# ETSI TS 136 521-1 V17.7.0 (2023-07)


**LTE;**
**Evolved Universal Terrestrial Radio Access (E-UTRA);**
**User Equipment (UE) conformance specification;**
**Radio transmission and reception;**
**Part 1: Conformance testing**
**(3GPP TS 36.521-1 version 17.7.0 Release 17)**



Reference
RTS/TSGR-0536521-1vh70

Keywords
LTE

***ETSI***

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - APE 7112B
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° w061004871

# Intellectual Property Rights

## Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The declarations pertaining to these essential IPRs, if any, are publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (https://ipr.etsi.org/).

Pursuant to the ETSI Directives including the ETSI IPR Policy, no investigation regarding the essentiality of IPRs, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

## Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

**DECT™**, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members. **3GPP™** and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners. **oneM2M™** logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners. **GSM**® and the GSM logo are trademarks registered and owned by the GSM Association.



# Legal Notice

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



The present document may refer to technical specifications or reports using their 3GPP identities. These shall be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between 3GPP and ETSI identities can be found under https://webapp.etsi.org/key/queryform.asp.

# Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

# Contents

# Foreword

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

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

Version x.y.z

where:

x the first digit:

1 presented to TSG for information;

2 presented to TSG for approval;

3 or greater indicates TSG approved document under change control.

y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

z the third digit is incremented when editorial only changes have been incorporated in the document.

# Introduction



The present document is part 1 of a multi-parts TS:

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.



3GPP TS 36.521-2 [11]: 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 [12]: 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 specifies the measurement procedures for the conformance test of the user equipment (UE) that contain transmitting characteristics, receiving characteristics and performance requirements as part of the 3G Long Term Evolution (3G LTE). Conformance test for the support of RRM (Radio Resource Management) are specified in TS 36.521-3 [12].

The requirements are listed in different clauses only if the corresponding parameters deviate. More generally, tests are only applicable to those mobiles that are intended to support the appropriate functionality. To indicate the circumstances in which tests apply, this is noted in the "*definition and applicability*" part of the test.

For example only Release 8 and later UE declared to support LTE shall be tested for this functionality. In the event that for some tests different conditions apply for different releases, this is indicated within the text of the test itself.

# 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] to [22] (void)

[23] 3GPP TS 36.521-1 Release 18: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) conformance specification; Radio transmission and reception; Part 1: Conformance Testing"

# 3 Definitions, symbols and abbreviations

Void

# 4 General

The requirements of the present document are provided in 3GPP TS 36.521-1 Release 18 [23].

# 5 to 14 Void

# Annex A to K: Void

# Annex L (informative): Change history

| Change history | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Date** | **TSG #** | **TSG Doc.** | **CR** | **Rev** | **Subject/Comment** | **Old** | **New** |
| 2007-08 | RAN5 #36 | R5-072185 | | | Skeleton proposed for RAN5#36Athens | | 0.0.1 |
| 2007-08 | RAN5 #36 | R5-072419 | | | Update the skeleton base on R4-071234_TR36.803.0.4.0.doc | 0.0.1 | 0.0.2 |
| 2007-08 | RAN5 #36 | R5-072424 | | | Update with editorial changes | 0.0.2 | 0.0.3 |
| 2007-11 | RAN5 #37 | R5-073043 | | | Update document with some info as following:<br>Section 5: Frequency band information<br>Section 6.2: Maximum output power<br>Section 6.5: Output RF spectrum emissions<br>Section 6.5.1: Occupied bandwidth<br>Section 6.5.2: Out of band emission<br>Section 6.5.3: Spurious emissions | 0.0.3 | 0.0.4 |
| 2007-11 | RAN5 #37 | R5-073360 | | | Editorial change to split MOP and UE Power classes | 0.0.4 | 0.0.5 |
| 2008-03 | RAN5 #38 | R5-080069 | | | Editorial changes to sync up with 36.101 v1.0.0 as much as feasible for the moment:<br>Update definitions, symbols and abbreviations<br>Update frequency bands, channel bandwidth, channel numbers information.<br>Restructure document to move “frequency error” sub-section inside Transmit signal quality.<br>Add “additional spectrum Emission Mask” sub-test (mask A,B,C) section to address the regulatory requirements that are not met with the general mask (OOB and spurious emission).<br>Add “Additional ACLR requirements” to address additional requirements that the network might indicate to the UE via signalling for a specific deployment scenario (in terms of additional requirements for UTRA/ACLR2<br>Restructure “Spurious Emission” to indicate we need to have 3 test cases to address: “E-UTRA Spurious Emission” requirements , “Spurious Emission band UE co-existence” requirements, and “Additional spurious emissions” requirements<br>Separate wide band and narrow band intermodulation in the intermodulation characteristics | 0.0.5 | 0.0.6 |
| 2008-03 | RAN5 #38 | R5-080408 | | | LTE Reference Sensitivity test Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080409 | | | LTE Maximum Rx input level test Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080410 | | | LTE Adjacent Channel Selectivity test Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080064 | | | LTE RF Receiver tests, General section Text proposal | | 0.0.7 |
| 2008-03 | RAN5 #38 | R5-080412 | | | LTE RF: transmission modulation initial EVM test proposal | | 0.0.7 |
| 2008-03 | RAN5 Workshop-UE LTE Test (9-11 April) | R5w0800027 | | | Modify styles and formats of tables and others according to drafting rules.<br>Add some definitions and abbreviations<br>Modified section 6.2 structure to be aligned with 36.101 v8.1.0<br>Modify tables of requirements to remove 1.6 MHz and 3.2MHz channel bandwidth according to new requirements 36.101 v8.1.0 | | 0.0.9 |
| 2008-03 | RAN5 Workshop-UE LTE Test (9-11 April) | R5w0800028 | | | Following TPs have been included:<br>R5w080013r1<br>R5w080014r1<br>R5w080008r2<br>R5w080009r2<br>R5w080040r1<br>R5w080015r1<br>R5w080016r1<br>R5w080017r1<br>R5w080018r2 | 0.0.9 | 0.1.0 |
| 2008-05 | RAN5#39 | R5-081046 | | | 36-521-1 alignment of measurement state for test cases | 0.1.0 | 0.1.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2008-05 | RAN5#39 | R5-081042 | | | Following approved TPs have been included:<br>R5-081040 36.521-1 after April LTE-RF workshop<br>R5-081415 36-521-1 alignment of measurement state for test cases – also the measurement state for each test cases has been updated according to R5-081404<br>R5-081416 Cover for LTE E-UTRAN RRC_IDLE State Mobility text proposal<br>R5-081417 Cover for LTE E-UTRAN RRC_CONNECTED State Mobility text proposal<br>R5-081404 LTE Rx Intermodulation test case text proposal<br>R5-081409 Annex structure for Measurement uncertainty & Test Tools<br>R5-081405 Text Proposal for TS 36.521-1 TC7.6 Blocking Characteristics<br>R5-081406 Text Proposal for TS 36.521-1 TC7.7 Spurious Response<br>R5-081403 Text Proposal for TS 36.521-1 TC7.9 Spurious Emissions<br>R5-081410 Uncertainties and Test Tools for subset of UE tests<br>R5-081331 Clarification of diversity characteristics section for multiple UE antennas<br>R5-081335 36-521-1 update of nominal and additional channel bandwidths | 0.1.1 | 0.2.0 |
| 2008-06 | RAN5 #39bis | R5-082029 | | | Following approved TPs have been included:<br>R5-082129: Restructure of TS 36.521-1 and RRM proposal (Split of RRM from 36.521-1 v0.2.0 in its own specification 36.521-3.)<br>R5-082166: Text Proposal for Annex C Downlink Physical Channels<br>R5-082130: Text Proposal for Chan bandwidths in TS 36.521-1<br>R5-082155: Text Proposal for LTE Tx Minimum Output Power<br>R5-082027: Text Proposal for Occupied bandwidth in TS 36.521-1<br>R5-082171: Text Proposal for LTE Adjacent Channel Leakage power Ratio<br>R5-082134: Text Proposal for LTE Tx Spurious Emissions<br>R5-082135: Text Proposal for LTE UE Maximum Output Power<br>R5-082136: Text Proposal for LTE Spectrum Emission Mask<br>R5-082138: UE Spurious Emissions Measurement uncertainty & Test Tolerances<br>R5-082169: LTE Spectrum Emission Mask test uncertainties and TTs<br>R5-082151: LTE UE Max Power and ACLR tests uncertainties and TTs<br>R5-082152: Text proposal for LTE Transmit OFF Power<br>R5-082153: LTE UE Max Rx Input and ACS test cases update<br>R5-082082: LTE Rx Intermodulation test case uncertainties and TTs<br>R5-082093: Text Proposal for TS 36.521-1 TC7.6 Blocking Characteristics<br>R5-082154: Text Proposal for TS 36.521-1 TC7.7 Spurious Response<br>R5-082167: OBW Measurement uncertainty & Test Tolerances<br>R5-082158: Cover for LTE Performance Requirement text proposal<br>R5-082159: Text Proposal for LTE Demodulation of PCFICH/PDCCH and PHICH<br>R5-082156: Text proposal for LTE Tx Minimum Output Power Uncertainty<br>R5-082157: Text proposal for LTE Tx Minimum Output Power Tolerance<br>R5-082164: Statistical testing of receiver characteristics<br>R5-082170: Cover for LTE Propagation Conditions Text Proposal<br>Editorial changes to align tables and figures numbering with R5-082025 | 0.2.0 | 0.3.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2008-08 | RAN5 #40 | R5-083163 | | | Following approved TPs have been included:<br>R5-083804: LTE Demodulation Performance text proposal<br>R5-083159: LTE-RF Occupied bandwidth test case / measurement uncertainty and TT text proposal<br>R5-083160: Transmission OFF power: TP, measurement uncertainty and test tolerances proposal<br>R5-083805: Frequency Error test case / measurement uncertainty and TT test proposal<br>R5-083162: Propagation conditions correction text proposal<br>R5-083220:Text Proposal for LTE Tx Minimum Output Power<br>R5-083806: TP of section 8 for E-UTRAN TDD in 36.521-1<br>R5-083344: Test Tolerance and System uncertainty for OBW test<br>R5-083848:Test Tolerance and System uncertainty for Reference sensitivity test<br>R5-083840: Test Tolerances for Spectrum Emission Mask<br>R5-083808: Reference Measurement Channel for LTE UE Receiver tests<br>R5-083350: Test Tolerance and System uncertainty for Blocking and Spurious response<br>R5-083366: Text Proposal for LTE Reporting of CQI/PMI<br>R5-083810: LTE PBCH Demodulation Performance Requirements<br>R5-083482: LTE-RF TP for Test Case 7.6 Blocking Characteristics<br>R5-083809: LTE-RF TP for Test Case 7.7 Spurious Response<br>R5-083484: LTE-RF TP for Test Case 7.9 Spurious Emissions<br>R5-083811: Annex E Global In-Channel TX-Test<br>R5-083163: TS 36.521-1 after RAN5#40 | 0.3.0 | 1.0.0 |
| 2008-10 | RAN5 #40Bis | R5-084072 | | | Following approved TPs have been included:<br>R5-084072 TS 36.521-1 after RAN5#40Bis<br>R5-084300 LTE-RF TP for Definitions Symbols and Abbreviations<br>R5-084304 LTE-RF-TP for general section<br>R5-084036 Test Tolerances for additional SEM<br>R5-084303 LTE-RF TP for Channel bandwidths and frequency range<br>R5-084305 LTE-RF TP for new Absolute Power Tolerance test case<br>R5-084067 LTE-RF TP for Transmission OFF test case<br>R5-084318 LTE-RF TP for Transmission Modulation test cases<br>R5-084069 LTE-RF Investigation of E-UTRA-TDD Frequency Error test case applicability<br>R5-084319 LTE-RF TP for Frequency Error test case<br>R5-084309 Text Proposal for LTE Tx Spurious Emissions<br>R5-084111 Text Proposal for LTE Adjacent Channel Leakage power Ratio<br>R5-084320 Text Proposal for LTE Additional Spectrum Emission Mask<br>R5-084310 Test Tolerances for additional spurious emission<br>R5-084311 Text Proposal for Occupied bandwidth<br>R5-084321 Text Proposal for LTE Spectrum Emission Mask<br>R5-084060 Modification to section 7.2 Diversity characteristics<br>R5-084312 References in 36.521-1 tests initial conditions<br>R5-084148 Update of Reference Measurement Channel for LTE UE Rx tests<br>R5-084167 LTE-RF TP for TC7.9 Spurious Emissions<br>R5-084075 LTE DL Reference Measurement Channel for PDSCH (FDD) text proposal<br>R5-084077 LTE Measurement of Performance Requirements text proposal<br>R5-084313 LTE Demodulation of PDSCH Test Requirements text proposal<br>R5-084147 Specification of DL propagation conditions for LTE UE tests<br>R5-084315 Text Proposal for LTE Demodulation of PCFICH/PDCCH<br>R5-084323 Text Proposal for Annex E Global In-Channel | 1.0.0 | 1.1.0 |
| 2008-12 | RAN#42 | RP-080863 | | | 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 |
| 2009-03 | RAN#43 | R5-086011 | 0001 | - | TP for In-band emissions | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086012 | 0002 | - | TP for Spectrum flatness | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086013 | 0003 | - | TP for IQ-component | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086064 | 0004 | - | LTE-RF: UE max output power | 8.0.1 | 8.1.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2009-03 | RAN#43 | R5-086093 | 0005 | - | Clarification of measurement period in minimum output power test procedure | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086094 | 0006 | - | Clarification of measurement period in transmit OFF power test procedure | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086120 | 0007 | - | Update of Max.input level test | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086125 | 0008 | - | Addition of UL Reference Measurement Channels in Annex A2 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086160 | 0009 | - | correction for Maximum Power Reduction (MPR) | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086167 | 0010 | - | LTE-RF: TDD applicability and CR for Blocking Characteristics and Spurious Response | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086168 | 0011 | - | LTE-RF: TDD applicability and CR for Spurious Emissions | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086239 | 0012 | - | Update of Symbols | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086401 | 0013 | - | LTE-RF: TX-RX channel freq separation | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086405 | 0014 | - | Update of 6.7 Transmit intermodulation test | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086406 | 0015 | - | Update of initial conditions for Tx and Rx test cases | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086408 | 0016 | - | Update of Adjacent Channel Leakage power Ratio | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086409 | 0017 | - | Removal of [ ] from Clause 7 Receiver Characteristics | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086413 | 0018 | - | Updates to Demodulation of PCFICH/PDCCH test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086414 | 0019 | - | Text proposal for Reporting of Channel State Information | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086415 | 0020 | - | Correction of RS_EPRE powers for default DL signal levels | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086416 | 0021 | - | Update of DL Reference Measurement Channels in Annex A3 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086417 | 0022 | - | Update to Annex E | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086425 | 0023 | - | Update of General text in clause 6 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086426 | 0024 | - | Clarification of measurement bandwidth in spectrum emission mask test | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086428 | 0025 | - | Demodulation of TDD PHICH test requirements text proposal | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-086429 | 0026 | - | Demodulation of TDD PCFICH/PDCCH test requirements text proposal | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090306 | 0027 | - | New Annex H for Uplink Physical Channels | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090308 | 0028 | - | Text proposal for Reporting of Channel State Information | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090403 | 0029 | - | CR to 36.521-1: Update of Spurious Emissions test cases | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090404 | 0030 | - | CR to 36.521-1: Update of ACLR test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090443 | 0031 | - | LTE-RF: Correction to 36.521-1 Frequency error test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-090488 | 0032 | - | LTE TDD applicability for Transmit intermodulation test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091002 | 0033 | - | LTE Demodulation of PDSCH Test Requirements text proposal | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091004 | 0034 | - | LTE-RF: CR for UE max power test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091007 | 0035 | - | LTE-RF: TDD Applicability and CR for Spectrum Emission Mask and Additional Spectrum Emission Mask | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091008 | 0036 | - | LTE-RF Investigation of E-UTRA-TDD for Occupied bandwidth test case applicability | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091009 | 0037 | - | LTE-RF: Investigation of E-UTRA-TDD for Adjacent Channel Leakage power Ratio test case applicability | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091011 | 0038 | - | LTE-RF: TDD applicability and CR for Maximum Input Level | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091012 | 0039 | - | LTE-RF: TDD applicability and CR for Adjacent Channel Selectivity (ACS) | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091017 | 0040 | - | Removal of Rx Narrowband Intermod 7.8.2 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091019 | 0041 | - | Relocation of 36.521-1 Annex C DL mapping | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091020 | 0042 | - | Removal of "Out-of-synchronization handling of output power" heading | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091023 | 0043 | - | Test requirements of TDD PDSCH demodulation performance with user-specific reference symbols | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091024 | 0044 | - | CR to 36.521-1: Update of Annex F.3.2 Measurement of transmitter | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091025 | 0045 | - | CR to 36.521-1: Update of SEM and Additional SEM test cases | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091077 | 0046 | - | CR to 36.521-1: Addition of test combinations for test cases with MPR application | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091082 | 0047 | - | Spurious emission requirements on PHS band including the future plan in Japan | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091101 | 0048 | - | LTE-RF: CR for MPR test case | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091106 | 0049 | - | Update of Reference sensitivity test in 7.3 | 8.0.1 | 8.1.0 |
| 2009-03 | RAN#43 | R5-091111 | 0050 | 1 | Update of initial conditions for Rx tests | 8.0.1 | 8.1.0 |
| 2009-05 | RAN#44 | R5-092144 | 0051 | - | LTE-RF: Resubmission of R5-086424 UE output power dynamics 36.521-1 v8.1.0 (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092146 | 0052 | - | LTE-RF: CR for UE configured UE transmitted output power test case (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092147 | 0053 | - | LTE-RF: CR for UE minimum output power test case (re-submit no change) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092149 | 0054 | - | LTE-RF: CR for Power Control Absolute power tolerance test case (re-submit no changes) | 8.1.0 | 8.2.0 |
| 2009-05 | RAN#44 | R5-092150 | 0055 | - | LTE-RF: CR for Power Control Relative power tolerance test case (re-submit no changes) | 8.1.0 | 8.2.0 |