | 36.101, 5.5 | TDD Band 37 |
| 38 | Frequency band: 2570-2620, 2570-2620 MHz | 36.101, 5.5 | TDD Band 38 |
| 39 | Frequency band: 1880-1920, 1880-1920 MHz | 36.101, 5.5 | TDD Band 39 |
| 40 | Frequency band: 2300-2400, 2300-2400 MHz | 36.101, 5.5 | TDD Band 40 |
| 41 | Frequency band: 2496-2690, 2496-2690 MHz | 36.101, 5.5 | TDD Band 41 |
| 42 | Frequency band: 3400-3600, 3400-3600 MHz | 36.101, 5.5 | TDD Band 42 |
| 43 | Frequency band: 3600-3800, 3600-3800 MHz | 36.101, 5.5 | TDD Band 43 |
| 44 | Frequency band: 703-803, 703-803 MHz | 36.101, 5.5 | TDD Band 44 |

A.4.6 CA Physical Layer Baseline Implementation Capabilities

Table A.4.6-1: Downlink CA capabilities (for one or more of the supported CA configurations in Tables A.4.6.1-3, A.4.6.2-3, A.4.6.3-4)

| Item | Bandwidth Class | Ref. | Comments |
|------|-----------------------|---------------|----------|
| 1 | DL CA with 2 carriers | 36.101, 5.6A | |
| | | 36.331, 6.3.6 | |
| 2 | DL CA with 3 carriers | 36.101, 5.6A | |
| | | 36.331, 6.3.6 | |

Table A.4.6-2: Uplink CA capabilities (for one or more of the supported CA configurations in Tables A.4.6.1-3, A.4.6.2-3, A.4.6.3-4)

| Item | Bandwidth Class | Ref. | Comments |
|------|-----------------------|-------------------------------|---|
| 1 | UL CA with 2 carriers | 36.101, 5.6A 36.331, 6.3.6 | |
| 2 | UL CA with 3 carriers | 36.331, 6.3.6 | Not used in any valid CA configurations in TS 36.101 yet |

A.4.6.1 Intra-band contiguous CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.1-1: Downlink Intra-band contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.1-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|---|-------------------------------|----------|
| 1 | DL Intra-band contiguous CA BW Class B | 36.101, 5.6A 36.331, 6.3.6 | |
| 2 | DL Intra-band contiguous CA BW Class C | 36.101, 5.6A 36.331, 6.3.6 | |
| 3 | DL Intra-band contiguous CA BW Class D | 36.101, 5.6A 36.331, 6.3.6 | |

Table A.4.6.1-2: Uplink Intra-band contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.1-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|--|-------------------------------|---|
| 1 | UL Intra-band contiguous CA BW Class B | 36.331, 6.3.6 | Not used in any valid CA configurations in TS 36.101 yet |
| 2 | UL Intra-band contiguous CA BW Class | 36.101, 5.6A 36.331, 6.3.6 | |

Table A.4.6.1-3: Supported CA configurations for Intra-band contiguous CA

| E-UTRA CA configuration / Item (Note 1) | Release | Supported | Supported CA Bandwidth Class(es) in UL (Note 2,7) | Supported Bandwidth Combination Set(s) (Note 3) | Fallback Bands Exception (Note 5,8) | Fallback CA configurations Exceptions (Note 6,8) |
|--|---------|-----------|--|--|--|---|
| CA_1C | Rel-10 | | | | - | - |
| CA_2C | Rel-12 | | | | - | - |
| CA_3C | Re-12 | | | | - | - |
| CA_7C | Rel-11 | | | | - | - |
| CA_12B | Rel-12 | | | | - | - |
| CA_23B | Rel-12 | | | | - | - |
| CA_27B | Rel-12 | | | | - | - |
| CA_38C | Rel-11 | | | | - | - |
| CA_39C | Rel-12 | | | | - | - |
| CA_40C | Rel-10 | | | | - | - |
| CA_40D | Rel-12 | | | | - | - |
| CA_41C | Rel-11 | | | | - | - |
| CA_41D | Rel-12 | | | | - | - |

| CA_42C | F | Rel-12 | | | | - | - | |
|---------|--|-----------------------------------|-------------------------|---|---|--|------------------------|--|
| Note 1: | | | | • | 9 | | 5.6A.1-1, e.g. "CA_1C" | |
| Note 2: | indicates CA operation on E-UTRA band 1 with DL CA Bandwidth Class C. The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-1. For this release of specification valid choices are "N", "XB" and "XC", where X is the band. For example, for CA_1C, N would mean only DL CA, "1C" would mean both DL and UL CA. | | | | | | | |
| Note 3: | | | | | andwidth Combination | | | |
| Note 4: | | all items | s is 3 | 6.101, 5.6A and 36.3 | 331, 6.3.6 | | | |
| Note 5: | Reference to all items is 36.101, 5.6A and 36.331, 6.3.6 Fallback Bands Exceptions column is used for the FALLBACK() operator in 'Tested Band Selection Criteria' (Table 4.1-1b). FALLBACK(A.4.6.1-3) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table A.4.1-2, with the following additional conditions: Band is not listed in the Fallback Band Exceptions for the considered CA Configuration Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination | | | | | | | |
| Note 6: | Sets supported by the considered CA Configuration Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in 'Tested CA Configurations Criteria' (Table 4.1-1c). FALLBACK(A.4.6.1-3) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table A.4.1-2, with the following additional conditions: Fallback CA Configuration is not listed in 'Fallback CA Configurations Exceptions' | | | | | | | |
| | Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets. FALLBACK_UL(A.4.6.1-3) shall return FALLBACK(A.4.6.1-3) AND UL(A.4.6.1-3) | | | | | | | |
| Note 7: | declared in c UL_2CC(A.4 Bandwidth C | olumn 'S .6.1-3) s lass was | Suppo hall r decl | orted CA Bandwidth eturn all supported C lared in column 'Sup | nfigurations where at l Class(es) in UL'. CA Configurations whe ported CA Bandwidth CA Configurations whe | re at least one 2 C Class(es) in UL'. | Carrier UL CA | |
| Note 8: | Bandwidth C The exception differences b | lass was ins colun etween (| decl nns a CA C | lared. re pre-filled, please | do not fill out. Exception | ons are possible if | | |

A.4.6.2 Intra-band non-contiguous CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.2-1: Downlink Intra-band non-contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.2-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|--|-------------------------------|----------|
| 1 | DL Intra-band non-contiguous CA BW Class Combination A-A | 36.101, 5.6A 36.331, 6.3.6 | |
| 2 | DL Intra-band non-contiguous CA BW Class Combination A-C/C-A | 36.101, 5.6A 36.331, 6.3.6 | |

Table A.4.6.2-2: Uplink Intra-band non-contiguous CA Bandwidth Class capabilities (for one or more of the supported CA configurations in Table A.4.6.2-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|---|-------------------------------|----------|
| | UL Intra-band non-contiguous CA BW Class Combination A-A | 36.101, 5.6A 36.331, 6.3.6 | |

Table A.4.6.2-3: Supported CA configurations for Intra-band non-contiguous CA

| E-UTRA CA configuration / Item (Note 1) | Release | Supported | Supported CA Bandwidth Class(es) in UL (Note 2,7) | Supported Bandwidth Combination Set(s) (Note 3) | Fallback Bands Exception (Note 5,8) | Fallback CA configurations Exceptions (Note 6,8) |
|--|---------|-----------|--|---|--|---|
| CA_2A-2A | Rel-12 | | | | - | - |
| CA_3A-3A | Rel-12 | | | | - | - |
| CA_4A-4A | Rel-12 | | | | - | - |
| CA_7A-7A | Rel-12 | | | | - | - |
| CA_23A-23A | Rel-12 | | | | - | - |
| CA_25A-25A | Rel-11 | | | | - | - |
| CA_41A-41A | Rel-11 | | | | - | - |
| CA_41A-41C | Rel-12 | | | | - | - |
| CA_41C-41A | Rel-12 | | | | - | - |
| CA_42A-42A | Rel-12 | | | | - | - |

- Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-3, e.g. "CA_2A-2A" indicates CA intra-band non-contiguous operation on E-UTRA band 2 with DL CA Bandwidth Class A-A.
- Note 2: The UL CA capabilities as per Table A.4.6-2can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-3. For this release of specification valid choices are "N", "XA-XA" and "XC", where X is the band. For example, for CA_4A-4A, "N" would mean only DL CA, "4A-4A" would mean both DL and UL CA.
- Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-3.
- Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6
- Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in 'Tested Band Selection Criteria' (Table 4.1-1b). FALLBACK(A.4.6.2-3) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table A.4.1-2, with the following additional conditions:
 - 1. Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
 - 2. Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration
- Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in 'Tested CA Configurations Criteria' (Table 4.1-1c). FALLBACK(A.4.6.2-3) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table A.4.1-2, with the following additional conditions:
 - 1. Fallback CA Configuration is not listed in 'Fallback CA Configurations Exceptions'
 - 2. Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.
- Note 7: UL(A.4.6.2-3) shall return all supported CA Configurations where at least one >1 Carrier UL CA Bandwidth Class was declared in column 'Supported CA Bandwidth Class(es) in UL'.

 UL_2CC(A.4.6.2-3) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column 'Supported CA Bandwidth Class(es) in UL'.

 UL_3CC(A.4.6.2-3) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.
- Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28, so 28 will be listed as an exception

A.4.6.3 Inter-band CA Physical Layer Baseline Implementation Capabilities

Table A.4.6.3-1: Downlink Inter-band CA Bandwidth Class Combination capabilities (for one or more of the supported CA configurations in Table A.4.6.3-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|--|---------------|----------|
| 1 | DL Inter-band CA BW Class | 36.101, 5.6A | |
| | Combination A-A | 36.331, 6.3.6 | |
| 2 | DL Inter-band CA BW Class | 36.101, 5.6A | |
| | Combination A-A-A (two bands) | 36.331, 6.3.6 | |
| 3 | DL Inter-band CA BW Class | 36.101, 5.6A | |
| | Combination A-A-A (three bands) | 36.331, 6.3.6 | |
| 4 | DL Inter-band CA BW Class | 36.101, 5.6A | |
| | Combination A-C/C-A or A-B/B-A | 36.331, 6.3.6 | |
| 5 | DL Inter-band CA BW Class | 36.101, 5.5 | |
| | Combination A-A where one of the bands | | |
| | is DL-only | | |

Table A.4.6.3-2: Uplink Inter-band CA Bandwidth Class Combination capabilities (for one or more of the supported CA configurations in Table A.4.6.3-3)

| Item | Bandwidth Class | Ref. | Comments |
|------|---------------------------|---------------|----------|
| 1 | UL Inter-band CA BW Class | 36.101, 5.6A | |
| | Combination A-A | 36.331, 6.3.6 | |
| | | | |

Table A.4.6.3-3: Supported CA configurations for Inter-band CA (two bands)

| E-UTRA CA configuration / Item (Note 1) | Release | Supported | Supported CA Bandwidth Class(es) in UL (Note 2,7) | Supported UL Bands (Note 9) | Supported Bandwidth Combination Set(s) (Note 3) | Fallback Bands Exception (Note 5) | Fallback CA configurations Exceptions (Note 6) |
|---|---------|-----------|--|-----------------------------------|---|--|---|
| CA_1A-3A | Rel-12 | | | | | - | - |
| CA_1A-5A | Rel-10 | | | | | - | - |
| CA_1A-7A | Rel-12 | | | | | - | - |
| CA_1A-8A | Rel-12 | | | | | - | - |
| CA_1A-11A | Rel-12 | | | | | - | - |
| CA_1A-18A | Rel-11 | | | | | - | - |
| CA_1A-19A | Rel-11 | | | | | - | - |
| CA_1A-20A | Rel-12 | | | | | - | - |
| CA_1A-21A | Rel-11 | | | | | - | - |
| CA_1A-26A | Rel-12 | | | | | - | - |
| CA_1A-28A | Rel-12 | | | | | - | - |
| CA_1A-41A | Rel-12 | | | | | - | - |
| CA_1A-41C | Rel-12 | | | | | - | - |

| CA_1A-42A | Rel-12 | | | | - | - |
|--------------|--------|---|---|---|---|---|
| CA_1A-42C | Rel-12 | | | | - | - |
| CA_2A-4A | Rel-12 | | | | - | - |
| CA_2A-4A-4A | Rel-12 | | | | - | - |
| CA_2A-5A | Rel-12 | | | | - | - |
| CA_2A-2A-5A | Rel-12 | | | | - | - |
| CA_2A-12A | Rel-12 | | | | - | - |
| CA_2A-12B | Rel-12 | | | | - | - |
| CA_2A-13A | Rel-12 | | | | - | - |
| CA_2A-2A-13A | Rel-12 | | | | - | - |
| CA_2A-17A | Rel-11 | | | | - | - |
| CA_2A-29A | Rel-11 | | 2 | | - | - |
| CA_2C-29A | Rel-12 | | 2 | | - | - |
| CA_2A-30A | Rel-12 | | | | - | - |
| CA_3A-5A | Rel-11 | | | | - | - |
| CA_3A-7A | Rel-11 | | | | - | - |
| CA_3A-7C | Rel-12 | | | | - | - |
| CA_3C-7A | Rel-12 | | | | - | - |
| CA_3A-8A | Rel-11 | | | | - | - |
| CA_3A-19A | Rel-12 | | | | - | - |
| CA_3A-20A | Rel-11 | | | | - | - |
| CA_3A-26A | Rel-12 | | | | - | - |
| CA_3A-27A | Rel-12 | | | | - | - |
| CA_3A-28A | Rel-12 | | | | - | - |
| CA_3A-42A | Rel-12 | | | | - | - |
| CA_3A-42C | Rel-12 | | | | - | - |
| CA_4A-5A | Rel-11 | | | | - | - |
| CA_4A-4A-5A | Rel-12 | | | | - | - |
| CA_4A-7A | Rel-11 | | | | - | - |
| CA_4A-4A-7A | Rel-12 | | | | - | - |
| CA_4A-12A | Rel-11 | | | | - | - |
| CA_4A-4A-12A | Rel-12 | | | | - | - |
| CA_4A-12B | Rel-12 | | | | - | - |
| L | | 1 | 1 | 1 | 1 | l |

| CA_4A-13A | Rel-11 | | | - | - |
|--------------|--------|--|----|----|---|
| CA_4A-4A-13A | Rel-12 | | | - | - |
| CA_4A-17A | Rel-11 | | | - | - |
| CA_4A-27A | Rel-12 | | | - | - |
| CA_4A-29A | Rel-11 | | 4 | - | - |
| CA_4A-30A | Rel-12 | | | - | - |
| CA_5A-7A | Rel-12 | | | - | - |
| CA_5A-12A | Rel-11 | | | _ | - |
| | | | | - | |
| CA_5A-13A | Rel-12 | | | - | - |
| CA_5A-17A | Rel-11 | | | - | - |
| CA_5A-25A | Rel-12 | | | - | - |
| CA_5A-30A | Rel-12 | | | - | - |
| CA_7A-8A | Rel-12 | | | - | - |
| CA_7A-12A | Rel-12 | | | - | - |
| CA_7A-20A | Rel-11 | | | - | - |
| CA_7A-28A | Rel-12 | | | - | - |
| CA_8A-11A | Rel-12 | | | - | - |
| CA_8A-20A | Rel-11 | | | - | - |
| CA_11A-18A | Rel-11 | | | - | - |
| | | | | | |
| CA_12A-25A | Rel-12 | | | 1 | - |
| CA_12A-30A | Rel-12 | | | - | - |
| CA_18A-28A | Rel-12 | | | 28 | - |
| CA_19A-21A | Rel-12 | | | - | - |
| CA_19A-42A | Rel-12 | | | - | - |
| CA_19A-42C | Rel-12 | | | - | - |
| CA_20A-32A | Rel-12 | | 20 | - | - |
| CA_23A-29A | Rel-12 | | 23 | - | - |
| CA_26A-41A | Rel-12 | | | - | - |
| CA_26A-41C | Rel-12 | | | - | - |
| CA_29A-30A | Rel-12 | | 30 | - | - |
| CA_39A-41A | Rel-12 | | | - | - |
| CA_39A-41C | Rel-12 | | | - | - |
| CA_41A-42A | Rel-12 | | | - | - |
| | | | | | |

- Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-2, e.g. "CA_1A-3A" indicates interband CA operation on E-UTRA band 1 with DL CA Bandwidth Class A and on E-UTRA band 3 with DL CA Bandwidth Class A
- Note 2: The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-2. For this release of specification valid choices are "N", "XA-XA" and "XC", where X is the band. For example, for full UL CA support in CA_18A-28A, UE shall indicate 18A-28A. For no UL CA "N"
- Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-2.
- Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6
- Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in 'Tested Band Selection Criteria' (Table 4.1-1b). FALLBACK(A.4.6.3-3) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table A.4.1-2, with the following additional conditions:
 - 1. Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
 - UL is supported in the band for the considered CA Configuration, according to Supported UL Bands Column
 - 3. Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration
- Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in 'Tested CA Configurations Criteria' (Table 4.1-1c). FALLBACK(A.4.6.3-3) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table A.4.1-2, with the following additional conditions:
 - 1. Fallback CA Configuration is not listed in 'Fallback CA Configurations Exceptions'
 - 2. UL is supported in each Fallback CA Configuration band that is not downlink-only, according to Supported UL Bands Column
 - 3. Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.

FALLBACK_UL(A.4.6.3-3) shall return FALLBACK(A.4.6.3-3) AND UL(A.4.6.3-3)

- Note 7: UL(A.4.6.3-3) shall return all supported CA Configurations where at least one UL CA Bandwidth Class was declared in column 'Supported CA Bandwidth Class(es) in UL'.

 UL_2CC(A.4.6.3-3) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column 'Supported CA Bandwidth Class(es) in UL'.

 UL_3CC(A.4.6.3-3) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.
- Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28. so 28 will be listed as an exception
- Note 9: List all the CA Combination bands where UL is supported

Table A.4.6.3-4: Supported CA configurations for Inter-band CA (three bands)

| E-UTRA CA configuration / Item (Note 1) | Release | Supported | Supported CA Bandwidth Class(es) in UL (Note 2,7) | Supported UL Bands (Note 9) | Supported Bandwidth Combination Set(s) (Note 3) | Fallback Bands Exception (Note 5,8) | Fallback CA configurations Exceptions (Note 6,8) |
|--|---------|-----------|---|-----------------------------------|---|--|---|
| CA_1A-3A-5A | Rel-12 | | | | | - | - |
| CA_1A-3A-8A | Rel-12 | | | | | - | - |
| CA_1A-3A-19A | Rel-12 | | | | | - | - |
| CA_1A-3A-20A | Rel-12 | | | | | - | - |
| CA_1A-3A-26A | Rel-12 | | | | | - | - |
| CA_1A-5A-7A | Rel-12 | | | | | - | - |
| CA_1A-7A-20A | Rel-12 | | | | | - | - |
| CA_1A-18A- 28A | Rel-12 | | | | | 28 | 1A-28A |

| CA_1A-19A-21A | Rel-12 | | | - | - |
|-------------------|--------|--|--|---|---|
| CA_2A-4A-5A | Rel-12 | | | - | - |
| CA 2A 4A 12A | Rel-12 | | | | |
| CA_2A-4A-12A | Rei-12 | | | - | - |
| CA_2A-4A-13A | Rel-12 | | | - | - |
| CA_2A-4A-29A | Rel-12 | | | - | - |
| CA_2A-5A-12A | Rel-12 | | | - | - |
| CA_2A-5A-13A | Rel-12 | | | - | - |
| CA_2A-5A-30A | Rel-12 | | | - | - |
| CA_2A-12A- 30A | Rel-12 | | | - | - |
| CA_2A-29A- 30A | Rel-12 | | | - | - |
| CA_3A-7A-20A | Rel-12 | | | - | - |
| CA_4A-5A-12A | Rel-12 | | | - | - |
| CA_4A-5A-13A | Rel-12 | | | - | - |
| CA_4A-5A-30A | Rel-12 | | | - | - |
| CA_4A-7A-12A | Rel-12 | | | - | - |
| CA_4A-12A- 30A | Rel-12 | | | - | - |
| CA_4A-29A- 30A | Rel-12 | | | - | - |
| CA_7A-8A-20A | Rel-12 | | | - | - |

- Note 1: Notation used for intra-band contiguous CA Bands is according to TS 36.101 [2] Table 5.6A.1-2a, e.g. "CA_1A-3A-19A" indicates CA operation on E-UTRA bands 1, 3 and 19, each with CA Bandwidth class A.
- Note 2: The UL CA capabilities as per Table A.4.6-2 can be supported on a single or multiple CA Band(s). The UE supplier shall indicate all supported UL CA Bandwidth Class(es), in uplink of the supported CA Band(s), as per TS 36.101 [2] Table 5.6A.1-2a. The UE shall also indicate in which bands is UL supported. For this release of specification valid choices are "N", "XA-YA" etc, where X,Y,Z are the bands. For example, for UL support in B1+B3, and B3+B19, for CA_1A-3A-19A, UE shall indicate "1A-3A", "3A-19A",
- Note 3: The UE supplier shall indicate the supported Bandwidth Combination Set(s) as per TS 36.101 [2] Table 5.6A.1-2a.
- Note 4: Reference to all items is 36.101, 5.6A and 36.331, 6.3.6
- Note 5: Fallback Bands Exceptions column is used for the FALLBACK() operator in 'Tested Band Selection Criteria' (Table 4.1-1b). FALLBACK(A.4.6.3-4) shall return a set of all fallback bands of the supported CA Configurations, i.e. a union of bands included in each CA Configuration, derived according to Table A.4.1-2, with the following additional conditions:
 - 1. Band is not listed in the Fallback Band Exceptions for the considered CA Configuration
 - 2. UL is supported in the band for the considered CA Configuration, according to Supported UL Bands Column
 - Maximum allowed channel BW in the band is included in at least one of the supported Bandwidth Combination Sets supported by the considered CA Configuration
- Note 6: Fallback CA configurations Exceptions column is used for the FALLBACK() and FALLBACK_UL() operators in 'Tested CA Configurations Criteria' (Table 4.1-1c). FALLBACK(A.4.6.3-4) shall return a set of all fallback CA Configurations of supported CA Configurations, derived according to Table A.4.1-2, with the following additional conditions:
 - 1. Fallback CA Configuration is not listed in 'Fallback CA Configurations Exceptions'
 - 2. UL is supported in each Fallback CA Configuration band that is not downlink-only, according to Supported UL Bands Column
 - 3. Maximum allowed channel BW in each Fallback CA Configuration band is included in at least one of the supported CA Configuration Bandwidth Combination Sets.
- Note 7: UL(A.4.6.3-4) shall return all supported CA Configurations where at least one >1 Carrier UL CA Bandwidth Class was declared in column 'Supported CA Bandwidth Class(es) in UL'

 UL_2CC(A.4.6.3-4) shall return all supported CA Configurations where at least one 2 Carrier UL CA Bandwidth Class was declared in column 'Supported CA Bandwidth Class(es) in UL'.

 UL_3CC(A.4.6.3-4) shall return all supported CA Configurations where at least one 3 Carrier UL CA Bandwidth Class was declared.
- Note 8: The exceptions columns are pre-filled, please do not fill out. Exceptions are possible if there are big differences between CA Configuration and Fallback CA Configuration/band definitions. For example, CA_18A-28A uses only a part of B28, so 28 will be listed as an exception
- Note 9: List all the CA Combination bands where UL is supported

Annex B (informative): Change history

| 2008-03 | | | | | Skeleton proposed for RAN5#38 Malaga | | 0.0.1 |
|---------|--------|-----------|------|---|---|-------|-------|
| 2008-06 | | | | | | | 0.0.1 |
| | | 1 | | | Updated after RAN5#39bis: | 0.0.1 | 0.1.0 |
| | | | | | - Editorial update and alignment with 36.523-2 | | |
| | | | | | - TC included in 36.521-1 and 36.521-3 included | | |
| | | | | | - Some Conditions for TC selections introduce | | |
| 2008-08 | | | | | Updated after RAN5#40: | 0.1.1 | 0.2.0 |
| | | | | | - Editorial update in regard to changing spec names, etc. | | |
| | | | | | - FDD and TDD split (R5-083839) | | |
| | | | | | - RRM TC numbers aligned with 36.521-3 v030 | | |
| 2008-10 | | | | | Update after RAN5#40bis: | 0.2.0 | 0.3.0 |
| | | | | | - Table split in different clauses for Conformance and RRM test cases | | |
| | | | | | - Extension of applicability tables to include Additional information column | | |
| | | | | | - Change of applicability of TCs that apply to any E-UTRA device into "R" - recommended | | |
| | | | | | - Updated TCs in accordance to 36.521-1 v110 and 36.521-3 v040 | | |
| | | | | | - Some editorial updates | | |
| 2008-11 | | | | | Update After RAN5#41 (R5-055360): | 0.3.0 | 2.0.0 |
| | | | | | - Renamed 8.1.1, added new 8.1.2, | | |
| | | | | | - Added new TCs to RRM section Measurement Performance Requirements | | |
| | | | | | - Added Table A.4.3-2 with reference to test loop functions in 36.509 | | |
| | | | | | - Some editorial changes | | |
| | | | | | - Normative References updated | | |
| | | | | | - Change RRM TC titles to reflect their applicability to FDD only | | |
| 2008-12 | RAN#42 | RP-080970 | | | Approval of version 2.0.0 at RAN#42, then put to version 8.0.0. | 2.0.0 | 8.0.0 |
| 2008-01 | | | | | Editorial corrections. | 8.0.0 | 8.0.1 |
| 2009-05 | RAN#44 | RP-090448 | 0001 | | CR to 36.521-2: Applicability changes and additions for RRM test cases | 8.0.1 | 8.1.0 |
| 2009-05 | RAN#44 | RP-090448 | 0002 | | LTE-RF: Applicability for Output Power Dynamics test cases | 8.0.1 | 8.1.0 |
| 2009-09 | RAN#45 | R5-094035 | 0003 | - | Correction CR to 36.521-2: Applicability changes to introduce additional RRM tests | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094572 | 0004 | - | Applicability for Output Power Dynamics test cases | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094710 | 0005 | - | Resubmission-Correction CR to 36.521-2: Applicability changes to introduce additional RRM tests | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094768 | 0006 | - | Update of RRM Conformance test applicability for SON | 8.1.0 | 8.2.0 |
| 2009-09 | RAN#45 | R5-094999 | 0007 | - | Correction CR to 36.521-2: Applicability changes to RF PDSCH | 8.1.0 | 8.2.0 |

| Date | TSG # | TSG Doc. | CR | Rev | | Old | New |
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| | | | | | Demodulation tests | | |
| 2009-12 | RAN#46 | R5-095519 | 0008 | | Correction CR to 36.521-2: Applicability changes to update the Demodulation of PDSCH (FDD) tests based on the CR merge results from RAN5#44 | 8.2.0 | 8.3.0 |
| 2009-12 | RAN#46 | R5-095778 | 0009 | | Update of RRM Conformance test applicability for RLM in DRX test cases | 8.2.0 | 8.3.0 |
| 2009-12 | RAN#46 | R5-095841 | 0010 | - | CR to 36.521-2: Applicability additions for new RRM (FDD) tests | 8.2.0 | 8.3.0 |
| 2010-03 | RAN#47 | R5-100358 | 0011 | - | CR to 36.521-2 Rel-8 Introduction of Applicability for E-UTRAN FDD - FDD Intra Frequency Cell Search with DRX when L3 filtering is used | 8.3.0 | 8.4.0 |
| 2010-03 | RAN#47 | R5-100561 | 0012 | - | CR to 36.521-2: Update baseline implementation capabilities with extended LTE1500 operating bands | 8.3.0 | 8.4.0 |
| 2010-03 | RAN#47 | R5-100872 | 0013 | - | CSI: Following up corrections to tests titles and RI clause structure | 8.3.0 | 8.4.0 |
| 2010-03 | RAN#47 | - | - | - | Moved to v9.0.0 with no change | 8.4.0 | 9.0.0 |
| 2010-06 | RAN#48 | R5-103147 | 0014 | - | Adding band 20, 800MHZ in EU to TS36.521-2 | 9.0.0 | 9.1.0 |
| 2010-06 | RAN#48 | R5-103757 | 0015 | - | Introduction of feature group indicator in applicability for RRM test cases | 9.0.0 | 9.1.0 |
| 2010-09 | RAN#49 | R5-104246 | 0017 | - | CR to 36.521-2 on Correction to cell search | 9.1.0 | 9.2.0 |
| 2010-09 | RAN#49 | R5-104264 | 0018 | - | Addition of applicability for new RRM test cases | 9.1.0 | 9.2.0 |
| 2010-09 | RAN#49 | R5-104372 | 0019 | - | Update of Applicability for Demodulation test cases and UE implementation Types for UTRA TDD | 9.1.0 | 9.2.0 |
| 2010-09 | RAN#49 | R5-104840 | 0020 | - | 36521-2 General update to add-remove TCs applicability correct, TC titles and numbers and editorials | 9.1.0 | 9.2.0 |
| 2010-09 | RAN#49 | R5-105056 | 0021 | - | Applicability of a new Rel-9 downlink sustained data rate performance test cases | 9.1.0 | 9.2.0 |
| 2010-12 | RAN#50 | R5-106118 | 0022 | - | CR to 36.521-2: Update baseline implementation capabilities for EUTRA TDD LTE band 41 | 9.2.0 | 9.3.0 |
| 2011-03 | RAN#51 | R5-110536 | 0023 | - | Defining new bands 42 and 43 (3500MHz) | 9.3.0 | 9.4.0 |
| 2011-03 | RAN#51 | R5-110955 | 0024 | - | CR to 36.521-2: General update to add, remove, and correct applicability of RRM TCs | 9.3.0 | 9.4.0 |
| 2011-06 | RAN#52 | R5-112131 | 0025 | - | Correction to Band 12 frequency range in 36.521-2 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112212 | 0026 | - | Adding Band 24 to TS 36.521-2 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112378 | 0027 | - | Update of FGI bit definitions for rel-9 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112821 | 0028 | - | Add release applicability for spatial multiplexing test cases | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112857 | 0029 | - | Addition of applicability for new RRM test cases 4.3.4.3 and 8.4.3 | 9.4.0 | 9.5.0 |
| 2011-06 | RAN#52 | R5-112865 | 0030 | - | Addition of applicability for new MBMS test cases 10.1 and 10.2 | 9.4.0 | 9.5.0 |
| 2011-09 | RAN#53 | R5-113306 | 0031 | - | Adding band 25 to TS36.521-2 | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-113625 | 0033 | - | Introduction of applicability of Rel-9 Scenarios | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-113626 | 0034 | - | Introduction of applicability of PDSCH performance tests for low UE categories | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-114025 | 0035 | - | Test Cases 6.2.3 and 6.2.4 Applicability Clarification | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-114070 | 0036 | - | Update baseline implementation capabilities for FDD LTE Band 23 in 36.521-2 | 9.5.0 | 9.6.0 |

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| 2011-09 | RAN#53 | R5-114074 | 0037 | - | Applicability for new R9 RRM test cases | 9.5.0 | 9.6.0 |
| 2011-09 | RAN#53 | R5-114096 | 0038 | - | Missing FGIs in RRM Test Case Applicabilities in 36.521-2 | 9.5.0 | 9.6.0 |
| 2011-12 | RAN#54 | R5-115128 | 0039 | - | Correction the content of A.4.4-1_16 in 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115134 | 0040 | - | Correction to the test case condition of C12 in 3GPP TS 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115186 | 0041 | - | Adding band 22 (3500MHz FDD) to 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115785 | 0042 | - | Requirement change in UE spurious emissions for Band 7 and 38 co-existence (Rel-8 only) | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115422 | 0043 | - | Update of FGI bit table in 36.521-2 | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | R5-115813 | 0044 | - | RF: Update of the applicability list | 9.6.0 | 9.7.0 |
| 2011-12 | RAN#54 | - | - | - | Moved to Rel-10 with no change | 9.7.0 | 10.0.0 |
| 2012-03 | RAN#55 | R5-120340 | 0046 | - | Addition of FGI bit 16 into test cases 9.1.x.x and 9.2.x.x | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120534 | 0047 | - | Introduction to Applicability for RSRQ for E-UTRA Carrier Aggregation | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120596 | 0048 | - | Updates to applicability for newly introduced CA feature chapter8 test cases in 36.521-2 | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120811 | 0049 | - | Correction to FGI bits in test case 8.5.2 | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120812 | 0050 | - | Addition of FGI bit 15 into test cases configuring event 1B | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120832 | 0051 | - | Update of FGI bit table in TS36.521-2 | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120836 | 0052 | - | Introduction to CA Applicability for Transmitter Characteristics tests MPR and ACLR | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120838 | 0053 | - | RF/RRM: Applicability for new added RRM test cases | 10.0.0 | 10.1.0 |
| 2012-03 | RAN#55 | R5-120840 | 0054 | - | Applicability for new UL MIMO test case | 10.0.0 | 10.1.0 |
| 2012-06 | RAN#56 | R5-121185 | 0055 | - | Updates to applicability for newly introduced CA feature TDD chapter 8 test cases in 36.521-2 | 10.1.0 | 10.2.0 |
| 2012-06 | RAN#56 | R5-121219 | 0056 | - | Adding operating band 26 to TS 36.521-2 | 10.1.0 | 10.2.0 |
| 2012-06 | RAN#56 | R5-121904 | 0057 | - | Addition of applicability for E-UTRAN Inter frequency case reselection in the existence of non-allowed CSG cell | 10.1.0 | 10.2.0 |
| 2012-06 | RAN#56 | R5-121965 | 0058 | - | Applicability for new UL MIMO test cases | 10.1.0 | 10.2.0 |
| 2012-06 | RAN#56 | R5-121966 | 0059 | - | Updates to applicability for Transmit timing tests in 36.521-2 | 10.1.0 | 10.2.0 |
| 2012-06 | RAN#56 | R5-121967 | 0060 | - | Applicability for new R9 RRM test cases | 10.1.0 | 10.2.0 |
| 2012-06 | RAN#56 | R5-121990 | 0061 | - | Addition of applicability for CA TCs | 10.1.0 | 10.2.0 |
| 2012-09 | RAN#57 | R5-123093 | 0062 | - | Updates to applicability for Chapter9 absolute and relative RSRP measurement test cases for carrier aggregation. | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123165 | 0063 | - | Introduction of Applicability for E-UTRAN Event Triggered reporting on deactivated SCell with PCell interruption in non-DRX for CA | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123169 | 0064 | - | Correction to Applicability for RSRQ for E-UTRA Carrier Aggregation | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123170 | 0065 | - | Introduction of eDL MIMO to UE service capabilities | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123533 | 0066 | - | Update of References in 36.521-2 v980 (pointer) | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123542 | 0067 | - | TS 36.521-2:TDD CA test cases applicability correction | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123788 | 0068 | - | Clarification of the release of UTRAN-EUTRAN Inter-RAT RRM test cases in 36.521-2 | 10.2.0 | 10.3.0 |

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| 2012-09 | RAN#57 | R5-123856 | 0069 | - | Applicability for new RRM test cases | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123858 | 0070 | - | Introduction of Applicability for ACS for CA and UE config Tx output power for CA | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123909 | 0071 | - | TS 36.521-2:New UE categories addition | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123942 | 0072 | - | Applicability update for test cases in TS36.521-1 with single BW requirements not defined for all operating bands, rel-8 | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123993 | 0073 | - | Update applicability of UL-MIMO related conformance test cases | 10.2.0 | 10.3.0 |
| 2012-09 | RAN#57 | R5-123997 | 0074 | - | TS 36.521-2:Applicability for new CQI test cases | 10.2.0 | 10.3.0 |
| 2012-12 | RAN#58 | R5-125251 | 0075 | - | Removing FGI bit 5 from section four RRM test cases | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-125390 | 0076 | - | Adding bands 28 and 44 to TS36.521-2 | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-125821 | 0077 | - | Correction to Additional Information for RRM 4.3.4.3 | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-125833 | 0078 | - | Introduction of Band 27 to TS 36.521-2 | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-125836 | 0079 | - | Update applicability of UL-MIMO related conformance test cases | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-125920 | 0080 | - | Applicability removal of RRM TC8.12.1 | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-126049 | 0081 | - | Updates to the applicability of CA RF Tx tests | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-124138 | 0082 | - | Updates to the applicability of CA RF Performance tests | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-124168 | 0083 | - | Updates to the applicability of CA RF Rx tests | 10.3.0 | 10.4.0 |
| 2012-12 | RAN#58 | R5-124169 | 0084 | - | Applicability for new RRM CA related TCs | 10.3.0 | 10.4.0 |
| 2013-03 | RAN#59 | R5-130177 | 0085 | - | Introduction of new rel-10 Reporting of RI test cases into applicability specification | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130297 | 0086 | - | Introduction of eDL-MIMO applicability | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130306 | 0087 | - | Updates to applicability for newly introduced eICIC feature chapter9 RRM test cases | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130445 | 0090 | - | Correction to CA physical layer implementation capabilities | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130464 | 0091 | - | Correction of FGI bit 8 in 36.521-2 | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130802 | 0092 | - | Addition of applicability for RRM TCs 9.1.7.1 and 9.1.7.2 | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130807 | 0093 | - | Applicability correction to Spurious emission band UE co- existence(36.521-2) | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130997 | 0098 | - | Addition of applicability statement for 6 new eICIC test cases | 10.4.0 | 10.5.0 |
| 2013-03 | RAN#59 | R5-130375 | 0088 | - | Updates to CA physical layer baseline implementation capabilities for CA band 7 | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130379 | 0089 | - | Updates to CA physical layer baseline implementation capabilities for CA band 41 | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130927 | 0094 | - | Updates on the supported CA configurations for CA_38, CA_3-7 and CA_7-20 | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130928 | 0095 | - | Addition of CA physical layer implementation capabilities for CA_4-5 and CA_4-13 | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130929 | 0096 | - | Updates of Inter-Band CA combinations CA_3-20 and CA_2-29 | 10.5.0 | 11.0.0 |
| 2013-03 | RAN#59 | R5-130930 | 0097 | - | CA_2-17 and CA_4-17 addition to supported capabilities in 36.521-2 | 10.5.0 | 11.0.0 |
| 2013-06 | RAN#60 | R5-131155 | 0100 | - | Introduction of new rel-11 Reporting of RI test cases into applicability specification | 11.0.0 | 11.1.0 |

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| 2013-06 | RAN#60 | R5-131159 | 0101 | - | Introduction of Maximum Input Level test case for CA (inter-band DL CA without UL CA) into applicability specification | 11.0.0 | 11.1.0 |
| | | | | | , 11 , 1 | | |
| 2013-06 | RAN#60 | R5-131212 | 0102 | - | Correction of applicability conditions for TC 8.2.1.1.1_1: TC 8.2.1.2.1_1 and TC 8.3.2.1.1_1 in 36.521-2 | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131444 | 0103 | - | Addition of applicability for Configured UE transmitted Output Power for inter-band CA | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131525 | 0104 | - | Corrections of eDL-MIMO applicability to align with reporting of CSI | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131712 | 0105 | - | Corrections to Table 4.1-1a "Applicability of RF conformance test cases Conditions" and Table 4.2-1a: Applicability of RRM conformance test cases Conditions | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131912 | 0106 | - | 36.521-2: Inter-band CA configurations update | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131914 | 0107 | - | Addition of applicability for FDD RF TCs 9.3.4.1.1, 9.3.4.2.1, 9.4.1.2.1, 9.4.2.2.1 and TDD RF TCs 9.3.4.1.2, 9.3.4.2.2, 9.4.1.2.2 and 9.4.2.2.2 | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-131927 | 0108 | - | Updates to applicability for newly introduced eICIC feature chapter9 RRM test cases in 36.521-2 | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-132013 | 0109 | - | 36.521-2 specification clean up | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-132015 | 0110 | - | Update of FGI tables in TS 36.521-2 | 11.0.0 | 11.1.0 |
| 2013-06 | RAN#60 | R5-132111 | 0111 | - | Removal of Spurious emission UE co-existence test case 6.6.3.2_1 from 36.521-2 | 11.0.0 | 11.1.0 |
| 2013-09 | RAN#61 | R5-133125 | 0112 | - | editorial correction for RRM test case Condition C46 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133143 | 0113 | - | Addition of applicability for test cases 7.3.13 and 7.3.15 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133251 | 0114 | - | Addition of Band 31 to 36.521-2 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133315 | 0115 | - | Applicability for new CA TCs for 20MHz | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133347 | 0116 | - | eICIC RRM: Applicability for some new added eICIC test cases | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133350 | 0117 | - | CA RF: Applicability for some new added CA test cases | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133403 | 0118 | - | CA RRM: Corrections to applicability of CA RRM TC-s | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133816 | 0119 | - | Update applicability of test cases required to support PUSCH 2-2 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133825 | 0120 | - | eICIC RF: Applicability for some new added eICIC test cases | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133827 | 0121 | - | Correction to applicability of TC 8.3.2.1.2, 8.3.2.1.3 and 8.3.2.2.1 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133839 | 0122 | - | Correction of applicability for FDD RF TCs 9.3.4.1.1, 9.3.4.2.1 & 9.4.1.2.1 and TDD RF TCs 9.3.4.1.2, 9.3.4.2.2 & 9.4.1.2.2 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133840 | 0123 | - | Addition of applicabilities for inter-freq/RAT without measurement gaps TCs | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133841 | 0124 | - | Correction to the reference information of chapter 2. | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133849 | 0125 | - | RRM: Update of applicability of some test cases | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133868 | 0126 | - | Addition of UE capability information Bandwidth Combination Set for Carrier Aggregation in ICS proforma tables | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133872 | 0127 | - | Update RF performance test applicability table for LTE B14 public safety high power UE | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133875 | 0128 | - | Addition of applicability for new TCs 8.3.1.1.3 and 8.3.2.1.4 | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133891 | 0129 | - | Applicability addition for CA test cases | 11.1.0 | 11.2.0 |
| 2013-09 | RAN#61 | R5-133897 | 0130 | - | Addition of the applicability of TC7.3.14 & TC7.3.16 | 11.1.0 | 11.2.0 |

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| 2013-12 | RAN#62 | R5-134129 | 0131 | - | RRM: Corrections of applicability of some test cases | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134164 | 0132 | - | Introduction of UE TM3 Demodulation Performance under High Speed Applicability | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134281 | 0134 | - | Addition of applicability for Sustained data rate test(FDD) for category 6 and 7 UEs | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134285 | 0135 | - | Removal of 6.2.5A.2 from applicability table | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134293 | 0136 | - | Correction to applicabilities for inter-freq/RAT without measurement gaps TCs | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134315 | 0137 | - | Removal of comma separated conditions | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134883 | 0138 | - | Addition of applicability for new TCs 7.4A.4 and 7.5A.4 | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134893 | 0142 | - | Addition of applicabilities of LTE Type A performance requirements | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134895 | 0139 | - | Removal of redundant not applicable to any device tests from applicability table | 11.2.0 | 11.3.0 |
| 2013-12 | RAN#62 | R5-134279 | 0133 | - | Addition of Rel-12 CA band combinations(CA_3-19 and CA_19-21) to Table A.4.6.3-3 | 11.3.0 | 12.0.0 |
| 2013-12 | RAN#62 | R5-135011 | 0141 | - | Updates of Table A.4.6.3-3 for CA 1A-26A | 11.3.0 | 12.0.0 |
| 2013-12 | RAN#62 | R5-135032 | 0140 | - | Applicability for new RRM test cases for 5MHz bandwidth | 11.3.0 | 12.0.0 |
| 2014-03 | RAN#63 | R5-140390 | 0143 | - | LTE Type A performance requirements - Adding a new test case 9.3.5.1.2 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140426 | 0144 | - | Updates to Intra-band non-contiguous CA applicability | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140526 | 0145 | - | Addition of applicability for TC 8.2.2.2.4 and TC 8.2.2.4.3 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140808 | 0146 | - | Correction the applicability for test case 8.2.1.3.2. | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140809 | 0147 | - | Update applicability table for LTE B14 public safety high power UE test cases | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140817 | 0148 | - | Applicability for new DL CoMP test cases | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140870 | 0150 | - | Corrections the applicability of test cases 8.16.3 and 8.16.4 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140871 | 0151 | - | Correcting applicability in 8.2.2.1.1_1 and 8.2.2.2.1_1 for UE categories 1 and/or 2 | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140897 | 0152 | - | Addition of Applicability for EPDCCH New Test Cases | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-140923 | 0153 | - | Introduction of UE CA Inter-band uplink capabilities | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-141020 | 0154 | - | Addition of test applicability of WB-RSRQ measurement | 12.0.0 | 12.1.0 |
| 2014-03 | RAN#63 | R5-141035 | 0155 | - | Applicability for new CA RRM TCs 7.1.3+7.1.4 | 12.0.0 | 12.1.0 |
| 2014-06 | RAN#64 | R5-142113 | 0157 | - | Addition of CA 3A-28A to 36.521-2 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-142337 | 0158 | - | Applicability update for CA band Combo CA_2A-13A | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-142345 | 0159 | - | Addition of CA band combination CA_39A-41A to Table A.4.6.3-3 in TS 36.521-2 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-142347 | 0160 | - | Updates of Table A.4.6.3-3 for CA_3A-26A and CA_3A-27A | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-142583 | 0161 | - | Update of FGI definitions in TS 36.521-2 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-142674 | 0162 | - | Definition correction to UL and DL category tables | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-142772 | 0163 | - | Addition of CA_2A-4A and CA_5A-7A to 36.521-2 Annex A4 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-142782 | 0164 | - | Introduction of TC 7.6.xA.4 and 7.7A.4 applicabilities | 12.1.0 | 12.2.0 |

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| 2014-06 | RAN#64 | R5-142799 | 0165 | - | Addition of applicability for TC 6.6.3B.2 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143000 | 0166 | - | Conditions C19, C20, C21 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143016 | 0167 | - | Addition of RF test cases applicability for eICIC | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143017 | 0168 | - | Addition of RRM test cases applicability for eICIC | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143028 | 0169 | - | LTE Type A performance requirements - Adding test case 8.2.1.4.3 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143030 | 0170 | - | Condition C43 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143053 | 0171 | - | Correction to the applicability of the test case 7.6.2A.3 and 7.7A.3. | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143054 | 0172 | - | Correction of the condition of test case 8.7.1.1 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143055 | 0173 | - | Correction of the condition of the test cases 8.2.1.1.1_A.2, 8.2.1.3.1_A.1, 8.2.1.3.1_A.2 and 8.2.1.4.2_A.2 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143056 | 0174 | - | Correction of the condition for the test cases 8.2.1.1.1_A.1, 8.2.1.4.2_A.1 and 8.2.2.1.1_A.1 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143060 | 0175 | - | Introduction of feICIC applicability statement for CSI test cases | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143061 | 0176 | - | Introduction of feICIC applicability statement for RRM test cases | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143078 | 0177 | - | Applicability for new CoMP TDD TCs | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143083 | 0178 | - | Addition of applicability for newly added RRM test cases | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143084 | 0179 | - | Addition of CA_27B related information into A.4.6 in TS 36.521-2 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143119 | 0180 | - | Update of applicability for EPDCCH test cases | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143145 | 0181 | - | Condition on no UL CA in C20 and C21 | 12.1.0 | 12.2.0 |
| 2014-06 | RAN#64 | R5-143215 | 0182 | - | Addition of applicability for new TM3, soft buffer management and SDR test cases | 12.1.0 | 12.2.0 |
| 2014-09 | RAN#65 | R5-144109 | 0183 | - | Introduction of feICIC applicability statement for Performance test cases (resubmission of R5-143075 not implemented) | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144121 | 0184 | - | Corrections to feICIC applicability statement for CSI test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144200 | 0185 | - | Applicability for newly added 5MHz+5 MHz and 10MHz+5MHz BW RRM test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144245 | 0186 | - | Corrections to applicability conditions for RRM test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144329 | 0187 | - | Update of FGI definitions in TS 36.521-2 | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144449 | 0188 | - | Applicability update for CA band Combo CA_7A-28A | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144484 | 0189 | - | Update Tx intra-band contiguous DL CA without UL CA TCs applicability to include BW Class B | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144504 | 0190 | - | New CA band combination CA_NC_42 and CA_4-27-Update to 36.521-2 | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144512 | 0191 | - | Addition of applicability for CA band combo CA_2A-5A | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144800 | 0192 | - | Correction to RF Baseline capabilities with Band 29 | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144837 | 0193 | - | Update test applicability for intra band non-contiguous CA test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144848 | 0194 | - | Update test applicability for inter band and intra band contiguous CA test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144849 | 0195 | - | Addition of CA_2A-2A to 36.521-2 Annex A4 | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144864 | 0202 | - | Addition of operating band 30 to TS36.521-2 | 12.2.0 | 12.3.0 |

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| 2014-09 | RAN#65 | R5-144871 | 0196 | - | Correction to Merge UE category tables | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144877 | 0197 | - | CA: Review of CA capabilities tables | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144878 | 0198 | - | Addition of applicability for newly added performance test cases | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144911 | 0199 | - | Update applicabilities for serving cell RSRP and RSRQ absolute accuracy TCs | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144919 | 0200 | - | Update the applicability conditions for TCs 8.8.2.1 and 8.8.2.2 | 12.2.0 | 12.3.0 |
| 2014-09 | RAN#65 | R5-144921 | 0201 | - | Addition of applicability for SDR test case 8.7.1.1_A.3 | 12.2.0 | 12.3.0 |
| 2014-12 | RAN#66 | R5-145017 | 0202 | - | Correction to 6.7A title number | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145180 | 0203 | - | New CA band combination CA_1A-3A - Updates of Table A.4.6.3-3 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145226 | 0204 | - | Introduction of CA_42C into TS36.521-2 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145244 | 0205 | - | New CA band combination CA_41-42 update to 36.521-2 section A.4.6.3 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145262 | 0206 | - | Applicability table update for RRM CA test cases in clause 8 and 9 to avoid redundant testing | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145359 | 0207 | - | Addition of applicability for TCs of activation and deactivation of known SCell | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145361 | 0208 | - | Removing SDR test applicability for Rel-11 and 12 inter-band CA | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145396 | 0209 | - | New CA band combination CA_18A-28A - Updates of Table A.4.6.3-3 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145440 | 0210 | - | New CA band combination 1+11 and 8+11 û Introduction of 1+11 and 8+11 to 36.521-2 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145478 | 0211 | - | Correction to feICIC applicability statement for PHICH test cases | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145529 | 0212 | - | Updates to applicability of CA demodulation tests for release independence | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145821 | 0213 | - | Update of applicability statements for mandatory Rel-11 capabilities, CoMP, and more | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145822 | 0214 | - | Update of FGI definitions in TS 36.521-2 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145823 | 0215 | - | Updates the applicable release for soft buffer management and TDD SDR CA tests in part 2 | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145842 | 0216 | - | Corrections to applicabilities for COMP | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145869 | 0217 | - | Applicability for FDD TC 8.2.1.1.1_A.3 and TDD TC 8.2.2.1.1_A.3+TC 8.2.2.4.2_A.3 for CA | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145873 | 0218 | - | Update to TM9 test case applicability | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145905 | 0219 | - | Applicability for newly added RRM TCs for testing of SCell in sTAG | 12.3.0 | 12.4.0 |
| 2014-12 | RAN#66 | R5-145981 | 0220 | = | Update to Additional information section to handle IMSVoIP not supported in 36.521-2 | 12.3.0 | 12.4.0 |
| 2015-03 | RAN#67 | R5-150298 | 0221 | - | Introduction of CA_1A-7A to TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150304 | 0222 | - | Corrections to title of RRM test case 8.7.1 in applicability table | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150365 | 0223 | - | CA: Corrections to CA capability tables | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150374 | 0224 | - | Introduction of RF applicability for CA band combinations 5+25 and 12+25 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150444 | 0225 | - | New CA band combination CA_1A-28A - Updates of Table A.4.6.3-3 | 12.4.0 | 12.5.0 |

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| 2015-03 | RAN#67 | R5-150524 | 0226 | - | Addition of CA_1A-20A to TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150546 | 0227 | - | Addition of 2A-12A and 5A-13A 2DL Interband CA to 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150558 | 0228 | - | Applicability conditions added to TCs 9.1.12.x and 9.2.11.x | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150564 | 0229 | - | Addition of CA_2A-2A-13A to TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150805 | 0230 | - | Update of FGI definitions in TS 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150830 | 0231 | - | Addition of CA_2-30 to Annex A.4.6 of TS 36.521-2. | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150831 | 0232 | - | Addition of CA_4-30 to Annex A.4.6 of TS 36.521-2. | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150832 | 0233 | - | Addition of CA_5-30 to Annex A.4.6 of TS 36.521-2. | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150858 | 0234 | - | Update of applicability statements for CoMP - TCs being split | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150872 | 0235 | - | Addition of applicability for 3DL CA test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150876 | 0236 | - | Addition of applicability for CA_39C in TS36.521-2 | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150882 | 0238 | - | Addition of applicability for newly added 20MHz+10MHz RRM test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150883 | 0239 | - | Addition of applicability for newly added RSRP accuracy RRM test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150904 | 0240 | - | Addition of a new table for Supported CA configurations for Interband CA (three bands) | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150914 | 0241 | - | Addition of applicability for Multi-Cluster PUSCH with One Uplink Carrier test cases | 12.4.0 | 12.5.0 |
| 2015-03 | RAN#67 | R5-150923 | 0242 | - | CA demod test case variants merge in 36.521-2 | 12.4.0 | 12.5.0 |
| 2015-06 | RAN#68 | R5-151156 | 0245 | - | Correction of applicability conditions for RRM test case 5.3.5 and 5.3.6 | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151164 | 0246 | - | CA RF: Correction to condition description | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151461 | 0261 | - | Updates to 36.521-2 regarding merging of TDD CA test cases | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151463 | 0262 | - | Addition of applicability of TD-LTE to UTRA TDD periodic measurements | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151509 | 0263 | - | Introduction of applicability for test cases 9.6.1.1-A.2 and 9.6.1.2-A.2: FDD/TDD CQI Reporting under AWGN conditions – PUCCH 1-0 (3DL CA) | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151826 | 0250 | 2 | Addition and correction of applicability for TDD sustained data rate performance | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151827 | 0254 | 1 | Update applicabilities of merged TDD CA cases | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151828 | 0258 | 2 | Correction of applicability for TDD sustained data rate performance | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151829 | 0268 | 1 | Correction to PICS items referenced in C32b and C33b applicability conditions. | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151892 | 0248 | 1 | Addition of frequency E-UTRA band 32 | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-151949 | 0259 | 1 | Applicability update of FDD-TDD RSRP accuracy test cases for FDD-TDD CA. | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-152009 | 0253 | 1 | Addition of applicability for newly added 20MHz+20MHz and 20MHz+10MHz CA RRM test cases | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-152016 | 0264 | 1 | Introduction to applicability for 2UL CA RF test cases (Tx and Rx) | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-152019 | 0260 | 1 | Addition of UE category 0 ICS and test cases | 12.5.0 | 12.6.0 |

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| 2015-06 | RAN#68 | R5-152023 | 0251 | 1 | Update of CA Physical Layer Baseline Implementation | 12.5.0 | 12.6.0 |
| | | | | | Capabilities for Rel-12 CA 2UL configurations | | |
| 2015-06 | RAN#68 | R5-152029 | 0243 | 1 | Introduction of Band Selection Concept and new 3DL CA Combinations to 36.521-2 | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-152036 | 0255 | 1 | Addition of applicability for newly introduced RSRP accuracy RRM test cases | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-152037 | 0256 | 1 | Addition of applicability for newly added FDD CA RSRP accuracy RRM test cases | 12.5.0 | 12.6.0 |
| 2015-06 | RAN#68 | R5-152129 | 0270 | - | CoMP TCs applicability update | 12.5.0 | 12.6.0 |
| 2015-09 | RAN#69 | R5-153062 | 0271 | - | Introduction of LTE eDL_MIMO applicability for TCs | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153162 | 0273 | - | Test applicability for TC 9.7.1.2 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153236 | 0278 | - | Addition of additional capabilities for Enhanced performance requirements type C for LTE | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-154023 | 0279 | 1 | RF: Applicability of CSI requirements to UE Category 1 (for 36.521-2) | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153388 | 0286 | - | Correction to applicability of feICIC test cases. | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153416 | 0287 | - | Correction to information of feature group indicators | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153477 | 0290 | - | 521-2 change applicability for Rel-10 CA RSRP relative accuracy tests | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153479 | 0292 | - | 521-2 change applicability for Rel-11 CA RSRP relative accuracy tests | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153480 | 0293 | - | Introduction of 2DL CA test skipping if 3DL CA is tested in 36.521-1 Chapter 7 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153481 | 0294 | - | 521-2 Addition of test applicabilities for Rel-12 CA RSRP relative accuracy tests | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153503 | 0296 | - | Correction to applicability content in Table 4.1-1, 4.1-1a. for 36.521-1 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153528 | 0299 | - | Update of FGI definitions in TS 36.521-2 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153580 | 0300 | - | Correction of applicability condition TC 9.6.1.1_A.1 non- contiguous part | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153614 | 0302 | - | Applicability for Receiver Spurious emissions test case for Carrier aggregation in DL-only bands | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153689 | 0306 | - | Applicability for new RRM TCs 7.1.3_1+7.1.4_1 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153813 | 0283 | 1 | Correction of L2G PSHO applicability for TS 36.521-2 spec | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153828 | 0280 | 1 | Addition of applicabilities for 3DL CA test cases | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153846 | 0298 | 1 | Addition of applicability of SU-MIMO conformance tests | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153860 | 0282 | 1 | Addition of test applicabilities of some test cases for 2UL CA | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153861 | 0291 | 1 | Proposal for missing Selection Criteria in table 4.1 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153896 | 0281 | 1 | Addition of applicabilities for 3DL CA RRM test cases | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153897 | 0289 | 1 | Implementation of 36.521-1 Chapter 8.1 and 9.1 test selection rules in Table 4.1-1 testcases | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153910 | 0276 | 1 | Corrections to MTC test applicabilities | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153911 | 0297 | 1 | Correction of MTC UE test case applicability | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153929 | 0272 | 1 | Addition of applicability for newly introduced 20MHz+20MHz and 20MHz+10MHz cases (Rel-12) | 12.6.0 | 12.7.0 |

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| 2015-09 | RAN#69 | R5-153932 | 0274 | 1 | Addition of applicability for newly introduced TC8.16.18A (Rel- | 12.6.0 | 12.7.0 |
| | | | | | 10) | | |
| 2015-09 | RAN#69 | R5-153933 | 0275 | 1 | Addition of applicability for newly introduced TC7.1.4A (Rel-11) | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153935 | 0277 | 1 | Correction to applicability of EUTRA TDD to UTRA TDD connected mode measurements | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153946 | 0301 | 1 | Adding applicability for TC 8.2.1.7_A.1 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-153948 | 0305 | 1 | Applicability corrections for test case 8.2.1.4.2_A.1 | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | R5-154013 | 0295 | 1 | Addition of UE category 0 test cases | 12.6.0 | 12.7.0 |
| 2015-09 | RAN#69 | - | - | - | update of the "non-specific references" in section 2 according to the approved R5-153582 and an action point on ETSI MCC | 12.6.0 | 12.7.0 |
| 2015-12 | RAN#70 | R5-155275 | 0314 | - | Introduction of applicabilities of 2 test cases for 2UL CA Tx test cases | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155301 | 0316 | - | Introduction of test applicability for TC 6.6.2.2A.1 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155318 | 0319 | - | Update of UE categories for R8 in 36.521-2 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155319 | 0320 | - | Update of UE categories for R10 in 36.521-2 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155323 | 0322 | - | Update of UE categories for R11 in 36.521-2 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155544 | 0326 | - | Correction to conditions C32 and C35 in Table 4.1-1 and Table | 12.7.0 | 12.8.0 |
| | | | | | 4.1-1a | | |
| 2015-12 | RAN#70 | R5-155545 | 0327 | - | Correction to condiotions of Table 4.1-1a | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155556 | 0328 | - | Correction of RRM Condition C77 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155558 | 0329 | - | Correction of RRM Condition C79 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155560 | 0330 | - | Correction of RRM Condition C80 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155563 | 0332 | - | Correction of RRM Condition C81 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155565 | 0334 | - | Correction of RRM Condition C82 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155635 | 0339 | - | Release indication corrections in table A.4.1-1: UE Radio Technologies | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155750 | 0341 | - | Addition of test cases in Table 4.1-1: Applicability of RF conformance test cases. | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155777 | 0342 | - | Test applicability for Intra Frequency RSRP Accuracy for UE category 0 Test Cases | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155843 | 0309 | 1 | Update of applicability of SU-MIMO conformance tests | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155870 | 0323 | 1 | Applicability updates on inter-band CA receiver test cases | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155871 | 0324 | 1 | Correction of applicability for FDD-TDD CA | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155872 | 0336 | 1 | Applicability update to FDD-TDD CA test cases | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155873 | 0335 | 1 | Introduction of applicability expression for new 3DL CA RRM tes case TC 8.16.41 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-155874 | 0340 | 1 | 36.521-2: CA_2A-2A-13A update | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-156050 | 0308 | 1 | Addition of applicability for newly introduced MTC RRM tests | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-156060 | 0331 | 1 | Addition of applicability for 2UL CA test cases 6.2.5A.3 and 6.2.5A.4 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-156061 | 0333 | 1 | Addition of applicability for 2UL CA test cases 6.2.4A.3, 6.3.5A.3.2 and 6.6.3.3A.3 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-156093 | 0313 | 1 | LTE Type B performance requirements - Addition of applicability | 12.7.0 | 12.8.0 |

| Date | TSG # | TSG Doc. | CR | Rev | Subject/Comment | Old | New |
|---------|--------|-----------|------|-----|--|--------|--------|
| | | | | | for 6 new NAICS test cases | | |
| 2015-12 | RAN#70 | R5-156107 | 0325 | 1 | Correction to test case condition for the test cases 9.5.1.x | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-156132 | 0338 | 2 | Applicability for new SCE-L1 test cases | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-156135 | 0318 | 2 | Update of test applicabilities for R12 RRM cases in 36.521-2 | 12.7.0 | 12.8.0 |
| 2015-12 | RAN#70 | R5-156136 | 0337 | 1 | Update of the 1.4MHz MBMS test applicability | 12.7.0 | 12.8.0 |

History

| Document history | | | | | | |
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| V12.3.0 | September 2014 | Publication | | | | |
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