# FCC SAR Test Report

## FCC ID: R9C-CPH1941

| | | |
|---|---|---|
| **Project No.** | : | 1909C106 |
| **Equipment** | : | Mobile Phone |
| **Brand Name** | : | OPPO |
| **Test Model** | : | CPH1941 |
| **Series Model** | : | N/A |
| **Date of Receipt** | : | Sep. 19, 2019 |
| **Date of Test** | : | Sep. 28, 2019 ~ Oct. 24, 2019 |
| **Issued Date** | : | Oct. 30, 2019 |
| **Report Version** | : | R01 |
| **Test Sample** | : | Engineering Sample No.: DG20190920156, DG20190920147, DG20190920151, DG20190920155, DG20190920154 |
| **Standard(s)** | : | Please refer to page 2. |
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The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Rot . Liang

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**Standard(s)** : **ANSI Std C95.1-1992** Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.(IEEE Std C95.1-1991)

**IEEE Std 1528-2013** Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

**KDB941225 D01** 3G SAR Procedures v03r01
**KDB941225 D05** SAR for LTE Devices v02r05
**KDB941225 D05A** LTE Rel.10 KDB Inquiry Sheet v01r02
**KDB941225 D06** Hotspot Mode V02r01
**KDB447498 D01** General RF Exposure Guidance v06
**KDB648474 D04** Handset SAR v01r03
**KDB248227 D01** 802. 11 Wi-Fi SAR v02r02
**KDB865664 D01** SAR measurement 100 MHz to 6 GHz v01r04
**KDB865664 D02** SAR Reporting v01r02
**KDB690783 D01** SAR Listings on Grants v01r03

**Declaration**

**BTL** represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

**BTL**'s reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. **BTL** shall have no liability for any declarations, inferences or generalizations drawn by the client or others from **BTL** issued reports.

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**BTL**'s laboratory quality assurance procedures are in compliance with the **ISO/IEC 17025** requirements, and accredited by the conformity assessment authorities listed in this test report.

**BTL** is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

**Limitation**

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

# Table of Contents Page


REPORT ISSUED HISTORY 6

1 . RF EMISSIONS MEASUREMENT 7

1.1 TEST FACILITY 7

1.2 MEASUREMENT UNCERTAINTY 7

2 . GENERAL INFORMATION 8

2.1 GENERAL DESCRIPTION OF EUT 8

2.2 STATEMENT OF COMPLIANCE 10

2.3 LABORATORY ENVIRONMENT 10

2.4 MAIN TEST INSTRUMENTS 11

3 . SAR MEASUREMENTS SYSTEM CONFIGURATION 13

3.1 SAR MEASUREMENT SET-UP 13

3.1.1 TEST SETUP LAYOUT 13

3.2 DASY5E-FIELDPROBESYSTEM 14

3.2.1 PROBE SPECIFICATION 14

3.2.2 E-FIELD PROBE CALIBRATION 15

3.2.3 OTHER TEST EQUIPMENT 16

3.2.4 SCANNING PROCEDURE 17

3.2.5 SPATIAL PEAK SAR EVALUATION 18

3.2.6 DATA STORAGE AND EVALUATION 19

3.2.7 DATA EVALUATION BY SEMCAD 20

4 . SYSTEM VERIFICATION PROCEDURE 22

4.1 TISSUE VERIFICATION 22

4.2 SYSTEM CHECK 24

4.3 SYSTEM CHECK PROCEDURE 25

5 . SAR MEASUREMENT VARIABILITY AND UNCERTAINTY 26

5.1 SAR MEASUREMENT VARIABILITY 26

6 . OPERATIONAL CONDITIONS DURING TEST 27

6.1 SAR TEST CONFIGURATION 27

6.1.1 GSM TEST CONFIGURATION 27

6.1.2 UMTS TEST CONFIGURATION 28

6.1.3 LTE TEST CONFIGURATION 33

6.1.4 LTE CARRIER AGGREGATION POWER 37

6.1.5 WIFI TEST CONFIGURATION 43

6.2 TEST POSITION 45

6.2.1 HEAD TEST CONFIGURATION 45

6.2.2 BODY-WORN TEST CONFIGURATION 46

# Table of Contents Page


6.2.3 HOTSPOT TEST CONFIGURATION 46
6.2.4 PRODUCT SPECIFIC 10-G SAR TEST CONFIGURATION 46
6.3 GENERAL DESCRIPTION OF TEST PROCEDURES 47
6.4 RECEIVER DETECTION MECHANISM 47
6.4.1 GENERAL DESCRIPTION OF RECEIVER DETECTION MECHANISM 47
6.4.2 MORE DETAILS INFORMATION FOLLOWINGS 48
7 . TEST RESULT 49
7.1 CONDUCTED POWER RESULTS 49
7.1.1 CONDUCTED POWER MEASUREMENTS OF GSM 49
7.1.2 CONDUCTED POWER MEASUREMENTS OF UMTS 53
7.1.3 CONDUCTED POWER MEASUREMENTS OF LTE 61
7.1.4 CONDUCTED POWER MEASUREMENTS OF BT 129
7.1.5 CONDUCTED POWER MEASUREMENTS OF WIFI 131
7.2 SAR TEST RESULTS 136
7.2.1 SAR MEASUREMENT RESULT OF HEAD 138
7.2.2 SAR MEASUREMENT RESULT OF BODY-WORN 149
7.2.3 SAR MEASUREMENT RESULT OF HOTSPOT 158
7.2.4 SAR MEASUREMENT RESULT OF PRODUCT SPECIFIC 10-G SAR 170
7.3 MULTIPLE TRANSMITTER EVALUATION 182
7.3.1 STAND-ALONE SAR TEST EXCLUSION 182
7.3.2 SIMULTANEOUS TRANSMISSION CONDITIONS 183
7.3.3 SAR SUMMATION SCENARIO 184
APPENDIX 187
1. TEST LAYOUT 187
Appendix A. SAR Plots of System Verification
Appendix B. SAR Plots of SAR Measurement
Appendix C. Calibration Certificate
Appendix D. Photographs of the Test Set-Up
Appendix E. Antenna location

# REPORT ISSUED HISTORY

| Report Version | Description | Issued Date |
|---|---|---|
| R00 | Original Issue. | Oct. 29, 2019 |
| R01 | 1. Updated the description in section 7.3.1.<br>2. Updated the data of BT. | Oct. 30, 2019 |

# 1. RF EMISSIONS MEASUREMENT

## 1.1 TEST FACILITY

The test facilities used to collect the test data in this report is **SAR room** at the location of No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

## 1.2 MEASUREMENT UNCERTAINTY

Note: Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

# 2. GENERAL INFORMATION

## 2.1 GENERAL DESCRIPTION OF EUT

| | | | |
|---|---|---|---|
| Equipment | Mobile Phone | | |
| Brand Name | OPPO | | |
| Model Name | CPH1941 | | |
| IMEI Code | Sample 1 | 868467040020176 | |
| | Sample 2 | 868467040020416 | |
| | Sample 3 | 868467040020044 | |
| | Sample 4 | 868467040020093 | |
| | Sample 5 | 868467040020028 | |
| Hardware Version | 11 | | |
| Software Version | ColorOS V6.0.1 | | |
| Firmware Version | TBD | | |
| Modulation | GSM(GMSK/8PSK), UMTS(QPSK), LTE(QPSK/16QAM/64QAM), WiFi(DSSS/OFDM), BT(GFSK/π/4-DQPSK/8-DPSK) | | |
| Operation Frequency Range(s) | Band | TX (MHz) | RX (MHz) |
| | GSM850 | 824~849 | 869~894 |
| | GSM1900 | 1850~1910 | 1930~1990 |
| | UMTS B2 | 1850~1910 | 1930~1990 |
| | UMTS B4 | 1710~1755 | 2110~2155 |
| | UMTS B5 | 824~849 | 869~894 |
| | LTE B2 | 1850~1910 | 1930~1990 |
| | LTE B4 | 1710~1755 | 2110~2155 |
| | LTE B5 | 824~849 | 869~894 |
| | LTE B7 | 2500~2570 | 2620~2690 |
| | LTE B26 | 814~849 | 859~894 |
| | LTE B38 | 2570~2620 | |
| | LTE B41 | 2496-2690 | |
| | Bluetooth | 2402~2480 | |
| | 2.4G WLAN | 2412~2462 | |
| | 5.2G WLAN | 5150~5250 | |
| | 5.3G WLAN | 5250~5350 | |
| | 5.6G WLAN | 5470~5725 | |
| | 5.8G WLAN | 5725~5850 | |
| GPRS/EDGE Multislot Class(12) | Max Number of Timeslots in Uplink: | 4 | |
| | Max Number of Timeslots in Downlink: | 4 | |
| | Max Total Timeslot: | 5 | |
| GSM Device class | Class B | | |
| HSDPA UE Category | 14 | | |
| HSUPA UE Category | 6 | | |
| DC-HSDPA Category | 24 | | |
| Power Class | 4,tested with power level 5(GSM850) | | |
| | 1,tested with power level 0(GSM1900) | | |
| | 3, tested with power control “all up bits”(UMTS B2/4/5) | | |
| | 3, tested with power control “all Max” (LTE B2/4/5/7/26/38/41) | | |

| | | | | | |
|---|---|---|---|---|---|
| Test Channels (low-mid-high) | 128-190-251 (GSM850) | | | | |
| | 512-661-810 (GSM1900) | | | | |
| | 9262-9400-9538 (UMTS B2) | | | | |
| | 1312-1413-1513 (UMTS B4) | | | | |
| | 4132-4182-4233 (UMTS B5) | | | | |
| | 18700-18900-19100 (LTE B2 BW=20MHz) | | | | |
| | 20050-20175-20300 (LTE B4 BW=20MHz) | | | | |
| | 20450-20525-20600 (LTE B5 BW=10MHz) | | | | |
| | 20850-21100-21350 (LTE B7 BW=20MHz) | | | | |
| | 26765-26865-26965 (LTE B26 BW=15MHz) | | | | |
| | 37850-38000-38150 (LTE B38 BW=20MHz) | | | | |
| | 39750-40620-41490 (LTE B41 BW=20MHz) | | | | |
| | 0-39-78 (BT) | | | | |
| | 0-19-39 (BLE) | | | | |
| | 1-6-11 (2.4G WIFI 802.11b/g/n HT20) | | | | |
| | 5G WIFI | 5.2G | 5.3G | 5.6G | 5.8G |
| | 802.11a/n HT20/ ac VHT20 | 36-40-44-48 | 52-56-60-64 | 100-104-108-112-116-132-136-140 | 149-153-157-161-165 |
| | 802.11n HT40/ ac VHT40 | 38-46 | 54-62 | 102-110-118-126-134 | 151-159 |
| | 802.11ac VHT80 | 42 | 58 | 106-122 | 155 |
| Antenna Gain | Band | Main antenna(dBi) | Second antenna(dBi) | WiFi antenna(dBi) | |
| | GSM 850 | 0.5 | 0.5 | / | |
| | GSM 1900 | 1.1 | 1.1 | / | |
| | UMTS B2 | 1.1 | 1.1 | / | |
| | UMTS B4 | 1.1 | 1.1 | / | |
| | UMTS B5 | 0.5 | 0.5 | / | |
| | LTE B2 | 1.1 | 1.1 | / | |
| | LTE B4 | 1.1 | 1.1 | / | |
| | LTE B5 | 0.5 | 0.5 | / | |
| | LTE B7 | 1.1 | 1.1 | / | |
| | LTE B26 | 0.5 | 0.5 | / | |
| | LTE B38 | 1.1 | 1.1 | / | |
| | LTE B41 | 1.1 | 1.1 | / | |
| | Bluetooth | / | / | -3.0 | |
| | WLAN 2.4G | / | / | -3.0 | |
| | WLAN 5G | / | / | -3.0 | |
| **Other Information** | | | | | |
| Battery | Power Rating | 3.87Vdc, 5000mAh/19.35Wh | | | |
| | Factory/Model | 1# Desay/BLP727(DA-P727-933) | | | |
| | | 2# Desay/BLP727(DD-P727-918) | | | |
| | | 3# Desay/BLP727(DA-P727-923) | | | |
| | | 4# Sunwoda/BLP727(XA-P727-922) | | | |
| | | 5# NVT/BLP727(NA-P727-92) | | | |
| With Earphone(Yes/No) | No | | | | |

## 2.2 STATEMENT OF COMPLIANCE

| Mode | Highest Reported Head SAR-1g (W/kg) | Highest Reported Body-worn (15mm) SAR-1g (W/kg) | Highest Reported Hotspot (10mm) SAR-1g (W/kg) | Highest Reported Product Specific (0mm) SAR-10g (W/kg) |
|---|---|---|---|---|
| GSM850 | 0.99 | 0.12 | 0.26 | / |
| GSM1900 | 0.77 | 0.21 | 0.62 | / |
| UMTS B2 | 1.07 | 0.31 | 0.80 | / |
| UMTS B4 | 1.07 | 0.31 | 0.92 | / |
| UMTS B5 | 0.31 | 0.15 | 0.24 | / |
| LTE B2 | 0.98 | 0.32 | 0.85 | / |
| LTE B4 | 1.06 | 0.36 | 0.92 | / |
| LTE B5 | 0.70 | 0.25 | 0.48 | / |
| LTE B7 | 0.96 | 0.30 | 0.82 | / |
| LTE B26 | 0.41 | 0.17 | 0.22 | / |
| LTE B38 | 0.89 | 0.29 | 0.74 | / |
| LTE B41 | 0.82 | 0.25 | 0.66 | / |
| 2.4G WLAN | 0.77 | 0.10 | 0.26 | / |
| 5.2G WLAN | / | / | 0.18 | / |
| 5.3G WLAN | 0.64 | 0.14 | / | 0.77 |
| 5.6G WLAN | 0.64 | 0.16 | / | 0.43 |
| 5.8G WLAN | 0.58 | 0.20 | 0.41 | / |
| Bluetooth | 0.24 | 0.03 | / | / |
| **Note: The highest reported SAR for head, body-worn, hotspot, product Specific SAR-10g and simultaneous transmission exposure conditions are 1.07W/kg, 0.36W/kg, 0.92W/kg, 0.77W/kg and 1.45W/kg respectively.** | | | | |

Note: The device is in compliance with Specific Absorption Rate(SAR)for general population uncontrolled exposure limits according to the FCC rule §2.1093, the ANSI C95.1:1992/IEEE C95.1:1991, the NCRP Report Number 86 for uncontrolled environment and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 .

## 2.3 LABORATORY ENVIRONMENT

| | |
|---|---|
| Temperature | Min. = 18ºC, Max. = 25ºC |
| Relative humidity | Min. = 30%, Max. = 70% |
| Ground system resistance | < 0.5Ω |
| Ambient noise is checked and found very low and in compliance with requirement of standards.<br>Reflection of surrounding objects is minimized and in compliance with requirement of standards. | |

## 2.4 MAIN TEST INSTRUMENTS

| Item | Equipment | Manufacturer | Model | Serial No. | Cal. Date | Cal. Interval |
|---|---|---|---|---|---|---|
| 1 | Data Acquisition Electronics | Speag | DAE4 | 878 | Dec. 12, 2018 | 1 Year |
| 2 | Data Acquisition Electronics | Speag | DAE3 | 420 | Jun. 21, 2019 | 1 Year |
| 3 | E-field Probe | Speag | EX3DV4 | 7544 | Sep. 09, 2019 | 1 Year |
| 4 | E-field Probe | Speag | ES3DV3 | 3162 | Apr. 12, 2019 | 1 Year |
| 5 | System Validation Dipole | Speag | D835V2 | 4d160 | Jun. 05, 2018 | 3 Years |
| 6 | System Validation Dipole | Speag | D1750V2 | 1101 | Jun. 07, 2018 | 3 Years |
| 7 | System Validation Dipole | Speag | D1900V2 | 5d179 | Jun. 07, 2018 | 3 Years |
| 8 | System Validation Dipole | Speag | D2450V2 | 919 | Jun. 11, 2018 | 3 Years |
| 9 | System Validation Dipole | Speag | D2600V2 | 1067 | Jun. 11, 2018 | 3 Years |
| 10 | System Validation Dipole | Speag | D5GHzV2 | 1160 | Jun. 20, 2018 | 3 Years |
| 11 | Twin Sam Phantom | Speag | Twin Sam Phantom V5.0 | 1469 | N/A | N/A |
| 12 | Twin Sam Phantom | Speag | Twin Sam Phantom V5.0 | 1784 | N/A | N/A |
| 13 | Twin Sam Phantom | Speag | Twin Sam Phantom V5.0 | 1896 | N/A | N/A |
| 14 | 8960 Series 10 Wireless Com Test set | Agilent | E5515E | MY52112163 | Aug. 03, 2019 | 1 Year |
| 15 | Radio Communication Analver | Anritsu | MT8820C | 6201525877 | Aug. 03, 2019 | 1 Year |
| 16 | Wideband radio communication tester | R&S | CMW500 | 152372 | Mar. 10, 2019 | 1 Year |
| 17 | CMW500-Wideband Radio Communication Tester | R&S | CMW500 | 153883 | Mar. 10, 2019 | 1 Year |
| 18 | Power Amplifier | Mini-Circuits | ZHL-42W+ | QA1333003 | Feb. 25, 2019 | 1 Year |
| 19 | Power Amplifier | Mini-Circuits | ZVE-8G+ | 520701341 | Feb. 25, 2019 | 1 Year |
| 20 | DC Source | lteck | OT6154 | M00157 | Aug. 03, 2019 | 1 Year |
| 21 | ENA Network Analyzer | Agilent | E5071C | MY46102965 | Mar. 10, 2019 | 1 Year |
| 22 | MXG Analog Signal Generator | Agilent | N5181A | MY49060710 | Aug. 03, 2019 | 1 Year |
| 23 | Signal Generator | Agilent | E4438C | MY4907131 | Mar. 10, 2019 | 1 Year |
| 24 | Peak Power Analyzer | Keysight | 8990B | MY51000506 | Nov. 26, 2018 | 1 Year |
| 25 | Wideband Power Sensor | Keysight | N1923A | MY58310004 | Nov. 26, 2018 | 1 Year |
| 26 | Smart Power Sensor | R&S | NRP-Z21 | 102209 | Mar. 01, 2019 | 1 Year |
| 27 | Dielectric Assessment Kit | Speag | DAK-3.5 | 1226 | N/A | N/A |
| 28 | Dual directional coupler | Woken | TS-PCC0M-05 | 107090019 | Mar. 10, 2019 | 1 Year |
| 29 | Coupler | Woken | 0110A05601O-10 | COM5BNW1A2 | Mar. 10, 2019 | 1 Year |
| 30 | Digital Themometer | LKM | DTM3000 | 3519 | Jul. 08, 2019 | 1 Year |

Remark:
1. “N/A” denotes no model name, serial No. or calibration specified.
2. * These test equipments have been recalibrated between the test periods. All these test equipments were within the valid period when the tests were performed.
3. 1) Per KDB865664 D01 requirements for dipole calibration, the test laboratory has adopted three-year extended calibration interval. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.
a) There is no physical damage on the dipole;
b) System check with specific dipole is within 10% of calibrated value;
c) The most recent return-loss result , measured at least annually, deviates by no more than 20% from the previous measurement;
d) The most recent measurement of the real or imaginary parts of the impedance, measured at least annually is within 5Ω from the previous measurement.
2) Network analyzer probe calibration against air, distilled water and a short block performed before measuring liquid parameters.

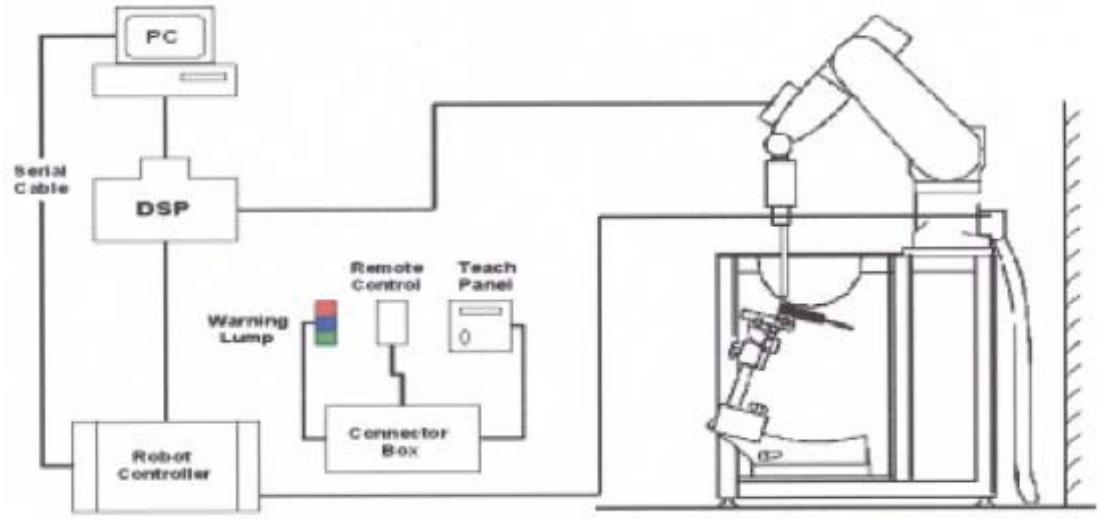
# 3. SAR MEASUREMENTS SYSTEM CONFIGURATION

## 3.1 SAR MEASUREMENT SET-UP

The DASY5 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
6. TheDASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 7
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

### 3.1.1 TEST SETUP LAYOUT



## 3.2 DASY5E-FIELDPROBESYSTEM

The SAR measurements were conducted with the dosimetric probe EX3DV4 and ES3DV3 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

### 3.2.1 PROBE SPECIFICATION

EX3DV4

| | |
|---|---|
| Construction | Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |
| Calibration | ISO/IEC 17025 calibration service available |
| Frequency | 10 MHz to 6 GHz<br>Linearity: ± 0.2 dB (30 MHz to 6 GHz) |
| Directivity | ± 0.3 dB in HSL (rotation around probe axis)<br>± 0.5 dB in tissue material (rotation normal to probe axis) |
| Dynamic Range | 10 µW/g to > 100 mW/g<br>Linearity:± 0.2dB |
| Dimensions | Overall length: 330 mm (Tip: 20 mm)<br>Tip diameter: 2.5 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm |

ES3DV3

| | |
|---|---|
| Construction | Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |
| Calibration | ISO/IEC 17025 calibration service available |
| Frequency | 10 MHz to 4 GHz<br>Linearity: ± 0.2 dB (30 MHz to 4 GHz) |
| Directivity | ± 0.3 dB in HSL (rotation around probe axis)<br>± 0.5 dB in tissue material (rotation normal to probe axis) |
| Dynamic Range | 5 µW/g to > 100 mW/g<br>Linearity:± 0.2dB |
| Dimensions | Overall length: 330 mm (Tip: 20 mm)<br>Tip diameter: 4 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm |

**E-field Probe**

### 3.2.2 E-FIELD PROBE CALIBRATION

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than ±10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$\mathbf{SAR} = \mathbf{C}\frac{\Delta T}{\Delta t}$$

Where: $\Delta t$ = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

$\Delta T$ = Temperature increase due to RF exposure.

Or

$$\mathbf{SAR} = \frac{|E|^2 \sigma}{\rho}$$

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m3).

### 3.2.3 OTHER TEST EQUIPMENT

#### 3.2.3.1. Device Holder for Transmitters

**Construction:** Simple but effective and easy-to-use extension for Mounting Device that facilitates the testing of larger devices (e.g., laptops, cameras, etc.) It is light weight and fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin SAM, ELI4 and SAM v6.0 Phantoms.
**Material:** POM, Acrylic glass, Foam

#### 3.2.3.2 Phantom

| | | |
|---|---|---|
| Model | Twin SAM | |
| Construction | The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot. | |
| Shell Thickness | 2 ± 0.2 mm | |
| Filling Volume | Approx. 25 liters | |
| Dimensions | Length:1000mm; Width: 500mm<br>Height: adjustable feet | |
| Aailable | Special | |

### 3.2.4 SCANNING PROCEDURE

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. ± 5 %.

The “surface check” measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above ± 0.1mm). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within ± 30°.)

- Area Scan

The “area scan” measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension (≤2GHz), 12 mm in x- and y- dimension (2-4 GHz) and 10mm in x- and y- dimension (4-6GHz). If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation.

- Zoom Scan

A “zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous “coarse” scan. This is a fine grid with maximum scan spatial resolution: $\Delta x_{zoom}$, $\Delta y_{zoom}$≤2GHz -≤8mm, 2-4GHz -≤5 mm and 4-6 GHz-≤4mm; $\Delta z_{zoom}$≤3GHz -≤5 mm, 3-4 GHz-≤4mm and 4-6GHz-≤2mm where the robot additionally moves the probe along the z-axis away from the bottom of the Phantom. DASY is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in Appendix B. Test results relevant for the specified standard (see chapter 1.4.) are shown in table form in chapter 7.2.

A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2 mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth.

The following table summarizes the area scan and zoom scan resolutions per FCC KDB 865664D01:

| Frequency | Maximun Area Scan resolution ($\Delta x_{area}$, $\Delta y_{area}$) | Maximun Zoom Scan spatial resolution ($\Delta x_{Zoom}$, $\Delta y_{Zoom}$) | Maximun Zoom Scan spatial resolution | | | Minimum zoom scan volume (x,y,z) |
|---|---|---|---|---|---|---|
| | | | Uniform Grid | Graded Grad | | |
| | | | $\Delta z_{Zoom}(n)$ | $\Delta z_{Zoom}(1)$* | $\Delta z_{Zoom}(n>1)$* | |
| ≤2GHz | ≤15mm | ≤8mm | ≤5mm | ≤4mm | ≤1.5*$\Delta z_{Zoom}$(n-1) | ≥30mm |
| 2-3GHz | ≤12mm | ≤5mm | ≤5mm | ≤4mm | ≤1.5*$\Delta z_{Zoom}$(n-1) | ≥30mm |
| 3-4GHz | ≤12mm | ≤5mm | ≤4mm | ≤3mm | ≤1.5*$\Delta z_{Zoom}$(n-1) | ≥28mm |
| 4-5GHz | ≤10mm | ≤4mm | ≤3mm | ≤2.5mm | ≤1.5*$\Delta z_{Zoom}$(n-1) | ≥25mm |
| 5-6GHz | ≤10mm | ≤4mm | ≤2mm | ≤2mm | ≤1.5*$\Delta z_{Zoom}$(n-1) | ≥22mm |

### 3.2.5 SPATIAL PEAK SAR EVALUATION

The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The basis of the evaluation are the SAR values measured at the points of the fine cube grid consisting of 5 x 5 x 7 points (with 8mm horizontal resolution) or 7 x 7 x 7 points (with 5mm horizontal resolution) or 8 x 8 x 7 points (with 4mm horizontal resolution). The algorithm that finds the maximal averaged volume is separated into three different stages.

- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting “Graph Evaluated”.
- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.
- All neighboring volumes are evaluated until no neighboring volume with a higher average value is found.

**Extrapolation**

The extrapolation is based on a least square algorithm [W. Gander, Computermathematik,p.168-180]. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

**Interpolation**

The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition [W. Gander, Computer mathematik, p.141-150] (x, y and z -direction) [Numerical Recipes in C, Second Edition, p.123ff ].

**Volume Averaging**

At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points (20x20x20) are interpolated to calculate the average.

**Advanced Extrapolation**

DASY5 uses the advanced extrapolation option which is able to compansate boundary effects on E-field probes.

### 3.2.6 DATA STORAGE AND EVALUATION

#### 3.2.6.1 Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “DAE”. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

### 3.2.7 DATA EVALUATION BY SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

| | | |
|---|---|---|
| Probe parameters: | Sensitivity | Normi, $a_{i0}$, $a_{i1}$, $a_{i2}$ |
| | Conversion factor | $ConvF_i$ |
| | Diode compression point | $Dcp_i$ |
| Device parameters: | Frequency | f |
| | Crest factor | cf |
| Media parameters: | Conductivity | |
| | Density | |

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multi meter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf / dcp_i$$

| | | |
|---|---|---|
| With | $V_i$ = compensated signal of channel i | ( i = x, y, z ) |
| | $U_i$ = input signal of channel i | ( i = x, y, z ) |
| | cf = crest factor of exciting field | (DASY parameter) |
| | $dcp_i$ = diode compression point | (DASY parameter) |

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes: $E_i = ( V_i / Norm_i \cdot ConvF )^{1/2}$

H-field probes: $H_i = ( V_i )^{1/2} \cdot ( a_{i0} + a_{i1} f + a_{i2} f^2 ) / f$

With $V_i$ = compensated signal of channel i ( i = x, y, z )

$Norm_i$ = sensor sensitivity of channel i ( i = x, y, z )

[mV/(V/m)$^2$] for E-field Probes

ConvF = sensitivity enhancement in solution

aij = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

$E_i$ = electric field strength of channel i in V/m

$H_i$ = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_X^2 + E_Y^2 + E_Z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot})^2 \cdot \boldsymbol{\sigma} / (\boldsymbol{\rho} \cdot 1000)$$

With SAR = local specific absorption rate in mW/g

$E_{tot}$ = total field strength in V/m

= conductivity in [mho/m] or [Siemens/m]

= equivalent tissue density in g/cm$^3$

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \text{ or } P_{pwe} = H_{tot}^2 \cdot 37.7$$

With $P_{pwe}$ = equivalent power density of a plane wave in mW/cm$^2$

$E_{tot}$ = total field strength in V/m

$H_{tot}$ = total magnetic field strength in A/m

# 4. SYSTEM VERIFICATION PROCEDURE

## 4.1 TISSUE VERIFICATION

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine of the dielectic parameter are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within ± 5% of the target values.

The following materials are used for producing the tissue-equivalent materials.

| Tissue Type | Bactericide | DGBE | HEC | NaCl | Sucrose | Triton X-100 | Water | Diethylene Glycol Mono-hexylether |
|---|---|---|---|---|---|---|---|---|
| Head 835 | 0.2 | - | 0.2 | 1.5 | 57.0 | - | 41.1 | - |
| Head 1750 | - | 47.0 | - | 0.4 | - | - | 52.6 | - |
| Head 1900 | - | 44.5 | - | 0.2 | - | - | 55.3 | - |
| Head 2450 | - | 45.0 | - | 0.1 | - | - | 54.9 | - |
| Head 2600 | - | 45.1 | - | 0.1 | - | - | 54.8 | - |
| Head 5G | - | - | - | - | - | 17.2 | 65.5 | 17.3 |

Salt: 99+% Pure Sodium Chloride; Sugar: 98+% Pure Sucrose; Water: De-ionized, 16M + resistivity
HEC: Hydroxyethyl Cellulose; DGBE: 99+% Di(ethylene glycol) butyl ether,[2-(2-butoxyethoxy)ethanol]
Triton X-100(ultra pure): Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl)phenyl]ether

| Tissue Verification | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tissue Type | Frequency (MHz) | Liquid Temp. (℃) | Conductivity (σ) | Permittivity (εr) | Targeted Conductivity (σ) | Targeted Permittivity (εr) | Deviation Conductivity (σ) (%) | Deviation Permittivity (εr) (%) | Date |
| Head | 835 | 22.4 | 0.902 | 42.401 | 0.90 | 41.5 | 0.22 | 2.17 | Oct. 03, 2019 |
| Head | 835 | 22.2 | 0.901 | 42.791 | 0.90 | 41.5 | 0.11 | 3.11 | Oct. 06, 2019 |
| Head | 835 | 22.5 | 0.900 | 42.763 | 0.90 | 41.5 | 0.00 | 3.04 | Oct. 08, 2019 |
| Head | 835 | 22.3 | 0.902 | 42.411 | 0.90 | 41.5 | 0.22 | 2.20 | Oct. 09, 2019 |
| Head | 835 | 22.3 | 0.890 | 42.987 | 0.90 | 41.5 | -1.11 | 3.58 | Oct. 15, 2019 |
| Head | 835 | 22.5 | 0.890 | 42.994 | 0.90 | 41.5 | -1.11 | 3.60 | Oct. 16, 2019 |
| Head | 1750 | 22.4 | 1.419 | 38.360 | 1.37 | 40.1 | 3.58 | -4.34 | Sep. 29, 2019 |
| Head | 1750 | 22.3 | 1.421 | 38.420 | 1.37 | 40.1 | 3.72 | -4.19 | Oct. 01, 2019 |
| Head | 1750 | 22.2 | 1.358 | 39.714 | 1.37 | 40.1 | -0.88 | -0.96 | Oct. 02, 2019 |
| Head | 1750 | 22.1 | 1.412 | 41.149 | 1.37 | 40.1 | 3.07 | 2.62 | Oct. 11, 2019 |
| Head | 1900 | 22.4 | 1.384 | 39.557 | 1.40 | 40.0 | -1.14 | -1.11 | Sep. 28, 2019 |
| Head | 1900 | 22.3 | 1.379 | 39.603 | 1.40 | 40.0 | -1.50 | -0.99 | Oct. 10, 2019 |
| Head | 1900 | 22.5 | 1.422 | 39.337 | 1.40 | 40.0 | 1.57 | -1.66 | Oct. 11, 2019 |
| Head | 1900 | 22.5 | 1.375 | 39.027 | 1.40 | 40.0 | -1.79 | -2.43 | Oct. 12, 2019 |
| Head | 2450 | 22.4 | 1.885 | 38.186 | 1.80 | 39.2 | 4.72 | -2.59 | Oct. 17, 2019 |
| Head | 2600 | 23.1 | 2.048 | 37.722 | 1.96 | 39.0 | 4.49 | -3.28 | Sep. 29, 2019 |
| Head | 2600 | 22.4 | 2.051 | 37.628 | 1.96 | 39.0 | 4.64 | -3.52 | Oct. 02, 2019 |
| Head | 2600 | 23.3 | 2.038 | 37.715 | 1.96 | 39.0 | 3.98 | -3.29 | Oct. 03, 2019 |
| Head | 2600 | 22.5 | 2.024 | 38.836 | 1.96 | 39.0 | 3.27 | -0.42 | Oct. 09, 2019 |
| Head | 2600 | 22.5 | 2.054 | 37.977 | 1.96 | 39.0 | 4.80 | -2.62 | Oct. 14, 2019 |
| Head | 2600 | 22.4 | 2.024 | 38.632 | 1.96 | 39.0 | 3.27 | -0.94 | Oct. 17, 2019 |
| Head | 2600 | 22.3 | 2.049 | 37.739 | 1.96 | 39.0 | 4.54 | -3.23 | Oct. 18, 2019 |
| Head | 5200 | 22.4 | 4.755 | 35.658 | 4.66 | 36.0 | 2.04 | -0.95 | Oct. 24, 2019 |
| Head | 5300 | 22.5 | 4.815 | 35.945 | 4.76 | 35.9 | 1.16 | 0.13 | Oct. 13, 2019 |
| Head | 5300 | 22.4 | 4.861 | 35.499 | 4.76 | 35.9 | 2.12 | -1.12 | Oct. 24, 2019 |
| Head | 5500 | 22.5 | 5.037 | 35.487 | 4.96 | 35.6 | 1.55 | -0.32 | Oct. 13, 2019 |
| Head | 5500 | 22.4 | 5.083 | 35.182 | 4.96 | 35.6 | 2.48 | -1.17 | Oct. 24, 2019 |
| Head | 5600 | 22.5 | 5.158 | 35.271 | 5.07 | 35.5 | 1.74 | -0.65 | Oct. 13, 2019 |
| Head | 5600 | 22.4 | 5.197 | 35.011 | 5.07 | 35.5 | 2.50 | -1.38 | Oct. 24, 2019 |
| Head | 5800 | 22.5 | 5.411 | 34.839 | 5.27 | 35.3 | 2.68 | -1.31 | Oct. 14, 2019 |

Note:
1) The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.
2) KDB 865664 was ensured to be applied for probe calibration frequencies greater than or equal to 50MHz of the EUT frequencies.
3) The above measured tissue parameters were used in the DASY software to perform interpolation via the DASY software to determine actual dielectric parameters at the test frequencies. The SAR test plots may slightly differ from the table above since the DASY rounds to three significant digits.

## 4.2 SYSTEM CHECK

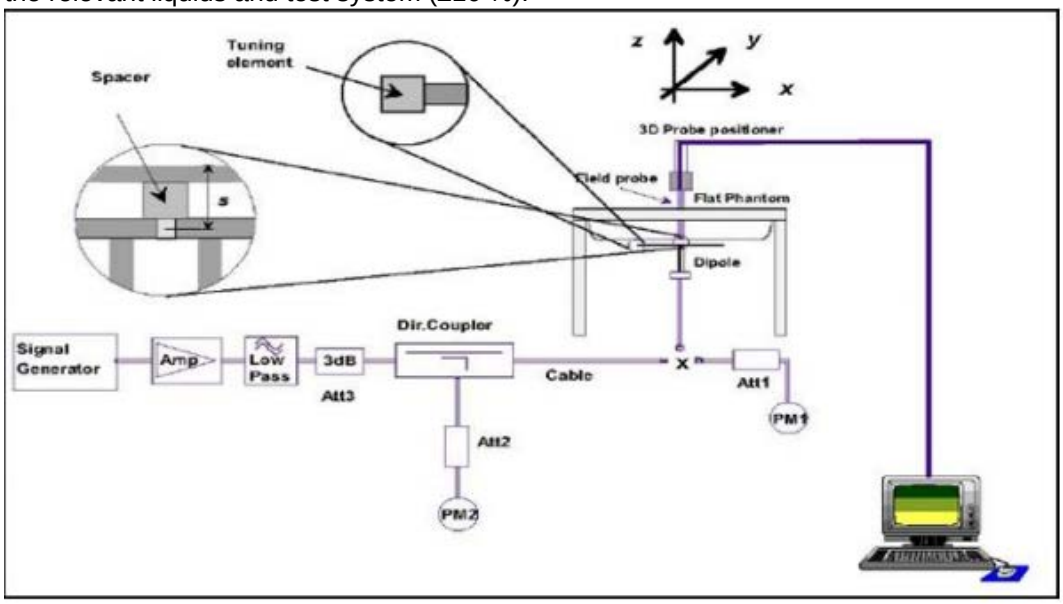
The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE Std 1528 (described above). The following table shows system check results for all frequency bands and tissue liquids used during the tests.

| System Check | Date | Frequency (MHz) | Targeted SAR-1g (W/kg) | Measured SAR-1g (W/kg) | normalized SAR-1g (W/kg) | Deviation (%) | Dipole S/N |
|---|---|---|---|---|---|---|---|
| Head | Oct. 03, 2019 | 835 | 9.23 | 2.39 | 9.56 | 3.58 | 4d160 |
| Head | Oct. 06, 2019 | 835 | 9.23 | 2.40 | 9.60 | 4.01 | 4d160 |
| Head | Oct. 08, 2019 | 835 | 9.23 | 2.42 | 9.68 | 4.88 | 4d160 |
| Head | Oct. 09, 2019 | 835 | 9.23 | 2.41 | 9.64 | 4.44 | 4d160 |
| Head | Oct. 15, 2019 | 835 | 9.23 | 2.23 | 8.92 | -3.36 | 4d160 |
| Head | Oct. 16, 2019 | 835 | 9.23 | 2.39 | 9.56 | 3.58 | 4d160 |
| Head | Sep. 29, 2019 | 1750 | 37.00 | 9.19 | 36.76 | -0.65 | 1101 |
| Head | Oct. 01, 2019 | 1750 | 37.00 | 9.32 | 37.28 | 0.76 | 1101 |
| Head | Oct. 02, 2019 | 1750 | 37.00 | 9.12 | 36.48 | -1.41 | 1101 |
| Head | Oct. 11, 2019 | 1750 | 37.00 | 9.65 | 38.60 | 4.32 | 1101 |
| Head | Sep. 28, 2019 | 1900 | 39.50 | 9.77 | 39.08 | -1.06 | 5d179 |
| Head | Oct. 10, 2019 | 1900 | 39.50 | 10.20 | 40.80 | 3.29 | 5d179 |
| Head | Oct. 11, 2019 | 1900 | 39.50 | 10.34 | 41.36 | 4.71 | 5d179 |
| Head | Oct. 12, 2019 | 1900 | 39.50 | 10.30 | 41.20 | 4.30 | 5d179 |
| Head | Oct. 17, 2019 | 2450 | 52.10 | 13.50 | 54.00 | 3.65 | 919 |
| Head | Sep. 29, 2019 | 2600 | 56.10 | 14.20 | 56.80 | 1.25 | 1067 |
| Head | Oct. 02, 2019 | 2600 | 56.10 | 14.20 | 56.80 | 1.25 | 1067 |
| Head | Oct. 03, 2019 | 2600 | 56.10 | 14.50 | 58.00 | 3.39 | 1067 |
| Head | Oct. 09, 2019 | 2600 | 56.10 | 14.20 | 56.80 | 1.25 | 1067 |
| Head | Oct. 14, 2019 | 2600 | 56.10 | 14.71 | 58.84 | 4.88 | 1067 |
| Head | Oct. 17, 2019 | 2600 | 56.10 | 14.30 | 57.20 | 1.96 | 1067 |
| Head | Oct. 18, 2019 | 2600 | 56.10 | 14.68 | 58.72 | 4.67 | 1067 |
| Head | Oct. 24, 2019 | 5200 | 75.30 | 7.24 | 72.40 | -3.85 | 1160 |
| Head | Oct. 13, 2019 | 5300 | 76.80 | 7.39 | 73.90 | -3.78 | 1160 |
| Head | Oct. 24, 2019 | 5300 | 76.80 | 7.36 | 73.60 | -4.17 | 1160 |
| Head | Oct. 13, 2019 | 5500 | 80.80 | 7.99 | 79.90 | -1.11 | 1160 |
| Head | Oct. 24, 2019 | 5500 | 80.80 | 8.06 | 80.60 | -0.25 | 1160 |
| Head | Oct. 13, 2019 | 5600 | 78.60 | 7.98 | 79.80 | 1.53 | 1160 |
| Head | Oct. 24, 2019 | 5600 | 78.60 | 8.04 | 80.40 | 2.29 | 1160 |
| Head | Oct. 14, 2019 | 5800 | 77.90 | 7.78 | 77.80 | -0.13 | 1160 |

## 4.3 SYSTEM CHECK PROCEDURE

The system check is performed by using a system check dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a plexiglass spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 250mW (below 3GHz) or 100mW (3-6GHz). To adjust this power a power meter is used.
The power sensor is connected to the cable before the system check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system check to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test.

System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system (±10 %).



# 5. SAR MEASUREMENT VARIABILITY AND UNCERTAINTY

## 5.1 SAR MEASUREMENT VARIABILITY

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

The detailed repeated measurement results are shown in Section 7.2.

# 6. OPERATIONAL CONDITIONS DURING TEST

## 6.1 SAR TEST CONFIGURATION

### 6.1.1 GSM TEST CONFIGURATION

SAR tests for GSM850 and GSM1900, a communication link is set up with a base station by air link.
Using 8960 Series the power lever is set to “5” and “0” in SAR of GSM850 and GSM1900. The tests in the band of GSM850 and GSM1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5. The EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink, and at most 4 timeslots in downlink, the maximum total timeslot is 5.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8PSK.

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot.

The allowed power reduction in the multi-slot configuration is as following:

| Number of timeslots in uplink assignment | | Reduction of maximum output power (dB) | | |
|---|---|---|---|---|
| Band | Time Slots | GPRS (GMSK) | EGPRS (GMSK) | EGPRS (8PSK ) |
| GSM850 | 1 TX slot | 0.0 | 0.0 | 6.4 |
| | 2 TX slots | 3.0 | 3.0 | 9.4 |
| | 3 TX slots | 4.8 | 4.8 | 11.2 |
| | 4 TX slots | 6.0 | 6.0 | 12.4 |
| GSM1900 | 1 TX slot | 0.0 | 0.0 | 4.3 |
| | 2 TX slots | 3.0 | 3.0 | 7.3 |
| | 3 TX slots | 4.8 | 4.8 | 9.1 |
| | 4 TX slots | 6.0 | 6.0 | 10.3 |

### 6.1.2 UMTS TEST CONFIGURATION

1. Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the procedures description in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1s” for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Result for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) should be tabulated in the SAR report .All configuration that are not supported by the DUT or cannot be measured due to technical or equipment limitation should be clearly identified.

2. WCDMA

(1).Head SAR Measurements

SAR for next to ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1s”. The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR with 3.4kbps SRB(signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

(2).Body SAR Measurements

SAR for body-worn accessory is measured using the 12.2 kbps RMC with the TPC bits configured to all “1s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by handset with 12.2 kbps RMC as the primary mode.

3. HSDPA

SAR for body exposure configurations is measured according to the “Body SAR Measurements” procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

Per KDB941225 D01, the 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures for the highest reported SAR body exposure configuration in 12.2 kbps RMC.

HSDPA should be configured according to UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HAPRQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. The $\beta_c$ and $\beta_d$ gain factors for DPCCH and DPDCH were set according to the values in the below table, $\beta_{hs}$ for HS-DPCCH is set automatically to the correct value when ΔACK,ΔNACK,ΔCQI = 8. The variation of the $\beta_c$ /$\beta_d$ ratio causes a power reduction at sub-tests 2 - 4.

| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c$ /$\beta_d$ | $\beta_{hs}$ (1) | CM(dB)(2) | MPR (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 0.0 | 0 |
| 2 | 12/15(3) | 15/15(3) | 64 | 12/15(3) | 24/15 | 1.0 | 0 |
| 3 | 15/15 | 8/15 | 64 | 15/8 | 30/15 | 1.5 | 0.5 |
| 4 | 15/15 | 4/15 | 64 | 15/4 | 30/15 | 1.5 | 0.5 |

Note 1: △ACK, △NACK and △CQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note 2 : CM=1 for $\beta_c/\beta_d$= 12/15, $\beta_{hs}/\beta_c$ = 24/15. For all other combinations of DPDCH,DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 3 : For subtest 2 the $\beta_c/\beta_d$ ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to $\beta_c$ = 11/15 and $\beta_d$ = 15/15

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.

Settings of required H-Set 1 QPSK acc. to 3GPP 34.121

| Parameter | Value |
|---|---|
| Nominal average inf. bit rate | 534 kbit/s |
| Inter-TTI Distance | 3 TTI"s |
| Number of HARQ Processes | 2 Processes |
| Information Bit Payload | 3202 Bits |
| MAC-d PDU size | 336 Bits |
| Number Code Blocks | 1 Block |
| Binary Channel Bits Per TTI | 4800 Bits |
| Total Available SMLs in UE | 19200 SMLs |
| Number of SMLs per HARQ Process | 9600 SMLs |
| Coding Rate | 0.67 |
| Number of Physical Channel Codes | 5 |

HSDPA UE category

| HS-DSCH Category | Maximum HS-DSCH Codes Received | Minimum Inter-TTI Interval | Maximum HS-DSCH Transport Block Bits/HS-DSCH TTI | Total Soft Channel Bits |
|---|---|---|---|---|
| 1 | 5 | 3 | 7298 | 19200 |
| 2 | 5 | 3 | 7298 | 28800 |
| 3 | 5 | 2 | 7298 | 28800 |
| 4 | 5 | 2 | 7298 | 38400 |
| 5 | 5 | 1 | 7298 | 57600 |
| 6 | 5 | 1 | 7298 | 67200 |
| 7 | 10 | 1 | 14411 | 115200 |
| 8 | 10 | 1 | 14411 | 134400 |
| 9 | 15 | 1 | 25251 | 172800 |
| 10 | 15 | 1 | 27952 | 172800 |
| 11 | 5 | 2 | 3630 | 14400 |
| 12 | 5 | 1 | 3630 | 28800 |
| 13 | 15 | 1 | 34800 | 259200 |
| 14 | 15 | 1 | 42196 | 259200 |
| 15 | 15 | 1 | 23370 | 345600 |
| 16 | 15 | 1 | 27952 | 345600 |

4. HSUPA

SAR for Body exposure configurations is measured according to the “Body SAR Measurements” procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2W/kg, SAR measurement is not required for the secondary mode.

Per KDB941225 D01, the 3G SAR test reduction procedures is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures for the highest reported body exposure SAR configuration in 12.2 kbps RMC.

Due to inner loop power control requirements in HSUPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSDPA should be configured according to the values indicated below as well as other applicable procedures described in the “WCDMA Handset” and “Release 5 HSDPA Data Device” sections of 3G device.

Subtests for WCDMA Release 6 HSUPA

| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{hs}$(1) | $\beta_{ec}$ | $\beta_{ed}$ | $\beta_{ec}$ (SF) | $\beta_{ed}$ (code) | CM(2) (dB) | MPR (dB) | AG(4) Index | E-TFCI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11/15(3) | 15/15(3) | 64 | 11/15(3) | 22/15 | 209/225 | 1039/225 | 4 | 1 | 1.0 | 0.0 | 20 | 75 |
| 2 | 6/15 | 15/15 | 64 | 6/15 | 12/15 | 12/15 | 94/75 | 4 | 1 | 3.0 | 2.0 | 12 | 67 |
| 3 | 15/15 | 9/15 | 64 | 15/9 | 30/15 | 30/15 | $\beta_{ed1}$:47/15<br>$\beta_{ed2}$:47/15 | 4 | 2 | 2.0 | 1.0 | 15 | 92 |
| 4 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 2/15 | 56/75 | 4 | 1 | 3.0 | 2.0 | 17 | 71 |
| 5 | 15/15(4) | 15/15(4) | 64 | 15/15(4) | 30/15 | 24/15 | 134/15 | 4 | 1 | 1.0 | 0.0 | 21 | 81 |

Note 1: $\Delta$ ACK, $\Delta$ NACK and $\Delta$ CQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference

Note 3 : For subtest 1 the $\beta_c/\beta_d$ ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$

Note 4 : For subtest 5 the $\beta_c/\beta_d$ ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$

Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g

Note 6: $\beta_{ed}$ can not be set directly; it is set by Absolute Grant Value.

HSUPA UE category

| UE E-DCH Category | Maximum E-DCH Codes Transmitted | Number of HARQ Processes | E-DCH TTI(ms) | Minimum Speading Factor | Maximum E-DCH Transport Block Bits | Max Rate (Mbps) |
|---|---|---|---|---|---|---|
| 1 | 1 | 4 | 10 | 4 | 7110 | 0.7296 |
| 2 | 2 | 8 | 2 | 4 | 2798 | 1.4592 |
| | 2 | 4 | 10 | 4 | 14484 | |
| 3 | 2 | 4 | 10 | 4 | 14484 | 1.4592 |
| 4 | 2 | 8 | 2 | 2 | 5772 | 2.9185 |
| | 2 | 4 | 10 | 2 | 20000 | 2.00 |
| 5 | 2 | 4 | 10 | 2 | 20000 | 2.00 |
| 6 (No DPDCH) | 4 | 8 | 10 | 2SF2&2SF4 | 11484 | 5.76 |
| | 4 | 4 | 2 | | 20000 | 2.00 |
| 7 (No DPDCH) | 4 | 8 | 2 | 2SF2&2SF4 | 22996 | ? |
| | 4 | 4 | 10 | | 20000 | ? |

NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4.UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM. (TS25.306-7.3.0).

5. DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel.5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode.
Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a Second serving HS-DSCH cell are required to perform the power measurement and for the results to be acceptable.

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0
Levels for HSDPA connection setup

| Parameter During Connection setup | Unit | Value |
|---|---|---|
| P-CPICH_Ec/Ior | dB | -10 |
| P-CCPCH and SCH_Ec/Ior | dB | -12 |
| PICH _Ec/Ior | dB | -15 |
| HS-PDSCH | dB | off |
| HS-SCCH_1 | dB | off |
| DPCH_Ec/Ior | dB | -5 |
| OCNS_Ec/Ior | dB | -3.1 |

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13
The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.
The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK

| Parameter | Value |
|---|---|
| Nominal average inf. bit rate | 60 kbit/s |
| Inter-TTI Distance | 1 TTI"s |
| Number of HARQ Processes | 6 Processes |
| Information Bit Payload | 120 Bits |
| Number Code Blocks | 1 Block |
| Binary Channel Bits Per TTI | 960 Bits |
| Total Available SMLs in UE | 19200 SMLs |
| Number of SMLs per HARQ Process | 3200 SMLs |
| Coding Rate | 0.15 |
| Number of Physical Channel Codes | 1 |

Note:
1.The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table above.
2.Maximum number of transmission is limited to 1,i.e.,retransmission is not allowed. The redundancy and constellation version 0 shall be used.

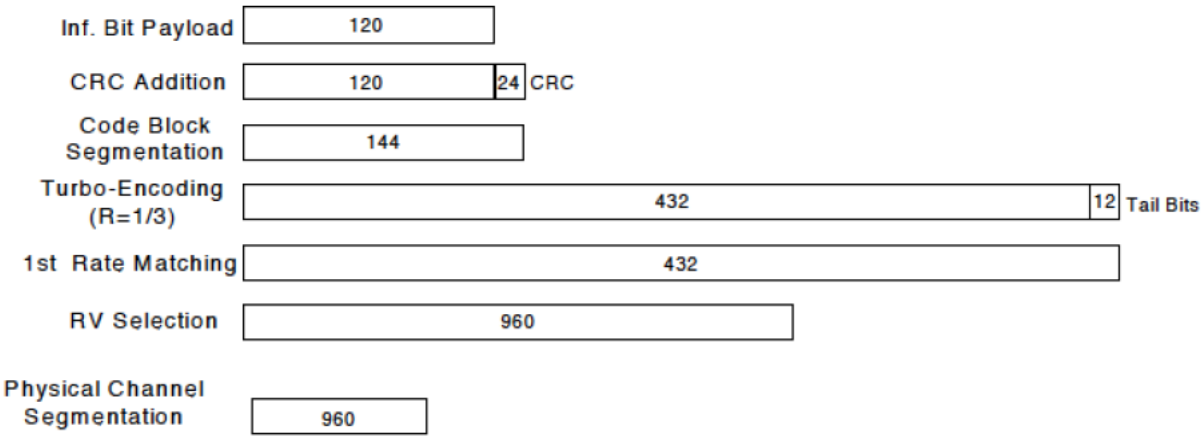



**Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)**

The following 4 Sub-tests for HSDPA were completed according to Release 5 procedures. A summary of subtest settings are illustrated below:

| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{hs}$ (1) | CM(dB)(2) | MPR (dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 0.0 | 0 |
| 2 | 12/15(3) | 15/15(3) | 64 | 12/15(3) | 24/15 | 1.0 | 0 |
| 3 | 15/15 | 8/15 | 64 | 15/8 | 30/15 | 1.5 | 0.5 |
| 4 | 15/15 | 4/15 | 64 | 15/4 | 30/15 | 1.5 | 0.5 |

Note 1: $\Delta$ ACK, $\Delta$ NACK and $\Delta$ CQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$
Note 2: CM=1 for $\beta_c/\beta_d$= 12/15, $\beta_{hs}/\beta_c$ = 24/15. For all other combinations of DPDCH,DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
Note 3 : For subtest 2 the $\beta_c/\beta_d$ ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to $\beta_c$ = 11/15 and $\beta_d$ = 15/15

Up commands are set continuously to set the UE to Max power.

Note:
1. The Dual Carriers transmission support HSDPA and HSUPA physical channels.
2. The Dual Carriers belong to the same Node and are on adjacent carriers.
3. The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
4. The Dual Carriers operate in the same frequency band.
5. The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.
6. The device doesn't support carrier aggregation for it just can operate in Release 8.

### 6.1.3 LTE TEST CONFIGURATION

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices. The CMW500 Wide Band Radio Communication Tester was used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR test were performed with the same number of RB and RB offsets transmitting on all TTI frames (Maximum TTI).

**1. Spectrum Plots for RB configurations**

A properly configured base station simulator was used for LTE output power measurements and SAR testing. Therefore, spectrum plots for RB configurations were not required to be included in this report.

**2. MPR**

When MPR is implemented permanently within the UE, regardless of network requirements, only those RB configurations allowed by 3GPP for the channel bandwidth and modulation. combinations may be tested with MPR active. Configurations with RB allocations less than the RB thresholds required by 3GPP must be tested without MPR.

The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101:

**Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3**

| Modulation | Channel bandwidth / Transmission bandwidth ($N_{RB}$) | | | | | | MPR (dB) |
|---|---|---|---|---|---|---|---|
| | 1.4 MHz | 3.0 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | |
| QPSK | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 1 |
| 16 QAM | ≤ 5 | ≤ 4 | ≤ 8 | ≤ 12 | ≤ 16 | ≤ 18 | ≤ 1 |
| 16 QAM | > 5 | > 4 | > 8 | > 12 | > 16 | > 18 | ≤ 2 |

**3. A-MPR**

A-MPR (Additional MPR) has been disabled for all SAR tests by using Network Signalling Value of “NS_01”on the base station simulator.

**4. LTE procedures for SAR testing**

**A) Largest channel bandwidth standalone SAR test requirements**

i) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

ii) QPSK with 50% RB allocation

The procedures required for 1 RB allocation in i) are applied to measure the SAR for QPSK with 50% RB allocation.

iii) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in i) and ii) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

iv) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

**B) Other channel bandwidth standalone SAR test requirements**

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

**LTE (TDD) Test Configuration**

According to KDB 941225 D05 SAR for LTE Devices V02r05, for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.
TDD LTE B38/41 supports 3GPP TS 36 for Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.
TDD LTE B38/41 supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

**Figure 4.2-1: Frame structure type 2**

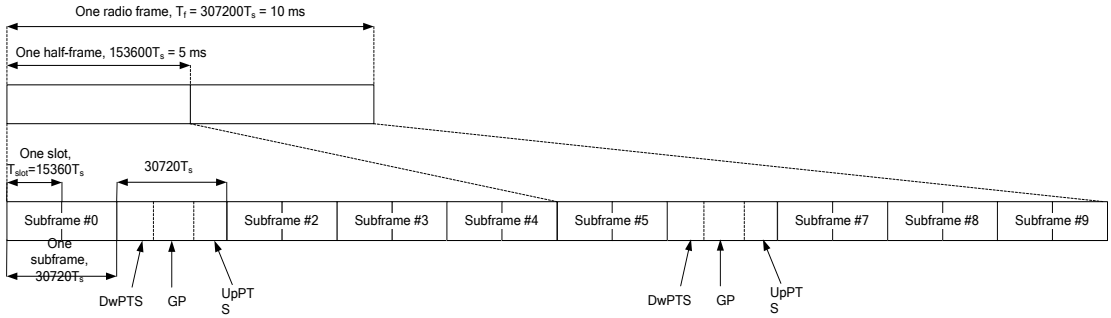



**Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)**

| Special subframe configuration | Normal cyclic prefix in downlink | | | Extended cyclic prefix in downlink | | |
|---|---|---|---|---|---|---|
| | DwPTS | UpPTS | | DwPTS | UpPTS | |
| | | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink | | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink |
| 0 | $6592 \cdot T_s$ | $2192 \cdot T_s$ | $2560 \cdot T_s$ | $7680 \cdot T_s$ | $2192 \cdot T_s$ | $2560 \cdot T_s$ |
| 1 | $19760 \cdot T_s$ | | | $20480 \cdot T_s$ | | |
| 2 | $21952 \cdot T_s$ | | | $23040 \cdot T_s$ | | |
| 3 | $24144 \cdot T_s$ | | | $25600 \cdot T_s$ | | |
| 4 | $26336 \cdot T_s$ | | | $7680 \cdot T_s$ | $4384 \cdot T_s$ | $5120 \cdot T_s$ |
| 5 | $6592 \cdot T_s$ | $4384 \cdot T_s$ | $5120 \cdot T_s$ | $20480 \cdot T_s$ | | |
| 6 | $19760 \cdot T_s$ | | | $23040 \cdot T_s$ | | |
| 7 | $21952 \cdot T_s$ | | | $12800 \cdot T_s$ | | |
| 8 | $24144 \cdot T_s$ | | | - | - | - |
| 9 | $13168 \cdot T_s$ | | | - | - | - |

**Table 4.2-2: Uplink-downlink configurations**

| Uplink-downlink configuration | Downlink-to-Uplink Switch-point periodicity | Subframe number | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0 | 5 ms | D | S | U | U | U | D | S | U | U | U |
| 1 | 5 ms | D | S | U | U | D | D | S | U | U | D |
| 2 | 5 ms | D | S | U | D | D | D | S | U | D | D |
| 3 | 10 ms | D | S | U | U | U | D | D | D | D | D |
| 4 | 10 ms | D | S | U | U | D | D | D | D | D | D |
| 5 | 10 ms | D | S | U | D | D | D | D | D | D | D |
| 6 | 5 ms | D | S | U | U | U | D | S | U | U | D |

According to Figure 4.2-1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table 4.2-2:

Duty cycle =(30720Ts*Ups+Uplink Component*Specials)/(307200Ts)

About the uplink component of Special subframes, we can figure out by Table 4.2-1:

Uplink Component=UpPTS

In conclusion, for the TDD LTE B38/41, Duty Cycle can be calculated with formula as below .all these sets are ok when we test, or we can set as below.

Duty cycle =[(30720Ts*Ups)+ UpPTS *Specials]/(307200Ts)

And we can get different Duty cycles under different configurations:

| Uplink-downlink configuratin | Subframe number | | | Configuration of special subframe | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Normal cyclic prefix in downlink | | | | Extended cyclic prefix in downlink | | | |
| | | | | Normal cyclic prefix in uplink | | Extended cyclic prefix in uplink | | Normal cyclic prefix in uplink | | Extended cyclic prefix in uplink | |
| | D | S | U | configuration 0-4 | configuration 5-9 | configuration 0-4 | configuration 5-9 | configuration 0-3 | configuration 4-7 | configuration 0-3 | configuration |
| 0 | 2 | 2 | 6 | 61.43% | 62.85% | 61.67% | 63.33% | 61.43% | 62.85% | 61.67% | 63.33% |
| 1 | 4 | 2 | 4 | 41.43% | 42.85% | 41.67% | 43.33% | 41.43% | 42.85% | 41.67% | 43.33% |
| 2 | 6 | 2 | 2 | 21.43% | 22.85% | 21.67% | 23.33% | 21.43% | 22.85% | 21.67% | 23.33% |
| 3 | 6 | 1 | 3 | 30.71% | 31.43% | 30.83% | 31.67% | 30.71% | 31.43% | 30.83% | 31.67% |
| 4 | 7 | 1 | 2 | 20.71% | 21.43% | 20.83% | 21.67% | 20.71% | 21.43% | 20.83% | 21.67% |
| 5 | 8 | 1 | 1 | 10.71% | 11.43% | 10.83% | 11.67% | 10.71% | 11.43% | 10.83% | 11.67% |
| 6 | 3 | 2 | 5 | 51.43% | 52.85% | 51.67% | 53.33% | 51.43% | 52.85% | 51.67% | 53.33% |

For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type 2.

### 6.1.4 LTE CARRIER AGGREGATION POWER

LTE Rel.11 Carrier Aggregation

As the KDB 941225 D05A, when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than 1/4dB higher than the maximum output power measured when downlink carrier aggregation is inactive, the CA test is not required.

E-UTRA CA configurations and bandwidth combination sets defined for intra-band contiguous CA

| **E-UTRA CA configuration / Bandwidth combination set** | | | | | |
|---|---|---|---|---|---|
| **E-UTRA CA configuration** | **Uplink CA configurations** | **Component carriers in order of increasing carrier frequency** | | **Maximum aggregated bandwidth [MHz]** | **Bandwidth combination set** |
| | | **Channel bandwidths for carrier [MHz]** | **Channel bandwidths for carrier [MHz]** | | |
| CA_7C | CA_7C | 15 | 15 | 40 | 0 |
| | | 20 | 20 | | |
| | | 10 | 20 | 40 | 1 |
| | | 15 | 15, 20 | | |
| | | 20 | 10, 15, 20 | | |
| | | 15 | 10,15 | 40 | 2 |
| | | 20 | 15,20 | | |
| CA_38C | CA_38C | 15 | 15 | 40 | 0 |
| | | 20 | 20 | | |
| CA_41C | CA_41C | 10 | 20 | 40 | 0 |
| | | 15 | 15,20 | | |
| | | 20 | 10, 15,20 | | |
| | | 5, 10 | 20 | 40 | 1 |
| | | 15 | 15,20 | | |
| | | 20 | 5,10, 15, 20 | | |
| | | 10 | 15,20 | 40 | 2 |
| NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes | | | | | |

**E-UTRA CA configurations and bandwidth combination sets defined for noncontiguous intra-band CA (with two sub-blocks)**

| E-UTRA CA configuration / Bandwidth combination set | | | | | |
|---|---|---|---|---|---|
| **E-UTRA CA configuration** | **Uplink CA configurations** | **Component carriers in order of increasing carrier frequency** | | **Maximum aggregated bandwidth [MHz]** | **Bandwidth combination set** |
| | | **Channel bandwidths for carrier [MHz]** | **Channel bandwidths for carrier [MHz]** | | |
| CA_7A-7A | - | 5 | 15 | 40 | 0 |
| | | 10 | 10,15 | | |
| | | 15 | 15,20 | | |
| | | 20 | 20 | | |
| CA_41A-41A | - | 10,15,20 | 10,15,20 | 40 | 0 |
| | | 5,10,15,20 | 5,10,15,20 | 40 | 1 |
| NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-3 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes. | | | | | |

**E-UTRA CA configurations and bandwidth combination sets defined for inter-band CA (two bands)**

| E-UTRA CA configuration / Bandwidth combination set | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **E-UTRA CA configuration** | **Uplink CA configurations** | **EUTRA Bands** | **1.4 MHz** | **3 MHz** | **5 MHz** | **10 MHz** | **15 MHz** | **20 MHz** | **Maximum aggregated bandwidth [MHz]** | **Bandwidth combination set** |
| CA_2A-5A | - | 2 | | | Yes | Yes | Yes | Yes | 30 | 0 |
| | | 5 | | | Yes | Yes | | | | |
| | | 2 | | | Yes | Yes | | | 20 | 1 |
| | | 5 | | | Yes | Yes | | | | |
| CA_4A-5A | - | 4 | | | Yes | Yes | | | 20 | 0 |
| | | 5 | | | Yes | Yes | | | | |
| | | 4 | | | Yes | Yes | Yes | Yes | 30 | 1 |
| | | 5 | | | Yes | Yes | | | | |
| NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-2 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes. | | | | | | | | | | |

Note:
1) For the inter-band CA combinations, all the listed bands above can be used as PCC or SCC.
2) The channel spacing and aggregated channel bandwidth for CA are identical to the associated specification in 3GPP TS 36.101 V13.2.0.
3) The reference test frequencies for CA refers to3GPP TS 36.508 V13.1.0

1. Carrier Aggregation power test results (Uplink)

Main antenna_Receiver on

| E-UTRA CA configuration | | PCC | | | | | | SCC | | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | | |
| CA_7C | Low | LTE B7 | 20 | QPSK | **20850** | 2510 | 1/99 | LTE B7 | 20 | QPSK | **21048** | 2529.8 | 1/0 | 25 | 23.24 |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/99 | LTE B7 | 20 | QPSK | **21298** | 2554.8 | 1/0 | 25 | 23.83 |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/0 | LTE B7 | 20 | QPSK | **20902** | 2515.2 | 1/99 | 25 | **24.02** |
| | High | LTE B7 | 20 | QPSK | **21152** | 2540.2 | 1/99 | LTE B7 | 20 | QPSK | **21350** | 2560 | 1/0 | 25 | 23.16 |
| CA_38C | Low | LTE B38 | 20 | QPSK | **37850** | 2580 | 1/99 | LTE B38 | 20 | QPSK | **38048** | 2599.8 | 1/0 | 25 | 23.87 |
| | Mid | LTE B38 | 20 | QPSK | **37901** | 2585.1 | 1/99 | LTE B38 | 20 | QPSK | **38099** | 2604.9 | 1/0 | 25 | 23.81 |
| | High | LTE B38 | 20 | QPSK | **37952** | 2590.2 | 1/99 | LTE B38 | 20 | QPSK | **38150** | 2610 | 1/0 | 25 | **23.95** |
| CA_41C | Low | LTE B41 | 20 | QPSK | **39750** | 2506 | 1/99 | LTE B41 | 20 | QPSK | **39948** | 2525.8 | 1/0 | 25 | 23.48 |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/99 | LTE B41 | 20 | QPSK | **40818** | 2612.8 | 1/0 | 25 | 24.17 |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/0 | LTE B41 | 20 | QPSK | **40422** | 2573.2 | 1/99 | 25 | 24.31 |
| | High | LTE B41 | 20 | QPSK | **41292** | 2660.2 | 1/99 | LTE B41 | 20 | QPSK | **41490** | 2680 | 1/0 | 25 | **23.54** |

Main antenna_Receiver off

| E-UTRA CA configuration | | PCC | | | | | | SCC | | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | | |
| CA_7C | Low | LTE B7 | 20 | QPSK | **20850** | 2510 | 1/99 | LTE B7 | 20 | QPSK | **21048** | 2529.8 | 1/0 | 21.5 | **21.49** |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/99 | LTE B7 | 20 | QPSK | **21298** | 2554.8 | 1/0 | 21.5 | 21.4 |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/0 | LTE B7 | 20 | QPSK | **20902** | 2515.2 | 1/99 | 21.5 | 21.47 |
| | High | LTE B7 | 20 | QPSK | **21152** | 2540.2 | 1/99 | LTE B7 | 20 | QPSK | **21350** | 2560 | 1/0 | 21.5 | 21.32 |
| CA_38C | Low | LTE B38 | 20 | QPSK | **37850** | 2580 | 1/99 | LTE B38 | 20 | QPSK | **38048** | 2599.8 | 1/0 | 23 | 22.56 |
| | Mid | LTE B38 | 20 | QPSK | **37901** | 2585.1 | 1/99 | LTE B38 | 20 | QPSK | **38099** | 2604.9 | 1/0 | 23 | 22.43 |
| | High | LTE B38 | 20 | QPSK | **37952** | 2590.2 | 1/99 | LTE B38 | 20 | QPSK | **38150** | 2610 | 1/0 | 23 | **22.59** |
| CA_41C | Low | LTE B41 | 20 | QPSK | **39750** | 2506 | 1/99 | LTE B41 | 20 | QPSK | **39948** | 2525.8 | 1/0 | 24 | **23.51** |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/99 | LTE B41 | 20 | QPSK | **40818** | 2612.8 | 1/0 | 24 | 23.1 |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/0 | LTE B41 | 20 | QPSK | **40422** | 2573.2 | 1/99 | 24 | 23.22 |
| | High | LTE B41 | 20 | QPSK | **41292** | 2660.2 | 1/99 | LTE B41 | 20 | QPSK | **41490** | 2680 | 1/0 | 24 | 23.01 |

Second antenna_Receiver on

| E-UTRA CA configuration | | PCC | | | | | | SCC | | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | | |
| CA_7C | Low | LTE B7 | 20 | QPSK | **20850** | 2510 | 1/99 | LTE B7 | 20 | QPSK | **21048** | 2529.8 | 1/0 | 15.5 | **15.19** |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/99 | LTE B7 | 20 | QPSK | **21298** | 2554.8 | 1/0 | 15.5 | 14.92 |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/0 | LTE B7 | 20 | QPSK | **20902** | 2515.2 | 1/99 | 15.5 | 15.04 |
| | High | LTE B7 | 20 | QPSK | **21152** | 2540.2 | 1/99 | LTE B7 | 20 | QPSK | **21350** | 2560 | 1/0 | 15.5 | 14.98 |
| CA_38C | Low | LTE B38 | 20 | QPSK | **37850** | 2580 | 1/99 | LTE B38 | 20 | QPSK | **38048** | 2599.8 | 1/0 | 17.5 | 17.21 |
| | Mid | LTE B38 | 20 | QPSK | **37901** | 2585.1 | 1/99 | LTE B38 | 20 | QPSK | **38099** | 2604.9 | 1/0 | 17.5 | 17.16 |
| | High | LTE B38 | 20 | QPSK | **37952** | 2590.2 | 1/99 | LTE B38 | 20 | QPSK | **38150** | 2610 | 1/0 | 17.5 | **17.25** |
| CA_41C | Low | LTE B41 | 20 | QPSK | **39750** | 2506 | 1/99 | LTE B41 | 20 | QPSK | **39948** | 2525.8 | 1/0 | 17 | 16.56 |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/99 | LTE B41 | 20 | QPSK | **40818** | 2612.8 | 1/0 | 17 | 16.38 |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/0 | LTE B41 | 20 | QPSK | **40422** | 2573.2 | 1/99 | 17 | 16.47 |
| | High | LTE B41 | 20 | QPSK | **41292** | 2660.2 | 1/99 | LTE B41 | 20 | QPSK | **41490** | 2680 | 1/0 | 17 | **16.67** |

Second antenna_Receiver off

| E-UTRA CA configuration | | PCC | | | | | | SCC | | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | Band | Band width [MHZ] | Modulation | Channel (UL) | Frequency [MHZ] | RB Size/ Offset | | |
| CA_7C | Low | LTE B7 | 20 | QPSK | **20850** | 2510 | 1/99 | LTE B7 | 20 | QPSK | **21048** | 2529.8 | 1/0 | 17 | **16.66** |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/99 | LTE B7 | 20 | QPSK | **21298** | 2554.8 | 1/0 | 17 | 16.57 |
| | Mid | LTE B7 | 20 | QPSK | **21100** | 2535 | 1/0 | LTE B7 | 20 | QPSK | **20902** | 2515.2 | 1/99 | 17 | 16.63 |
| | High | LTE B7 | 20 | QPSK | **21152** | 2540.2 | 1/99 | LTE B7 | 20 | QPSK | **21350** | 2560 | 1/0 | 17 | 16.52 |
| CA_38C | Low | LTE B38 | 20 | QPSK | **37850** | 2580 | 1/99 | LTE B38 | 20 | QPSK | **38048** | 2599.8 | 1/0 | 19 | 18.69 |
| | Mid | LTE B38 | 20 | QPSK | **37901** | 2585.1 | 1/99 | LTE B38 | 20 | QPSK | **38099** | 2604.9 | 1/0 | 19 | 18.66 |
| | High | LTE B38 | 20 | QPSK | **37952** | 2590.2 | 1/99 | LTE B38 | 20 | QPSK | **38150** | 2610 | 1/0 | 19 | **18.75** |
| CA_41C | Low | LTE B41 | 20 | QPSK | **39750** | 2506 | 1/99 | LTE B41 | 20 | QPSK | **39948** | 2525.8 | 1/0 | 20 | 19.51 |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/99 | LTE B41 | 20 | QPSK | **40818** | 2612.8 | 1/0 | 20 | 19.32 |
| | Mid | LTE B41 | 20 | QPSK | **40620** | 2593 | 1/0 | LTE B41 | 20 | QPSK | **40422** | 2573.2 | 1/99 | 20 | 19.44 |
| | High | LTE B41 | 20 | QPSK | **41292** | 2660.2 | 1/99 | LTE B41 | 20 | QPSK | **41490** | 2680 | 1/0 | 20 | **19.63** |

2. Carrier Aggregation power test results (Downlink)

Main antenna_Receiver on

| E-UTRA CA configuration | | CC-Combo | PCC | | | | | | | | Wgap [MHz] | SCC | | | | Tune-up For TX Power With DL CA | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Band | Band width [MHZ] | Modulation | RB Size/ Offset | Channel (UL) | Frequency [MHZ] | Channel (DL) | Frequency [MHZ] | | Band | Band width [MHZ] | Channel (DL) | Frequency [MHZ] | | TX Power With DL CA | TX Power Single Carrier |
| CA_7C | Low | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | - | LTE B7 | 20 | **3048** | 2649.8 | 24.5 | 23.86 | 24.08 |
| | Mid | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21001** | 2525.1 | 3001 | 2645.1 | | LTE B7 | 20 | **3199** | 2664.9 | 24.5 | 23.95 | 24.18 |
| | High | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21152** | 2540.2 | 3152 | 2660.2 | | LTE B7 | 20 | **3350** | 2680 | 24.5 | 23.9 | 24.11 |
| CA_38C | Low | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37850** | 2580 | 37850 | 2580 | - | LTE B38 | 20 | **38048** | 2599.8 | 24.5 | 23.72 | 23.92 |
| | Mid | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37901** | 2585.1 | 37901 | 2585.1 | | LTE B38 | 20 | **38099** | 2604.9 | 24.5 | 23.84 | 23.89 |
| | High | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37952** | 2590.2 | 37952 | 2590.2 | | LTE B38 | 20 | **38150** | 2610 | 24.5 | 23.66 | 23.85 |
| CA_41C | Low | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | - | LTE B41 | 20 | **39948** | 2525.8 | 24.5 | 24.12 | 24.05 |
| | Mid | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **40521** | 2583.1 | 40521 | 2583.1 | | LTE B41 | 20 | **40719** | 2602.9 | 24.5 | 23.98 | 24.00 |
| | High | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **41292** | 2660.2 | 41292 | 2660.2 | | LTE B41 | 20 | **41490** | 2680 | 24.5 | 23.89 | 23.95 |
| CA_ 7A-7A | N/A | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | 30 | LTE B7 | 20 | **3350** | 2680 | 24.5 | 23.79 | 24.08 |
| | | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21000** | 2525 | 3000 | 2645 | 15 | LTE B7 | 20 | **3350** | 2680 | 24.5 | 23.99 | 24.18 |
| CA_ 41A-41A | N/A | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | 154 | LTE B41 | 20 | **41490** | 2680 | 24.5 | 24.01 | 24.05 |
| CA_ 2A-5A | N/A | 20M+10M | LTE B2 | 20 | QPSK | 1/0 | **18900** | 1880 | 900 | 1960 | - | LTE B5 | 10 | **2600** | 889 | 24.5 | 23.83 | 24.09 |
| CA_ 4A-5A | N/A | 20M+10M | LTE B4 | 20 | QPSK | 1/0 | **20175** | 1732.5 | 2175 | 2132.5 | - | LTE B5 | 10 | **2525** | 881.5 | 24.5 | 23.75 | 24.01 |

Main antenna_Receiver off

| E-UTRA CA configuration | | CC-Combo | PCC | | | | | | | | Wgap [MHz] | SCC | | | | Tune-up For TX Power With DL CA | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Band | Band width [MHZ] | Modulation | RB Size/ Offset | Channel (UL) | Frequency [MHZ] | Channel (DL) | Frequency [MHZ] | | Band | Band width [MHZ] | Channel (DL) | Frequency [MHZ] | | TX Power With DL CA | TX Power Single Carrier |
| CA_7C | Low | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | - | LTE B7 | 20 | **3048** | 2649.8 | 21 | 20.63 | 20.80 |
| | Mid | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21001** | 2525.1 | 3001 | 2645.1 | | LTE B7 | 20 | **3199** | 2664.9 | 21 | 20.78 | 20.99 |
| | High | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21152** | 2540.2 | 3152 | 2660.2 | | LTE B7 | 20 | **3350** | 2680 | 21 | 20.73 | 20.98 |
| CA_38C | Low | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37850** | 2580 | 37850 | 2580 | - | LTE B38 | 20 | **38048** | 2599.8 | 23 | 22.39 | 22.66 |
| | Mid | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37901** | 2585.1 | 37901 | 2585.1 | | LTE B38 | 20 | **38099** | 2604.9 | 23 | 22.52 | 22.59 |
| | High | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37952** | 2590.2 | 37952 | 2590.2 | | LTE B38 | 20 | **38150** | 2610 | 23 | 22.44 | 22.53 |
| CA_41C | Low | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | - | LTE B41 | 20 | **39948** | 2525.8 | 23 | 22.74 | 22.59 |
| | Mid | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **40521** | 2583.1 | 40521 | 2583.1 | | LTE B41 | 20 | **40719** | 2602.9 | 23 | 22.81 | 22.69 |
| | High | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **41292** | 2660.2 | 41292 | 2660.2 | | LTE B41 | 20 | **41490** | 2680 | 23 | 22.79 | 22.66 |
| CA_ 7A-7A | N/A | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | 30 | LTE B7 | 20 | **3350** | 2680 | 21 | 20.68 | 20.80 |
| | | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21000** | 2525 | 3000 | 2645 | 15 | LTE B7 | 20 | **3350** | 2680 | 21 | 20.56 | 20.99 |
| CA_ 41A-41A | N/A | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | 154 | LTE B41 | 20 | **41490** | 2680 | 23 | 20.67 | 22.59 |
| CA_ 2A-5A | N/A | 20M+10M | LTE B2 | 20 | QPSK | 1/0 | **18900** | 1880 | 900 | 1960 | - | LTE B5 | 10 | **2600** | 889 | 21 | 20.36 | 20.21 |
| CA_ 4A-5A | N/A | 20M+10M | LTE B4 | 20 | QPSK | 1/0 | **20175** | 1732.5 | 2175 | 2132.5 | - | LTE B5 | 10 | **2525** | 881.5 | 21.5 | 21.42 | 21.23 |

Second antenna_Receiver on

| E-UTRA CA configuration | | CC-Combo | PCC | | | | | | | | Wgap [MHz] | SCC | | | | Tune-up For TX Power With DL CA | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Band | Band width [MHZ] | Modulation | RB Size/ Offset | Channel (UL) | Frequency [MHZ] | Channel (DL) | Frequency [MHZ] | | Band | Band width [MHZ] | Channel (DL) | Frequency [MHZ] | | TX Power With DL CA | TX Power Single Carrier |
| CA_7C | Low | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | - | LTE B7 | 20 | **3048** | 2649.8 | 16 | 15.33 | 15.46 |
| | Mid | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21001** | 2525.1 | 3001 | 2645.1 | | LTE B7 | 20 | **3199** | 2664.9 | 16 | 15.42 | 15.39 |
| | High | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21152** | 2540.2 | 3152 | 2660.2 | | LTE B7 | 20 | **3350** | 2680 | 16 | 15.37 | 15.43 |
| CA_38C | Low | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37850** | 2580 | 37850 | 2580 | - | LTE B38 | 20 | **38048** | 2599.8 | 17.5 | 17.27 | 17.22 |
| | Mid | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37901** | 2585.1 | 37901 | 2585.1 | | LTE B38 | 20 | **38099** | 2604.9 | 17.5 | 17.13 | 17.20 |
| | High | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37952** | 2590.2 | 37952 | 2590.2 | | LTE B38 | 20 | **38150** | 2610 | 17.5 | 17.22 | 17.18 |
| CA_41C | Low | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | - | LTE B41 | 20 | **39948** | 2525.8 | 17.5 | 17.02 | 16.84 |
| | Mid | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **40521** | 2583.1 | 40521 | 2583.1 | | LTE B41 | 20 | **40719** | 2602.9 | 17.5 | 16.84 | 16.75 |
| | High | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **41292** | 2660.2 | 41292 | 2660.2 | | LTE B41 | 20 | **41490** | 2680 | 17.5 | 16.67 | 16.85 |
| CA_ 7A-7A | N/A | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | 30 | LTE B7 | 20 | **3350** | 2680 | 16 | 15.63 | 15.46 |
| | | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21000** | 2525 | 3000 | 2645 | 15 | LTE B7 | 20 | **3350** | 2680 | 16 | 15.15 | 15.39 |
| CA_ 41A-41A | N/A | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | 154 | LTE B41 | 20 | **41490** | 2680 | 17 | 16.68 | 16.84 |
| CA_ 2A-5A | N/A | 20M+10M | LTE B2 | 20 | QPSK | 1/0 | **18900** | 1880 | 900 | 1960 | - | LTE B5 | 10 | **2600** | 889 | 17.5 | 17.29 | 17.02 |
| CA_ 4A-5A | N/A | 20M+10M | LTE B4 | 20 | QPSK | 1/0 | **20175** | 1732.5 | 2175 | 2132.5 | - | LTE B5 | 10 | **2525** | 881.5 | 20 | 19.53 | 19.34 |

Second antenna_Receiver off

| E-UTRA CA configuration | | CC-Combo | PCC | | | | | | | | Wgap [MHz] | SCC | | | | Tune-up For TX Power With DL CA | Power | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Band | Band width [MHZ] | Modulation | RB Size/ Offset | Channel (UL) | Frequency [MHZ] | Channel (DL) | Frequency [MHZ] | | Band | Band width [MHZ] | Channel (DL) | Frequency [MHZ] | | TX Power With DL CA | TX Power Single Carrier |
| CA_7C | Low | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | - | LTE B7 | 20 | **3048** | 2649.8 | 17.5 | 17.12 | 16.90 |
| | Mid | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21001** | 2525.1 | 3001 | 2645.1 | | LTE B7 | 20 | **3199** | 2664.9 | 17.5 | 16.77 | 16.95 |
| | High | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21152** | 2540.2 | 3152 | 2660.2 | | LTE B7 | 20 | **3350** | 2680 | 17.5 | 17.05 | 16.92 |
| CA_38C | Low | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37850** | 2580 | 37850 | 2580 | - | LTE B38 | 20 | **38048** | 2599.8 | 19.5 | 19.32 | 19.16 |
| | Mid | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37901** | 2585.1 | 37901 | 2585.1 | | LTE B38 | 20 | **38099** | 2604.9 | 19.5 | 19.05 | 19.17 |
| | High | 20M+20M | LTE B38 | 20 | QPSK | 1/0 | **37952** | 2590.2 | 37952 | 2590.2 | | LTE B38 | 20 | **38150** | 2610 | 19.5 | 19.33 | 19.21 |
| CA_41C | Low | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | - | LTE B41 | 20 | **39948** | 2525.8 | 21 | 20.61 | 20.46 |
| | Mid | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **40521** | 2583.1 | 40521 | 2583.1 | | LTE B41 | 20 | **40719** | 2602.9 | 21 | 20.41 | 20.55 |
| | High | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **41292** | 2660.2 | 41292 | 2660.2 | | LTE B41 | 20 | **41490** | 2680 | 21 | 20.47 | 20.63 |
| CA_ 7A-7A | N/A | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **20850** | 2510 | 2850 | 2630 | 30 | LTE B7 | 20 | **3350** | 2680 | 17.5 | 17.05 | 16.90 |
| | | 20M+20M | LTE B7 | 20 | QPSK | 1/0 | **21000** | 2525 | 3000 | 2645 | 15 | LTE B7 | 20 | **3350** | 2680 | 17.5 | 17.12 | 16.95 |
| CA_ 41A-41A | N/A | 20M+20M | LTE B41 | 20 | QPSK | 1/0 | **39750** | 2506 | 39750 | 2506 | 154 | LTE B41 | 20 | **41490** | 2680 | 21 | 20.51 | 20.45 |
| CA_ 2A-5A | N/A | 20M+10M | LTE B2 | 20 | QPSK | 1/0 | **18900** | 1880 | 900 | 1960 | - | LTE B5 | 10 | **2600** | 889 | 21 | 20.79 | 20.67 |
| CA_ 4A-5A | N/A | 20M+10M | LTE B4 | 20 | QPSK | 1/0 | **20175** | 1732.5 | 2175 | 2132.5 | - | LTE B5 | 10 | **2525** | 881.5 | 22.5 | 22.26 | 22.42 |

### 6.1.5 WIFI TEST CONFIGURATION

For WLAN SAR testing, WLAN engineering testing software installed on the DUT can provide continuous transmitting RF signal.

2.4G

| Mode | 802.11b | 802.11g | 802.11n HT20 |
|---|---|---|---|
| Duty cycle | 100% | | |
| Crest factor | 1 | | |

5G

| Mode | 802.11a | 802.11n HT20 | 802.11n HT40 | 802.11ac HT20 | 802.11ac HT40 | 802.11ac VH80 |
|---|---|---|---|---|---|---|
| Duty cycle | 100% | | | | | |
| Crest factor | 1 | | | | | |

For WiFi SAR testing, a communication link is set up with the test mode software for WiFi mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. The RF signal utilized in SAR measurement has 100% duty cycle and its crest factor is 1. The test procedures in KDB 248227 D01 are applied.

#### 6.1.5.1 2.4G SAR Test Requirements

**802.11b DSSS SAR Test Requirements**

SAR is measured for 2.4 GHz 802.11b DSSS using either a fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:
1) When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
2) When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

**2.4 GHz 802.11g/n OFDM SAR Test Exclusion Requirements**

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied. SAR is not required for the following 2.4 GHz OFDM conditions.
1) When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
2) When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

**SAR Test Requirements for OFDM configurations**

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

### 6.1.5.2 5G SAR Test Requirements

✧ **U-NII-1 and U-NII-2A Band**

For devices that operate in both U-NII-1 and U-NII-2A bands, when the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, both bands are tested independently for SAR. When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, both bands are tested independently for SAR.

✧ **U-NII-2C, U-NII-3 Bands**

The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, the channels at 5.60 – 5.65 GHz in U-NII-2C band must be disabled with acceptable mechanisms and documented in the equipment certification.
Unless band gap channels are permanently disabled, they must be considered for SAR testing.
To maintain SAR measurement accuracy and to facilitate test reduction, the channels in U-NII-2C band above 5.65 GHz may be grouped with the 5.8 GHz channels in U-NII-3 or §15.247 band to enable two SAR probe calibration frequency points to cover the bands, including the band gap channels.11 When band gap channels are supported and the bands are not aggregated for SAR testing, band gap channels must be considered independently in each band according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

### 6.1.5.3 OFDM transmission mode and SAR test channel selection

For the 2.4GHz and 5GHz bands, when the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations (for example 802.11a, 802.11n and 802.11ac, or 802.11g and 802.11n, with the same channel bandwidth, modulation, and data rate, etc.), the lower order 802.11 mode (i.e.802.11a then 802.11n and 802.11ac, or 802.11g then 802.11n) is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

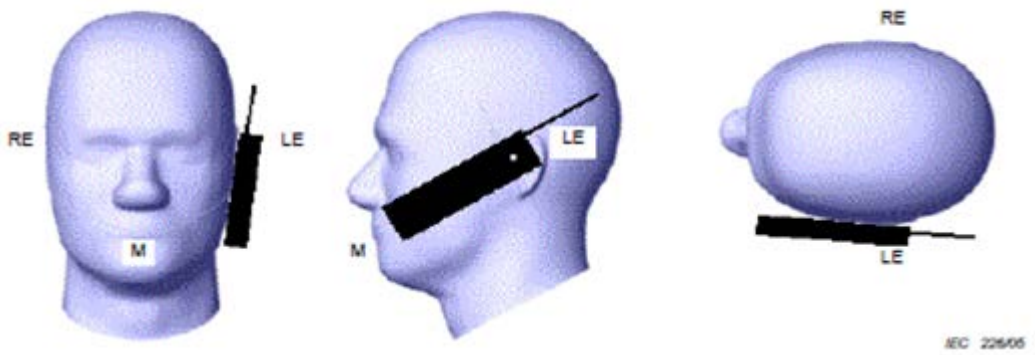
### 6.1.5.4 Initial test configuration procedure

For OFDM, in both 2.4GHz and 5GHz bands, an initial test configuration is determined for each frequency band and aggregated band, according to the transmission mode with the highest maximum output power specified for SAR measurements. When the same maximum output power is specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration(s) with the largest channel bandwidth, lowest order modulation, and lowest data rate. If the average RF output powers of the highest identical transmission modes are within 0.25 dB of each other, mid channel of the transmission mode with highest average RF output powers is the initial test channel. Otherwise, the channel of the transmission mode with the highest average RF output power will be the initial test configuration.
When the reported SAR is ≤ 0.8 W/kg, no additional measurements on other test channels are required. Otherwise, SAR is evaluated using the subsequent highest average RF output channel until the reported SAR result is ≤ 1.2 W/kg or all channels are measured. When there are multiple untested channels having the same subsequent highest average RF output power, the channel with higher frequency from the lowest 802.11 mode is considered for SAR measurement.

## 6.2 TEST POSITION

### 6.2.1 HEAD TEST CONFIGURATION

Measurements were made in “cheek” and “tilt” positions on both the left hand and right hand sides of the phantom.

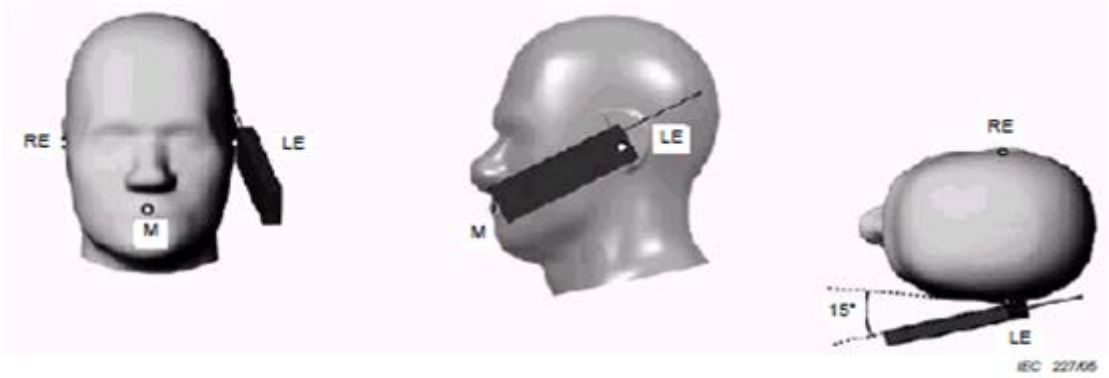



**Key**

| | |
|---|---|
| M | Mouth reference point |
| LE | Left ear reference point (ERP) |
| RE | Right ear reference point (ERP) |

Figure 1 Cheek position of the wireless device on the left side of SAM

Note1: Cheek position of the wireless device on Right side of SAM also is similar to the left side represented above.




**Key**

| | |
|---|---|
| M | Mouth reference point |
| LE | Left ear reference point (ERP) |
| RE | Right ear reference point (ERP) |

Figure 2 Tilt position of the wireless device on the left side of SAM

Note2: Tilt position of the wireless device on Right side of SAM also is similar to the left side represented above.

### 6.2.2 BODY-WORN TEST CONFIGURATION

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device. The distance between the device and the phantom was kept 15mm.

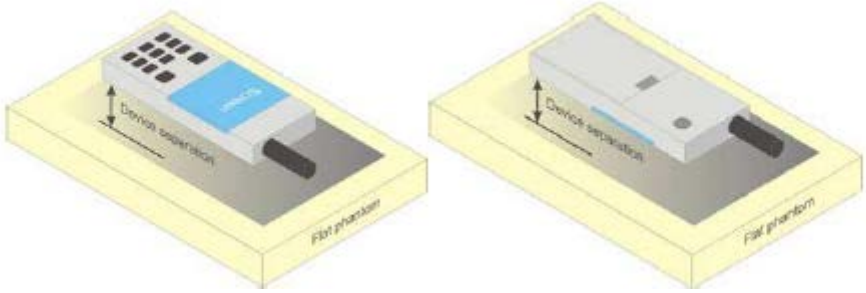



Figure 3 Test positions for body-worn device

### 6.2.3 HOTSPOT TEST CONFIGURATION

Per FCC KDB 941225D06, the SAR test separation distance for hotspot mode is determined according to device form factor. When the overall length and width of a device is > 9cm×5cm, a test separation distance of 10mm is required for hotspot mode SAR measurements. A test separation distance of 5mm or less is required for smaller devices. Hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25mm from that surface or edge; for the data modes, wireless technologies and frequency bands supporting hotspot mode. The SAR results are used to determine simultaneous transmission SAR test exclusion for hotspot mode; otherwise, simultaneous transmission SAR measurement is required.

### 6.2.4 PRODUCT SPECIFIC 10-G SAR TEST CONFIGURATION

Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0cm or an overall diagonal dimension > 16.0cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, the device is marketed as “Phablet”.
The UMPC mini-tablets procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25mm from that surface or edge, in direct contact with a flat phantom, for product specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2W/kg; when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold.

## 6.3 GENERAL DESCRIPTION OF TEST PROCEDURES

Connection to the EUT is established via air interface with Agilent 8960 & R&S CMW500 & Anritsu MT8820C, and the EUT is set to maximum output power by Agilent 8960 & R&S CMW500 & Anritsu MT8820C. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. The antenna connected to the output of the base station simulator shall be placed at least 50cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30dB.

## 6.4 RECEIVER DETECTION MECHANISM

### 6.4.1 GENERAL DESCRIPTION OF RECEIVER DETECTION MECHANISM

The device supports the receiver detection mechanism. The main purpose is to minimize triggering associated with power reduction scenarios by receiver detection mechanisms and provide enhanced user experience.
This device uses the receiver to indicate whether the user is making a call in head scenario or not. The selection between head and body power levels is based on the receiver detection mechanism. It can determine proximity to head or body and set the relevant power level for 2G&3G&4G antenna accordingly.

**Table: Summery of Receiver detection mechanism**

| Antenna | Receiver on (Head) | Receiver off (Body-worn & Hotspot) |
|---|---|---|
| 2G&3G&4G second ant | Power Level A1 | Power Level B1 |
| 2G&3G&4G main ant | Power Level A2 | Power Level B2 |

The location of the antenna inside EUT, please refer to Appendix E.

| Main Antenna | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Power scenario | GSM 850 | GSM 1900 | UMTS B2 | UMTS B4 | UMTS B5 | LTE B2 | LTE B4 | LTE B5 | LTE B7 | LTE B26 | LTE B38 | LTE B41 |
| Receiver on (Head) | 34 | 31 | 23 | 25 | 23 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Receiver off (Body-worn & Hotspot) | 32 | 28 | 21 | 21.5 | 23 | 20.5 | 21.5 | 24.5 | 21.5 | 25 | 23 | 23 |

| Second Antenna | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Power scenario | GSM 850 | GSM 1900 | UMTS B2 | UMTS B4 | UMTS B5 | LTE B2 | LTE B4 | LTE B5 | LTE B7 | LTE B26 | LTE B38 | LTE B41 |
| Receiver on (Head) | 32.5 | 26 | 17.5 | 19.5 | 22 | 17.5 | 19.5 | 24.5 | 15.5 | 25 | 17.5 | 17 |
| Receiver off (Body-worn & Hotspot) | 33 | 29 | 21 | 22 | 22 | 21 | 22.5 | 25 | 17 | 25 | 19.5 | 21 |

### 6.4.2 MORE DETAILS INFORMATION FOLLOWINGS

**For head SAR test,**
1) Standalone Head SAR of 2G&3G&4G second ant is evaluated at power level A1;
2) Standalone Head SAR of 2G&3G&4G Main ant is evaluated at power level A2;
Note: As the receiver only works in voice mode when the user is making a call in head scenario, In LTE Data/ WCDMA RMC (Data) mode, the mobile phone won't ring and answer, it just can be connected with the test instrument. Therefore, for Head SAR test of UMTS and LTE, we're planning to test LTE Data/ WCDMA RMC (Data) mode through triggering the receiver on by XML test scripts in order to simulate the users' scene (LTE VOIP, WCDMA VOIP).

**For body-worn & hotspot SAR test,**
1) Standalone body-worn & hotspot SAR of 2G&3G&4G second ant is evaluated at power level B1;
2) Standalone body-worn & hotspot SAR of 2G&3G&4G Main ant is evaluated at power level B2;
Note: As the receiver will not work during body-worn voice mode operation with the headset connected. When the receiver is off, the power level with headset connected is the same as those without headset connected. So body-worn & hotspot SAR with headset is tested at the body-worn & hotspot SAR worst case without headset connected at the same power level.

# 7. TEST RESULT

## 7.1 CONDUCTED POWER RESULTS

### 7.1.1 CONDUCTED POWER MEASUREMENTS OF GSM

1. Main antenna_Receiver on

| GSM850 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 |
| GSM (CS) | | 34.00 | 32.84 | **32.76** | 32.84 | 24.81 | 23.65 | **23.57** | 23.65 |
| GPRS/ EDGE (GMSK) | 1 Tx Slot | 34.00 | 32.88 | 32.78 | 32.91 | 24.81 | 23.69 | 23.59 | 23.72 |
| | 2 Tx Slot | 30.50 | 30.29 | 30.00 | 30.06 | 24.37 | 24.16 | 23.87 | 23.93 |
| | 3 Tx Slot | 29.00 | 28.31 | 28.24 | 28.28 | 24.58 | 23.89 | 23.82 | 23.86 |
| | 4 Tx Slot | 27.50 | 27.05 | 26.92 | 26.86 | 24.32 | 23.87 | 23.74 | 23.68 |
| EDGE (8PSK) | 1 Tx Slot | 27.50 | 27.20 | 27.03 | 26.95 | 18.31 | 18.01 | 17.84 | 17.76 |
| | 2 Tx Slot | 25.50 | 24.72 | 24.49 | 24.97 | 19.37 | 18.59 | 18.36 | 18.84 |
| | 3 Tx Slot | 24.50 | 23.68 | 23.64 | 24.03 | 20.08 | 19.26 | 19.22 | 19.61 |
| | 4 Tx Slot | 23.50 | 23.09 | 22.96 | 22.87 | 20.32 | 19.91 | 19.78 | 19.69 |
| GSM1900 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 |
| GSM (CS) | | 31.00 | 29.71 | **30.14** | 30.05 | 21.81 | 20.52 | **20.95** | 20.86 |
| GPRS/EDGE (GMSK) | 1 Tx Slot | 31.00 | 29.73 | 30.15 | 30.04 | 21.81 | 20.54 | 20.96 | 20.85 |
| | 2 Tx Slot | 28.00 | 27.06 | 27.42 | 27.38 | 21.87 | 20.93 | 21.29 | 21.25 |
| | 3 Tx Slot | 27.00 | 25.93 | 26.34 | 26.06 | 22.58 | 21.51 | 21.92 | 21.64 |
| | 4 Tx Slot | 25.00 | 24.04 | 24.68 | 24.46 | 21.82 | 20.86 | 21.50 | 21.28 |
| EDGE (8PSK) | 1 Tx Slot | 26.50 | 25.59 | 26.07 | 26.09 | 17.31 | 16.40 | 16.88 | 16.90 |
| | 2 Tx Slot | 24.50 | 23.86 | 24.16 | 24.25 | 18.37 | 17.73 | 18.03 | 18.12 |
| | 3 Tx Slot | 23.50 | 22.75 | 22.64 | 22.88 | 19.08 | 18.33 | 18.22 | 18.46 |
| | 4 Tx Slot | 22.00 | 21.58 | 21.71 | 21.45 | 18.82 | 18.40 | 18.53 | 18.27 |

2. Main antenna_Receiver off

| GSM850 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 |
| GSM (CS) | | 32.00 | 31.38 | **31.31** | 31.44 | 22.81 | 22.19 | **22.12** | 22.25 |
| GPRS/ EDGE (GMSK) | 1 Tx Slot | 32.00 | 31.38 | 31.31 | 31.44 | 22.81 | 22.19 | 22.12 | 22.25 |
| | 2 Tx Slot | 29.50 | 28.66 | 28.45 | 28.75 | 23.37 | 22.53 | 22.32 | 22.62 |
| | 3 Tx Slot | 28.00 | 27.10 | **26.62** | 26.80 | **23.58** | 22.68 | **22.20** | 22.38 |
| | 4 Tx Slot | 26.50 | 25.90 | 25.33 | 25.50 | 23.32 | 22.72 | 22.15 | 22.32 |
| EDGE (8PSK) | 1 Tx Slot | 26.50 | 25.98 | 25.72 | 25.68 | 17.31 | 16.79 | 16.53 | 16.49 |
| | 2 Tx Slot | 24.50 | 23.68 | 23.24 | 23.40 | 18.37 | 17.55 | 17.11 | 17.27 |
| | 3 Tx Slot | 23.50 | 22.52 | 22.42 | 22.47 | 19.08 | 18.10 | 18.00 | 18.05 |
| | 4 Tx Slot | 22.50 | 21.93 | 22.19 | 22.34 | 19.32 | 18.75 | 19.01 | 19.16 |
| GSM1900 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 |
| GSM (CS) | | 28.00 | 27.44 | **27.57** | 27.62 | 18.81 | 18.25 | **18.38** | 18.43 |
| GPRS/ EDGE (GMSK) | 1 Tx Slot | 28.00 | 27.44 | 27.57 | 27.62 | 18.81 | 18.25 | 18.38 | 18.43 |
| | 2 Tx Slot | 25.00 | 24.52 | 24.60 | 24.73 | 18.87 | 18.39 | 18.47 | 18.60 |
| | 3 Tx Slot | 24.00 | 23.22 | **23.39** | 23.45 | **19.58** | 18.80 | **18.97** | 19.03 |
| | 4 Tx Slot | 22.00 | 21.52 | 21.77 | 21.72 | 18.82 | 18.34 | 18.59 | 18.54 |
| EDGE (8PSK) | 1 Tx Slot | 24.00 | 23.11 | 23.18 | 23.08 | 14.81 | 13.92 | 13.99 | 13.89 |
| | 2 Tx Slot | 22.00 | 21.12 | 21.22 | 21.20 | 15.87 | 14.99 | 15.09 | 15.07 |
| | 3 Tx Slot | 21.00 | 20.74 | 20.91 | 20.90 | 16.58 | 16.32 | 16.49 | 16.48 |
| | 4 Tx Slot | 20.00 | 19.78 | 19.93 | 19.89 | 16.82 | 16.60 | 16.75 | 16.71 |

3. Second antenna_Receiver on

| GSM850 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 |
| GSM (CS) | | 32.50 | **32.13** | **31.68** | **31.93** | 23.31 | **22.94** | **22.49** | **22.74** |
| GPRS/ EDGE (GMSK) | 1 Tx Slot | 32.50 | 32.13 | 31.68 | 31.93 | 23.31 | 22.94 | 22.49 | 22.74 |
| | 2 Tx Slot | 29.50 | 28.90 | 28.80 | 29.28 | 23.37 | 22.77 | 22.67 | 23.15 |
| | 3 Tx Slot | 27.50 | 27.25 | 26.90 | 27.30 | 23.08 | 22.83 | 22.48 | 22.88 |
| | 4 Tx Slot | 26.50 | 26.04 | 25.67 | 26.08 | 23.32 | 22.86 | 22.49 | 22.90 |
| EDGE (8PSK) | 1 Tx Slot | 26.50 | 26.18 | 26.18 | 26.27 | 17.31 | 16.99 | 16.99 | 17.08 |
| | 2 Tx Slot | 24.50 | 23.90 | 23.86 | 23.85 | 18.37 | 17.77 | 17.73 | 17.72 |
| | 3 Tx Slot | 23.50 | 22.75 | 22.84 | 23.04 | 19.08 | 18.33 | 18.42 | 18.62 |
| | 4 Tx Slot | 23.00 | 22.50 | 22.52 | 22.49 | 19.82 | 19.32 | 19.34 | 19.31 |
| GSM1900 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 |
| GSM (CS) | | 26.00 | 25.30 | **25.74** | 25.53 | 16.81 | 16.11 | **16.55** | 16.34 |
| GPRS/ EDGE (GMSK) | 1 Tx Slot | 26.00 | 25.30 | 25.74 | 25.53 | 16.81 | 16.11 | 16.55 | 16.34 |
| | 2 Tx Slot | 23.00 | 22.35 | 22.83 | 22.60 | 13.81 | 16.22 | 16.70 | 16.47 |
| | 3 Tx Slot | 22.00 | 21.13 | 21.71 | 21.43 | 12.81 | 16.71 | 17.29 | 17.01 |
| | 4 Tx Slot | 20.00 | 19.56 | 19.80 | 19.75 | 10.81 | 16.38 | 16.62 | 16.57 |
| EDGE (8PSK) | 1 Tx Slot | 22.00 | 21.60 | 21.79 | 21.73 | 12.81 | 12.41 | 12.60 | 12.54 |
| | 2 Tx Slot | 21.00 | 19.81 | 20.30 | 20.10 | 11.81 | 13.68 | 14.17 | 13.97 |
| | 3 Tx Slot | 19.00 | 18.60 | 18.73 | 18.61 | 9.81 | 14.18 | 14.31 | 14.19 |
| | 4 Tx Slot | 18.00 | 17.28 | 17.52 | 17.64 | 14.82 | 14.10 | 14.34 | 14.46 |

4. Second antenna_Receiver off

| GSM850 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 | | 128/ 824.2 | 190/ 836.6 | 251/ 848.8 |
| GSM (CS) | | 33.00 | 32.74 | **32.77** | 32.98 | 23.81 | 23.55 | **23.58** | 23.79 |
| GPRS/ EDGE (GMSK) | 1 Tx Slot | 33.00 | 32.74 | 32.77 | 32.98 | 23.81 | 23.55 | 23.58 | 23.79 |
| | 2 Tx Slot | 30.50 | 30.01 | **29.60** | 30.12 | **24.37** | 23.88 | **23.47** | 23.99 |
| | 3 Tx Slot | 28.50 | 28.15 | 27.80 | 28.23 | 24.08 | 23.73 | 23.38 | 23.81 |
| | 4 Tx Slot | 27.50 | 26.90 | 26.66 | 27.11 | 24.32 | 23.72 | 23.48 | 23.93 |
| EDGE (8PSK) | 1 Tx Slot | 27.50 | 27.23 | 27.07 | 27.20 | 18.31 | 18.04 | 17.88 | 18.01 |
| | 2 Tx Slot | 25.00 | 24.82 | 24.73 | 24.88 | 18.87 | 18.69 | 18.60 | 18.75 |
| | 3 Tx Slot | 24.00 | 23.60 | 23.47 | 23.71 | 19.58 | 19.18 | 19.05 | 19.29 |
| | 4 Tx Slot | 23.50 | 22.80 | 22.94 | 23.10 | 20.32 | 19.62 | 19.76 | 19.92 |
| GSM1900 | | Max Burst Average Power (dBm) | | | | Max Frame Average Power (dBm) | | | |
| | | Max. Tune-up | Channel/Frequency(MHz) | | | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 | | 512/ 1850.2 | 661/ 1880 | 810/ 1909.8 |
| GSM (CS) | | 29.00 | 28.68 | **28.82** | 28.71 | 19.81 | 19.49 | **19.63** | 19.52 |
| GPRS/ EDGE (GMSK) | 1 Tx Slot | 29.00 | 28.68 | 28.82 | 28.71 | 19.81 | 19.49 | 19.63 | 19.52 |
| | 2 Tx Slot | 26.00 | 25.63 | 24.80 | 25.69 | 19.87 | 19.50 | 18.67 | 19.56 |
| | 3 Tx Slot | 25.00 | 24.43 | **24.50** | 24.47 | **20.58** | 20.01 | **20.08** | 20.05 |
| | 4 Tx Slot | 23.00 | 22.69 | 22.93 | 22.81 | 19.82 | 19.51 | 19.75 | 19.63 |
| EDGE (8PSK) | 1 Tx Slot | 24.50 | 24.31 | 24.26 | 24.10 | 15.31 | 15.12 | 15.07 | 14.91 |
| | 2 Tx Slot | 22.50 | 22.28 | 22.30 | 22.10 | 16.37 | 16.15 | 16.17 | 15.97 |
| | 3 Tx Slot | 21.50 | 21.13 | 21.13 | 20.96 | 17.08 | 16.71 | 16.71 | 16.54 |
| | 4 Tx Slot | 21.00 | 20.75 | 20.97 | 20.71 | 17.82 | 17.57 | 17.79 | 17.53 |

Note:
1) The conducted power of GSM is measured with RMS detector.
2) Frame-averaged output power was calculated from the measured burst-averaged output power by converting the slot powers into linear units and calculating the energy over 8 time slots.
3) The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:
Frame-averaged power=10 x log (Burst-averaged power mW x Slot used/8)
4) The tested channels are marks in bold.

### 7.1.2 CONDUCTED POWER MEASUREMENTS OF UMTS

1. Main antenna_Receiver on

| Band | UMTS B2 Average Conducted Power(dBm) | | | | UMTS B4 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|
| Tx Channel | Max. | 9262 | 9400 | 9538 | Max. | 1312 | 1413 | 1513 |
| Frequency(MHz) | Tune-up | 1852.4 | 1880 | 1907.6 | Tune-up | 1712.4 | 1732.6 | 1752.6 |
| AMR Voice | 23.00 | 21.27 | 21.49 | 21.60 | 25.00 | 24.40 | 24.43 | 24.50 |
| RMC 12.2K | 23.00 | 21.27 | **21.49** | 21.60 | 25.00 | 24.40 | **24.43** | 24.50 |
| RMC 64K | 23.00 | 21.29 | 21.54 | 21.64 | 25.00 | 24.36 | 24.42 | 24.33 |
| RMC 144K | 23.00 | 21.43 | 21.53 | 21.62 | 25.00 | 24.34 | 24.44 | 24.26 |
| RMC 384K | 23.00 | 21.28 | 21.55 | 21.61 | 25.00 | 24.35 | 24.38 | 24.32 |
| HSDPA Subtest-1 | 22.00 | 21.44 | 21.53 | 21.60 | 24.00 | 23.37 | 23.40 | 23.35 |
| HSDPA Subtest-2 | 22.00 | 21.37 | 21.53 | 21.58 | 24.00 | 23.34 | 23.39 | 23.28 |
| HSDPA Subtest-3 | 21.50 | 20.95 | 21.07 | 21.15 | 23.50 | 22.89 | 22.91 | 22.82 |
| HSDPA Subtest-4 | 21.50 | 20.83 | 21.11 | 21.09 | 23.50 | 22.84 | 22.85 | 22.82 |
| HSUPA Subtest-1 | 21.50 | 20.65 | 20.88 | 20.94 | 23.50 | 23.33 | 23.42 | 23.34 |
| HSUPA Subtest-2 | 19.00 | 18.41 | 18.54 | 18.74 | 22.00 | 21.48 | 21.37 | 21.35 |
| HSUPA Subtest-3 | 20.00 | 19.43 | 19.52 | 19.60 | 22.50 | 22.34 | 22.41 | 22.32 |
| HSUPA Subtest-4 | 19.00 | 18.33 | 18.57 | 18.44 | 22.00 | 21.38 | 21.39 | 21.27 |
| HSUPA Subtest-5 | 22.00 | 21.43 | 21.53 | 21.64 | 23.50 | 23.35 | 23.43 | 23.29 |
| DC-HSDPA Subtest-1 | 22.00 | 21.44 | 21.53 | 21.60 | 24.00 | 23.37 | 23.40 | 23.35 |
| DC-HSDPA Subtest-2 | 22.00 | 21.37 | 21.53 | 21.58 | 24.00 | 23.34 | 23.39 | 23.28 |
| DC-HSDPA Subtest-3 | 21.50 | 20.95 | 21.07 | 21.15 | 23.50 | 22.89 | 22.91 | 22.82 |
| DC-HSDPA Subtest-4 | 21.50 | 20.83 | 21.11 | 21.09 | 23.50 | 22.84 | 22.85 | 22.82 |

| Band | UMTS B5 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|
| Tx Channel | Max. | 4132 | 4182 | 4233 |
| Frequency(MHz) | Tune-up | 826.4 | 836.4 | 846.6 |
| AMR Voice | 23.00 | 21.34 | 21.37 | 21.42 |
| RMC 12.2K | 23.00 | 21.34 | **21.37** | 21.42 |
| RMC 64K | 23.00 | 21.33 | 21.36 | 21.35 |
| RMC 144K | 23.00 | 21.35 | 21.40 | 21.41 |
| RMC 384K | 23.00 | 21.41 | 21.39 | 21.43 |
| HSDPA Subtest-1 | 22.00 | 21.36 | 21.39 | 21.35 |
| HSDPA Subtest-2 | 22.00 | 21.42 | 21.44 | 21.41 |
| HSDPA Subtest-3 | 21.00 | 20.39 | 20.43 | 20.48 |
| HSDPA Subtest-4 | 21.00 | 20.30 | 20.44 | 20.42 |
| HSUPA Subtest-1 | 21.00 | 20.72 | 20.75 | 20.81 |
| HSUPA Subtest-2 | 19.00 | 18.40 | 18.46 | 18.38 |
| HSUPA Subtest-3 | 20.00 | 19.42 | 19.37 | 19.44 |
| HSUPA Subtest-4 | 19.00 | 18.41 | 18.39 | 18.37 |
| HSUPA Subtest-5 | 22.00 | 21.37 | 21.34 | 21.31 |
| DC-HSDPA Subtest-1 | 22.00 | 21.36 | 21.39 | 21.35 |
| DC-HSDPA Subtest-2 | 22.00 | 21.42 | 21.44 | 21.41 |
| DC-HSDPA Subtest-3 | 21.00 | 20.39 | 20.43 | 20.48 |
| DC-HSDPA Subtest-4 | 21.00 | 20.30 | 20.44 | 20.42 |

2. Main antenna_Receiver off

| Band | UMTS B2 Average Conducted Power(dBm) | | | | UMTS B4 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|
| Tx Channel | Max. | 9262 | 9400 | 9538 | Max. | 1312 | 1413 | 1513 |
| Frequency(MHz) | Tune-up | 1852.4 | 1880 | 1907.6 | Tune-up | 1712.4 | 1732.6 | 1752.6 |
| AMR Voice | 21.00 | 20.44 | 20.54 | 20.49 | 21.50 | 21.23 | 21.28 | 21.04 |
| RMC 12.2K | 21.00 | **20.44** | **20.54** | **20.49** | 21.50 | **21.23** | **21.28** | **21.04** |
| RMC 64K | 21.00 | 20.47 | 20.55 | 20.43 | 21.50 | 21.15 | 21.23 | 21.07 |
| RMC 144K | 21.00 | 20.48 | 20.52 | 20.46 | 21.50 | 21.08 | 21.21 | 21.01 |
| RMC 384K | 21.00 | 20.46 | 20.51 | 20.55 | 21.50 | 21.12 | 21.22 | 21.15 |
| HSDPA Subtest-1 | 20.00 | 19.43 | 19.55 | 19.50 | 20.50 | 20.10 | 20.28 | 20.02 |
| HSDPA Subtest-2 | 20.00 | 19.51 | 19.60 | 19.52 | 20.50 | 20.10 | 19.95 | 20.40 |
| HSDPA Subtest-3 | 19.50 | 18.96 | 19.02 | 18.98 | 20.00 | 19.61 | 19.83 | 19.54 |
| HSDPA Subtest-4 | 19.50 | 19.06 | 18.93 | 19.03 | 20.00 | 19.66 | 19.78 | 19.58 |
| HSUPA Subtest-1 | 20.00 | 19.42 | 19.58 | 19.46 | 20.50 | 20.05 | 20.16 | 20.05 |
| HSUPA Subtest-2 | 18.00 | 17.61 | 17.68 | 17.47 | 18.50 | 18.08 | 18.28 | 18.12 |
| HSUPA Subtest-3 | 19.00 | 18.55 | 18.59 | 18.47 | 19.50 | 19.17 | 19.20 | 19.06 |
| HSUPA Subtest-4 | 18.00 | 17.50 | 17.67 | 17.52 | 18.50 | 18.18 | 18.27 | 18.12 |
| HSUPA Subtest-5 | 20.00 | 19.49 | 19.56 | 19.50 | 20.50 | 20.14 | 20.25 | 20.06 |
| DC-HSDPA Subtest-1 | 20.00 | 19.43 | 19.55 | 19.50 | 20.50 | 20.10 | 20.28 | 20.02 |
| DC-HSDPA Subtest-2 | 20.00 | 19.51 | 19.60 | 19.52 | 20.50 | 20.10 | 19.95 | 20.40 |
| DC-HSDPA Subtest-3 | 19.50 | 18.96 | 19.02 | 18.98 | 20.00 | 19.61 | 19.83 | 19.54 |
| DC-HSDPA Subtest-4 | 19.50 | 19.06 | 18.93 | 19.03 | 20.00 | 19.66 | 19.78 | 19.58 |

| Band | UMTS B5 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|
| Tx Channel | Max. | 4132 | 4182 | 4233 |
| Frequency(MHz) | Tune-up | 826.4 | 836.4 | 846.6 |
| AMR Voice | 23.00 | 21.34 | 21.37 | 21.42 |
| RMC 12.2K | 23.00 | 21.34 | **21.37** | 21.42 |
| RMC 64K | 23.00 | 21.33 | 21.36 | 21.35 |
| RMC 144K | 23.00 | 21.35 | 21.40 | 21.41 |
| RMC 384K | 23.00 | 21.41 | 21.39 | 21.43 |
| HSDPA Subtest-1 | 22.00 | 21.36 | 21.39 | 21.35 |
| HSDPA Subtest-2 | 22.00 | 21.42 | 21.44 | 21.41 |
| HSDPA Subtest-3 | 21.00 | 20.39 | 20.43 | 20.48 |
| HSDPA Subtest-4 | 21.00 | 20.30 | 20.44 | 20.42 |
| HSUPA Subtest-1 | 21.00 | 20.72 | 20.75 | 20.81 |
| HSUPA Subtest-2 | 19.00 | 18.40 | 18.46 | 18.38 |
| HSUPA Subtest-3 | 20.00 | 19.42 | 19.37 | 19.44 |
| HSUPA Subtest-4 | 19.00 | 18.41 | 18.39 | 18.37 |
| HSUPA Subtest-5 | 22.00 | 21.37 | 21.34 | 21.31 |
| DC-HSDPA Subtest-1 | 22.00 | 21.36 | 21.39 | 21.35 |
| DC-HSDPA Subtest-2 | 22.00 | 21.42 | 21.44 | 21.41 |
| DC-HSDPA Subtest-3 | 21.00 | 20.39 | 20.43 | 20.48 |
| DC-HSDPA Subtest-4 | 21.00 | 20.30 | 20.44 | 20.42 |

3. Second antenna_Receiver on

| Band | UMTS B2 Average Conducted Power(dBm) | | | | UMTS B4 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|
| Tx Channel | Max. | 9262 | 9400 | 9538 | Max. | 1312 | 1413 | 1513 |
| Frequency(MHz) | Tune-up | 1852.4 | 1880 | 1907.6 | Tune-up | 1712.4 | 1732.6 | 1752.6 |
| AMR Voice | 17.50 | 17.08 | 17.10 | 17.09 | 19.50 | 19.00 | 19.19 | 18.99 |
| RMC 12.2K | 17.50 | **17.08** | **17.10** | **17.09** | 19.50 | **19.00** | **19.19** | **18.99** |
| RMC 64K | 17.50 | 17.12 | 17.20 | 17.03 | 19.50 | 18.98 | 19.13 | 19.03 |
| RMC 144K | 17.50 | 17.09 | 17.18 | 17.07 | 19.50 | 19.00 | 19.15 | 19.00 |
| RMC 384K | 17.50 | 17.08 | 17.05 | 16.98 | 19.50 | 19.01 | 19.10 | 18.96 |
| HSDPA Subtest-1 | 16.50 | 16.02 | 16.11 | 16.03 | 18.50 | 18.05 | 18.14 | 18.01 |
| HSDPA Subtest-2 | 16.50 | 16.04 | 16.17 | 16.01 | 18.50 | 18.04 | 18.21 | 18.05 |
| HSDPA Subtest-3 | 16.50 | 16.10 | 16.13 | 15.97 | 18.50 | 18.06 | 18.30 | 18.12 |
| HSDPA Subtest-4 | 16.50 | 16.01 | 16.08 | 16.00 | 18.50 | 18.02 | 18.10 | 18.02 |
| HSUPA Subtest-1 | 16.50 | 16.01 | 16.09 | 15.14 | 17.50 | 17.07 | 17.30 | 17.13 |
| HSUPA Subtest-2 | 14.50 | 14.12 | 13.87 | 13.78 | 16.50 | 16.15 | 16.23 | 16.12 |
| HSUPA Subtest-3 | 15.50 | 15.05 | 15.13 | 14.91 | 17.50 | 17.00 | 17.10 | 17.06 |
| HSUPA Subtest-4 | 14.50 | 14.00 | 14.11 | 14.01 | 16.50 | 16.07 | 16.23 | 16.03 |
| HSUPA Subtest-5 | 16.50 | 16.11 | 16.22 | 16.15 | 18.50 | 18.05 | 18.28 | 18.12 |
| DC-HSDPA Subtest-1 | 16.50 | 16.02 | 16.11 | 16.03 | 18.50 | 18.05 | 18.14 | 18.01 |
| DC-HSDPA Subtest-2 | 16.50 | 16.04 | 16.17 | 16.01 | 18.50 | 18.04 | 18.21 | 18.05 |
| DC-HSDPA Subtest-3 | 16.50 | 16.10 | 16.13 | 15.97 | 18.50 | 18.06 | 18.30 | 18.12 |
| DC-HSDPA Subtest-4 | 16.50 | 16.01 | 16.08 | 16.00 | 18.50 | 18.02 | 18.10 | 18.02 |

| Band | UMTS B5 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|
| Tx Channel | Max. | 4132 | 4182 | 4233 |
| Frequency(MHz) | Tune-up | 826.4 | 836.4 | 846.6 |
| AMR Voice | 22.00 | 21.56 | 21.54 | 21.58 |
| RMC 12.2K | 22.00 | 21.56 | **21.54** | 21.58 |
| RMC 64K | 22.00 | 21.57 | 21.56 | 21.62 |
| RMC 144K | 22.00 | 21.54 | 21.57 | 21.59 |
| RMC 384K | 22.00 | 21.56 | 21.57 | 21.56 |
| HSDPA Subtest-1 | 22.00 | 21.55 | 21.56 | 21.59 |
| HSDPA Subtest-2 | 22.00 | 21.62 | 21.58 | 21.60 |
| HSDPA Subtest-3 | 21.00 | 20.63 | 20.55 | 20.67 |
| HSDPA Subtest-4 | 21.00 | 20.64 | 20.65 | 20.62 |
| HSUPA Subtest-1 | 21.50 | 20.96 | 21.05 | 20.98 |
| HSUPA Subtest-2 | 19.00 | 18.54 | 18.58 | 18.64 |
| HSUPA Subtest-3 | 20.00 | 19.57 | 19.62 | 19.64 |
| HSUPA Subtest-4 | 19.00 | 18.66 | 18.57 | 18.61 |
| HSUPA Subtest-5 | 22.00 | 21.52 | 21.57 | 21.63 |
| DC-HSDPA Subtest-1 | 22.00 | 21.55 | 21.56 | 21.59 |
| DC-HSDPA Subtest-2 | 22.00 | 21.62 | 21.58 | 21.60 |
| DC-HSDPA Subtest-3 | 21.00 | 20.63 | 20.55 | 20.67 |
| DC-HSDPA Subtest-4 | 21.00 | 20.64 | 20.65 | 20.62 |

4. Second antenna_Receiver off

| Band | UMTS B2 Average Conducted Power(dBm) | | | | UMTS B4 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|
| Tx Channel | Max. | 9262 | 9400 | 9538 | Max. | 1312 | 1413 | 1513 |
| Frequency(MHz) | Tune-up | 1852.4 | 1880 | 1907.6 | Tune-up | 1712.4 | 1732.6 | 1752.6 |
| AMR Voice | 21.00 | 20.82 | 20.93 | 20.95 | 22.00 | 21.36 | 21.59 | 21.42 |
| RMC 12.2K | 21.00 | 20.82 | **20.93** | 20.95 | 22.00 | 21.36 | **21.59** | 21.42 |
| RMC 64K | 21.00 | 20.87 | 20.92 | 20.88 | 22.00 | 21.43 | 21.54 | 21.41 |
| RMC 144K | 21.00 | 20.85 | 20.90 | 20.86 | 22.00 | 21.40 | 21.52 | 21.44 |
| RMC 384K | 21.00 | 20.88 | 20.94 | 20.93 | 22.00 | 21.37 | 21.61 | 21.43 |
| HSDPA Subtest-1 | 20.50 | 19.89 | 19.96 | 19.90 | 21.00 | 20.70 | 20.57 | 20.46 |
| HSDPA Subtest-2 | 20.50 | 19.95 | 20.02 | 19.98 | 21.00 | 20.39 | 20.56 | 20.45 |
| HSDPA Subtest-3 | 20.50 | 19.47 | 19.58 | 19.44 | 20.50 | 19.92 | 20.09 | 19.93 |
| HSDPA Subtest-4 | 20.50 | 19.43 | 19.49 | 19.51 | 20.50 | 19.93 | 20.09 | 19.94 |
| HSUPA Subtest-1 | 20.50 | 19.84 | 19.94 | 19.85 | 21.00 | 20.32 | 20.51 | 20.43 |
| HSUPA Subtest-2 | 18.50 | 17.93 | 17.96 | 17.85 | 19.00 | 18.37 | 18.53 | 18.45 |
| HSUPA Subtest-3 | 19.50 | 18.85 | 19.02 | 18.94 | 20.00 | 19.42 | 19.55 | 19.39 |
| HSUPA Subtest-4 | 18.50 | 17.95 | 18.01 | 17.98 | 19.00 | 18.45 | 18.61 | 18.41 |
| HSUPA Subtest-5 | 20.50 | 20.40 | 20.01 | 19.89 | 21.00 | 20.36 | 20.54 | 20.47 |
| DC-HSDPA Subtest-1 | 20.50 | 19.89 | 19.96 | 19.90 | 21.00 | 20.70 | 20.57 | 20.46 |
| DC-HSDPA Subtest-2 | 20.50 | 19.95 | 20.02 | 19.98 | 21.00 | 20.39 | 20.56 | 20.45 |
| DC-HSDPA Subtest-3 | 20.50 | 19.47 | 19.58 | 19.44 | 20.50 | 19.92 | 20.09 | 19.93 |
| DC-HSDPA Subtest-4 | 20.50 | 19.43 | 19.49 | 19.51 | 20.50 | 19.93 | 20.09 | 19.94 |

| Band | UMTS B5 Average Conducted Power(dBm) | | | |
|---|---|---|---|---|
| Tx Channel | Max. | 4132 | 4182 | 4233 |
| Frequency(MHz) | Tune-up | 826.4 | 836.4 | 846.6 |
| AMR Voice | 22.00 | 21.56 | 21.54 | 21.58 |
| RMC 12.2K | 22.00 | 21.56 | **21.54** | 21.58 |
| RMC 64K | 22.00 | 21.57 | 21.56 | 21.62 |
| RMC 144K | 22.00 | 21.54 | 21.57 | 21.59 |
| RMC 384K | 22.00 | 21.56 | 21.57 | 21.56 |
| HSDPA Subtest-1 | 22.00 | 21.55 | 21.56 | 21.59 |
| HSDPA Subtest-2 | 22.00 | 21.62 | 21.58 | 21.60 |
| HSDPA Subtest-3 | 21.00 | 20.63 | 20.55 | 20.67 |
| HSDPA Subtest-4 | 21.00 | 20.64 | 20.65 | 20.62 |
| HSUPA Subtest-1 | 21.50 | 20.96 | 21.05 | 20.98 |
| HSUPA Subtest-2 | 19.00 | 18.54 | 18.58 | 18.64 |
| HSUPA Subtest-3 | 20.00 | 19.57 | 19.62 | 19.64 |
| HSUPA Subtest-4 | 19.00 | 18.66 | 18.57 | 18.61 |
| HSUPA Subtest-5 | 22.00 | 21.52 | 21.57 | 21.63 |
| DC-HSDPA Subtest-1 | 22.00 | 21.55 | 21.56 | 21.59 |
| DC-HSDPA Subtest-2 | 22.00 | 21.62 | 21.58 | 21.60 |
| DC-HSDPA Subtest-3 | 21.00 | 20.63 | 20.55 | 20.67 |
| DC-HSDPA Subtest-4 | 21.00 | 20.64 | 20.65 | 20.62 |

Note:
1) The conducted power of UMTS is measured with RMS detector.
2) Note: Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.
3) The tested channels are marks in bold.
4) The power of single channel and double channel is smaller than RMC12.2K, so SAR need not be tested.

### 7.1.3 CONDUCTED POWER MEASUREMENTS OF LTE

1. Conducted power measurement results of LTE B2

1) Main antenna_Receiver on

| LTE B2/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B2/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18607/ 1850.7 | 18900/ 1880 | 19193/ 1909.3 | | | | 18615/ 1851.5 | 18900/ 1880 | 19185/ 1908.5 |
| QPSK | 1/0 | 25.00 | 23.52 | 23.82 | 23.73 | QPSK | 1/0 | 25.00 | 23.60 | 23.89 | 23.76 |
| | 1/2 | 25.00 | 23.61 | 23.87 | 23.79 | | 1/7 | 25.00 | 23.74 | 23.97 | 23.83 |
| | 1/5 | 25.00 | 23.53 | 23.82 | 23.70 | | 1/14 | 25.00 | 23.74 | 23.85 | 23.76 |
| | 3/0 | 25.00 | 23.52 | 23.73 | 23.72 | | 8/0 | 24.00 | 22.85 | 23.12 | 23.03 |
| | 3/1 | 25.00 | 23.60 | 23.78 | 23.78 | | 8/3 | 24.00 | 22.88 | 23.13 | 23.02 |
| | 3/3 | 25.00 | 23.59 | 23.77 | 23.77 | | 8/7 | 24.00 | 22.91 | 23.09 | 22.98 |
| | 6/0 | 24.00 | 22.78 | 23.00 | 22.95 | | 15/0 | 24.00 | 22.94 | 23.05 | 23.04 |
| 16QAM | 1/0 | 24.00 | 22.93 | 23.39 | 23.02 | 16QAM | 1/0 | 24.00 | 22.79 | 23.54 | 23.11 |
| | 1/2 | 24.00 | 22.99 | 23.49 | 23.06 | | 1/7 | 24.00 | 22.90 | 23.64 | 23.19 |
| | 1/5 | 24.00 | 22.94 | 23.43 | 23.04 | | 1/14 | 24.00 | 22.85 | 23.48 | 23.08 |
| | 3/0 | 24.00 | 22.84 | 23.24 | 23.14 | | 8/0 | 23.00 | 22.07 | 22.30 | 22.17 |
| | 3/1 | 24.00 | 22.91 | 23.29 | 23.17 | | 8/3 | 23.00 | 22.07 | 22.31 | 22.20 |
| | 3/3 | 24.00 | 22.91 | 23.25 | 23.20 | | 8/7 | 23.00 | 22.09 | 22.25 | 22.16 |
| | 6/0 | 23.00 | 22.02 | 22.03 | 22.24 | | 15/0 | 23.00 | 22.03 | 22.23 | 22.11 |
| 64QAM | 1/0 | 23.00 | 21.78 | 21.90 | 22.02 | 64QAM | 1/0 | 23.00 | 21.97 | 21.89 | 21.94 |
| | 1/2 | 23.00 | 21.83 | 21.96 | 22.11 | | 1/7 | 23.00 | 22.04 | 22.02 | 21.94 |
| | 1/5 | 23.00 | 21.72 | 21.91 | 21.99 | | 1/14 | 23.00 | 22.06 | 21.89 | 21.83 |
| | 3/0 | 23.00 | 21.74 | 21.70 | 21.89 | | 8/0 | 22.00 | 20.78 | 20.85 | 20.71 |
| | 3/1 | 23.00 | 21.80 | 21.70 | 21.99 | | 8/3 | 22.00 | 20.79 | 20.86 | 20.78 |
| | 3/3 | 23.00 | 21.75 | 21.69 | 21.89 | | 8/7 | 22.00 | 20.86 | 20.87 | 20.73 |
| | 6/0 | 22.00 | 20.93 | 20.79 | 20.67 | | 15/0 | 22.00 | 20.73 | 20.85 | 20.76 |

| LTE B2/BW=5M | | Average Conducted Power(dBm) | | | | LTE B2/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18625/ 1852.5 | 18900/ 1880 | 19175/ 1907.5 | | | | 18650/ 1855 | 18900/ 1880 | 19150/ 1905 |
| QPSK | 1/0 | 25.00 | 23.79 | 23.91 | 23.91 | QPSK | 1/0 | 25.00 | 23.71 | 23.97 | 23.88 |
| | 1/12 | 25.00 | 23.91 | 23.91 | 23.92 | | 1/24 | 25.00 | 23.76 | 23.92 | 23.77 |
| | 1/24 | 25.00 | 23.85 | 23.86 | 23.84 | | 1/49 | 25.00 | 23.75 | 23.85 | 23.76 |
| | 12/0 | 24.00 | 22.91 | 23.14 | 23.09 | | 25/0 | 24.00 | 23.01 | 23.12 | 23.08 |
| | 12/6 | 24.00 | 22.97 | 23.12 | 23.08 | | 25/12 | 24.00 | 23.02 | 23.14 | 23.08 |
| | 12/13 | 24.00 | 22.96 | 23.10 | 23.05 | | 25/25 | 24.00 | 22.94 | 23.10 | 23.08 |
| | 25/0 | 24.00 | 23.00 | 23.15 | 23.06 | | 50/0 | 24.00 | 22.96 | 23.13 | 23.07 |
| 16QAM | 1/0 | 24.00 | 23.09 | 23.68 | 23.24 | 16QAM | 1/0 | 24.00 | 22.86 | 23.56 | 23.21 |
| | 1/12 | 24.00 | 23.19 | 23.73 | 23.27 | | 1/24 | 24.00 | 22.91 | 23.49 | 23.10 |
| | 1/24 | 24.00 | 23.12 | 23.62 | 23.19 | | 1/49 | 24.00 | 22.85 | 23.48 | 23.05 |
| | 12/0 | 23.00 | 22.07 | 22.36 | 22.23 | | 25/0 | 23.00 | 22.04 | 22.25 | 22.28 |
| | 12/6 | 23.00 | 22.10 | 22.33 | 22.18 | | 25/12 | 23.00 | 22.03 | 22.26 | 22.28 |
| | 12/13 | 23.00 | 22.12 | 22.30 | 22.18 | | 25/25 | 23.00 | 22.02 | 22.20 | 22.25 |
| | 25/0 | 23.00 | 22.05 | 22.24 | 22.07 | | 50/0 | 23.00 | 22.00 | 22.25 | 22.15 |
| 64QAM | 1/0 | 23.00 | 21.65 | 22.13 | 21.98 | 64QAM | 1/0 | 23.00 | 22.02 | 21.94 | 21.96 |
| | 1/12 | 23.00 | 21.83 | 22.15 | 22.02 | | 1/24 | 23.00 | 22.06 | 21.92 | 21.89 |
| | 1/24 | 23.00 | 21.76 | 22.09 | 21.95 | | 1/49 | 23.00 | 22.05 | 21.89 | 21.90 |
| | 12/0 | 22.00 | 20.79 | 20.78 | 20.86 | | 25/0 | 22.00 | 20.81 | 20.88 | 20.88 |
| | 12/6 | 22.00 | 20.89 | 20.77 | 20.83 | | 25/12 | 22.00 | 20.83 | 20.91 | 20.88 |
| | 12/13 | 22.00 | 20.87 | 20.76 | 20.81 | | 25/25 | 22.00 | 20.78 | 20.87 | 20.88 |
| | 25/0 | 22.00 | 20.78 | 20.76 | 20.83 | | 50/0 | 22.00 | 20.80 | 20.87 | 20.80 |

| LTE B2/BW=15M | | Average Conducted Power(dBm) | | | | LTE B2/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18675/ 1857.5 | 18900/ 1880 | 19125/ 1902.5 | | | | 18700/ 1860 | 18900/ 1880 | 19100/ 1900 |
| QPSK | 1/0 | 25.00 | 23.77 | 24.06 | 24.05 | QPSK | 1/0 | 25.00 | 23.78 | 24.01 | **24.08** |
| | 1/37 | 25.00 | 23.76 | 23.93 | 23.87 | | 1/50 | 25.00 | 23.77 | 23.91 | 23.85 |
| | 1/74 | 25.00 | 23.70 | 23.89 | 23.88 | | 1/99 | 25.00 | 23.77 | 23.89 | 23.84 |
| | 36/0 | 24.00 | 23.03 | 23.16 | 23.16 | | 50/0 | 24.00 | 23.03 | 23.22 | **23.25** |
| | 36/19 | 24.00 | 22.94 | 23.16 | 23.11 | | 50/25 | 24.00 | 23.01 | 23.15 | 23.13 |
| | 36/39 | 24.00 | 22.92 | 23.09 | 23.08 | | 50/50 | 24.00 | 23.02 | 23.10 | 23.09 |
| | 75/0 | 24.00 | 22.99 | 23.11 | 23.11 | | 100/0 | 24.00 | 23.04 | 23.15 | 23.19 |
| 16QAM | 1/0 | 24.00 | 22.94 | 23.67 | 23.61 | 16QAM | 1/0 | 24.00 | 23.56 | 23.72 | 23.63 |
| | 1/37 | 24.00 | 22.90 | 23.52 | 23.46 | | 1/50 | 24.00 | 23.54 | 23.60 | 23.46 |
| | 1/74 | 24.00 | 22.94 | 23.48 | 23.46 | | 1/99 | 24.00 | 23.52 | 23.52 | 23.47 |
| | 36/0 | 23.00 | 22.10 | 22.32 | 22.22 | | 50/0 | 23.00 | 22.12 | 22.34 | 22.26 |
| | 36/19 | 23.00 | 22.02 | 22.31 | 22.17 | | 50/25 | 23.00 | 22.06 | 22.27 | 22.21 |
| | 36/39 | 23.00 | 21.99 | 22.23 | 22.14 | | 50/50 | 23.00 | 22.15 | 22.24 | 22.14 |
| | 75/0 | 23.00 | 22.05 | 22.23 | 22.17 | | 100/0 | 23.00 | 22.09 | 22.24 | 22.23 |
| 64QAM | 1/0 | 23.00 | 22.11 | 22.07 | 22.43 | 64QAM | 1/0 | 23.00 | 22.03 | 22.56 | 22.29 |
| | 1/37 | 23.00 | 22.05 | 21.95 | 22.32 | | 1/50 | 23.00 | 22.09 | 22.47 | 22.12 |
| | 1/74 | 23.00 | 22.04 | 21.92 | 22.35 | | 1/99 | 23.00 | 22.11 | 22.43 | 22.13 |
| | 36/0 | 22.00 | 20.87 | 20.94 | 20.91 | | 50/0 | 22.00 | 20.87 | 20.92 | 21.04 |
| | 36/19 | 22.00 | 20.87 | 20.95 | 20.85 | | 50/25 | 22.00 | 20.89 | 20.90 | 20.99 |
| | 36/39 | 22.00 | 20.83 | 20.88 | 20.85 | | 50/50 | 22.00 | 20.94 | 20.86 | 20.97 |
| | 75/0 | 22.00 | 20.79 | 20.85 | 20.90 | | 100/0 | 22.00 | 20.87 | 20.87 | 20.99 |

2) Main antenna_Receiver off

| LTE B2/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B2/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18607/ 1850.7 | 18900/ 1880 | 19193/ 1909.3 | | | | 18615/ 1851.5 | 18900/ 1880 | 19185/ 1908.5 |
| QPSK | 1/0 | 20.50 | 19.92 | 19.81 | 19.80 | QPSK | 1/0 | 20.50 | 19.92 | 19.91 | 19.79 |
| | 1/2 | 20.50 | 19.95 | 19.90 | 19.85 | | 1/7 | 20.50 | 20.01 | 20.13 | 19.87 |
| | 1/5 | 20.50 | 19.91 | 19.90 | 19.81 | | 1/14 | 20.50 | 19.90 | 19.99 | 19.81 |
| | 3/0 | 20.50 | 19.90 | 19.84 | 19.73 | | 8/0 | 20.50 | 19.95 | 20.04 | 19.85 |
| | 3/1 | 20.50 | 19.96 | 19.98 | 19.78 | | 8/3 | 20.50 | 19.93 | 20.05 | 19.88 |
| | 3/3 | 20.50 | 19.90 | 19.94 | 19.75 | | 8/7 | 20.50 | 19.91 | 20.03 | 19.80 |
| | 6/0 | 20.50 | 19.85 | 19.93 | 19.75 | | 15/0 | 20.50 | 19.92 | 20.00 | 19.86 |
| 16QAM | 1/0 | 20.50 | 20.01 | 20.04 | 19.87 | 16QAM | 1/0 | 20.50 | 19.91 | 20.03 | 19.79 |
| | 1/2 | 20.50 | 20.03 | 20.07 | 19.92 | | 1/7 | 20.50 | 19.93 | 19.95 | 19.85 |
| | 1/5 | 20.50 | 20.00 | 20.16 | 19.81 | | 1/14 | 20.50 | 19.87 | 20.17 | 19.72 |
| | 3/0 | 20.50 | 20.11 | 20.00 | 20.00 | | 8/0 | 20.50 | 20.13 | 19.89 | 20.00 |
| | 3/1 | 20.50 | 19.90 | 19.83 | 20.06 | | 8/3 | 20.50 | 20.13 | 19.92 | 20.00 |
| | 3/3 | 20.50 | 19.82 | 19.82 | 19.98 | | 8/7 | 20.50 | 20.09 | 19.86 | 19.96 |
| | 6/0 | 20.50 | 20.14 | 20.18 | 19.77 | | 15/0 | 20.50 | 20.06 | 19.82 | 19.96 |
| 64QAM | 1/0 | 20.50 | 20.07 | 19.77 | 19.99 | 64QAM | 1/0 | 20.50 | 20.04 | 19.78 | 20.14 |
| | 1/2 | 20.50 | 20.13 | 19.84 | 20.04 | | 1/7 | 20.50 | 20.10 | 20.02 | 19.84 |
| | 1/5 | 20.50 | 20.00 | 19.82 | 20.01 | | 1/14 | 20.50 | 20.01 | 19.93 | 20.08 |
| | 3/0 | 20.50 | 19.99 | 19.80 | 19.82 | | 8/0 | 20.50 | 19.83 | 19.88 | 19.89 |
| | 3/1 | 20.50 | 20.06 | 19.91 | 19.90 | | 8/3 | 20.50 | 19.85 | 19.94 | 19.97 |
| | 3/3 | 20.50 | 19.96 | 19.90 | 19.80 | | 8/7 | 20.50 | 19.81 | 19.87 | 19.89 |
| | 6/0 | 20.50 | 19.93 | 20.03 | 19.90 | | 15/0 | 20.50 | 19.73 | 19.89 | 19.97 |

| LTE B2/BW=5M | | Average Conducted Power(dBm) | | | | LTE B2/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18625/ 1852.5 | 18900/ 1880 | 19175/ 1907.5 | | | | 18650/ 1855 | 18900/ 1880 | 19150/ 1905 |
| QPSK | 1/0 | 20.50 | 20.08 | 19.97 | 19.93 | QPSK | 1/0 | 20.50 | 19.95 | 19.98 | 19.98 |
| | 1/12 | 20.50 | 20.09 | 20.09 | 19.92 | | 1/24 | 20.50 | 19.90 | 20.05 | 19.79 |
| | 1/24 | 20.50 | 20.01 | 20.01 | 19.87 | | 1/49 | 20.50 | 19.96 | 19.90 | 19.78 |
| | 12/0 | 20.50 | 19.94 | 19.92 | 19.86 | | 25/0 | 20.50 | 19.92 | 19.95 | 19.89 |
| | 12/6 | 20.50 | 19.96 | 20.03 | 19.89 | | 25/12 | 20.50 | 20.07 | 20.08 | 19.93 |
| | 12/13 | 20.50 | 19.92 | 20.02 | 19.84 | | 25/25 | 20.50 | 20.02 | 20.01 | 19.90 |
| | 25/0 | 20.50 | 19.98 | 20.07 | 19.86 | | 50/0 | 20.50 | 20.05 | 20.02 | 19.88 |
| 16QAM | 1/0 | 20.50 | 19.87 | 19.91 | 19.75 | 16QAM | 1/0 | 20.50 | 19.76 | 19.61 | 20.13 |
| | 1/12 | 20.50 | 19.90 | 20.07 | 19.75 | | 1/24 | 20.50 | 19.72 | 19.72 | 19.96 |
| | 1/24 | 20.50 | 19.78 | 20.01 | 19.70 | | 1/49 | 20.50 | 19.68 | 19.54 | 19.95 |
| | 12/0 | 20.50 | 19.80 | 19.88 | 19.71 | | 25/0 | 20.50 | 19.80 | 19.74 | 19.69 |
| | 12/6 | 20.50 | 19.84 | 19.98 | 19.68 | | 25/12 | 20.50 | 19.90 | 19.84 | 19.71 |
| | 12/13 | 20.50 | 19.80 | 19.93 | 19.67 | | 25/25 | 20.50 | 19.83 | 19.76 | 19.70 |
| | 25/0 | 20.50 | 19.77 | 19.84 | 19.57 | | 50/0 | 20.50 | 19.88 | 19.80 | 19.69 |
| 64QAM | 1/0 | 20.50 | 19.74 | 20.06 | 19.91 | 64QAM | 1/0 | 20.50 | 20.02 | 19.90 | 19.96 |
| | 1/12 | 20.50 | 19.75 | 19.92 | 19.91 | | 1/24 | 20.50 | 19.98 | 19.91 | 19.79 |
| | 1/24 | 20.50 | 19.64 | 20.10 | 19.89 | | 1/49 | 20.50 | 20.05 | 19.79 | 19.79 |
| | 12/0 | 20.50 | 19.81 | 19.71 | 19.73 | | 25/0 | 20.50 | 19.76 | 19.83 | 19.77 |
| | 12/6 | 20.50 | 19.83 | 19.81 | 19.72 | | 25/12 | 20.50 | 19.89 | 19.94 | 19.75 |
| | 12/13 | 20.50 | 19.79 | 19.78 | 19.70 | | 25/25 | 20.50 | 19.82 | 19.92 | 19.73 |
| | 25/0 | 20.50 | 19.75 | 19.85 | 19.69 | | 50/0 | 20.50 | 19.82 | 19.88 | 19.73 |

| LTE B2/BW=15M | | Average Conducted Power(dBm) | | | | LTE B2/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18675/ 1857.5 | 18900/ 1880 | 19125/ 1902.5 | | | | 18700/ 1860 | 18900/ 1880 | 19100/ 1900 |
| QPSK | 1/0 | 20.50 | 20.11 | 20.08 | 20.05 | QPSK | 1/0 | 20.50 | 20.18 | **20.21** | 20.13 |
| | 1/37 | 20.50 | 20.09 | 20.05 | 19.99 | | 1/50 | 20.50 | 20.12 | 20.15 | 20.08 |
| | 1/74 | 20.50 | 19.94 | 19.89 | 19.89 | | 1/99 | 20.50 | 20.10 | 20.04 | 19.94 |
| | 36/0 | 20.50 | 20.09 | 19.89 | 19.98 | | 50/0 | 20.50 | 20.10 | 20.11 | 20.03 |
| | 36/19 | 20.50 | 20.03 | 20.04 | 19.92 | | 50/25 | 20.50 | 20.06 | **20.13** | 19.95 |
| | 36/39 | 20.50 | 20.02 | 20.03 | 19.89 | | 50/50 | 20.50 | 20.05 | 20.04 | 19.91 |
| | 75/0 | 20.50 | 20.04 | 20.04 | 19.92 | | 100/0 | 20.50 | 20.08 | 20.09 | 20.01 |
| 16QAM | 1/0 | 20.50 | 19.74 | 20.18 | 20.11 | 16QAM | 1/0 | 20.50 | 19.87 | 19.94 | 19.66 |
| | 1/37 | 20.50 | 19.67 | 20.10 | 20.11 | | 1/50 | 20.50 | 19.79 | 19.79 | 19.57 |
| | 1/74 | 20.50 | 19.59 | 20.04 | 19.98 | | 1/99 | 20.50 | 19.92 | 19.76 | 19.49 |
| | 36/0 | 20.50 | 19.83 | 20.04 | 19.73 | | 50/0 | 20.50 | 19.90 | 19.94 | 19.76 |
| | 36/19 | 20.50 | 19.86 | 19.93 | 19.71 | | 50/25 | 20.50 | 19.87 | 19.90 | 19.69 |
| | 36/39 | 20.50 | 19.81 | 19.89 | 19.65 | | 50/50 | 20.50 | 19.79 | 19.83 | 19.67 |
| | 75/0 | 20.50 | 19.83 | 19.90 | 19.71 | | 100/0 | 20.50 | 19.87 | 19.90 | 19.73 |
| 64QAM | 1/0 | 20.50 | 20.14 | 19.96 | 20.04 | 64QAM | 1/0 | 20.50 | 20.07 | 19.89 | 20.09 |
| | 1/37 | 20.50 | 20.09 | 19.95 | 20.00 | | 1/50 | 20.50 | 20.10 | 19.84 | 20.01 |
| | 1/74 | 20.50 | 19.94 | 19.81 | 19.97 | | 1/99 | 20.50 | 20.10 | 19.80 | 19.93 |
| | 36/0 | 20.50 | 19.88 | 19.81 | 19.79 | | 50/0 | 20.50 | 19.91 | 19.95 | 19.86 |
| | 36/19 | 20.50 | 19.85 | 19.95 | 19.75 | | 50/25 | 20.50 | 19.88 | 19.90 | 19.77 |
| | 36/39 | 20.50 | 19.85 | 19.92 | 19.71 | | 50/50 | 20.50 | 19.84 | 19.88 | 19.73 |
| | 75/0 | 20.50 | 19.83 | 19.91 | 19.78 | | 100/0 | 20.50 | 19.84 | 19.90 | 19.78 |

3) Second antenna_Receiver on

| LTE B2/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B2/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18607/ 1850.7 | 18900/ 1880 | 19193/ 1909.3 | | | | 18615/ 1851.5 | 18900/ 1880 | 19185/ 1908.5 |
| QPSK | 1/0 | 17.50 | 16.67 | 16.72 | 16.52 | QPSK | 1/0 | 17.50 | 16.69 | 16.77 | 16.63 |
| | 1/2 | 17.50 | 16.75 | 16.72 | 16.57 | | 1/7 | 17.50 | 16.78 | 16.96 | 16.70 |
| | 1/5 | 17.50 | 16.69 | 16.76 | 16.52 | | 1/14 | 17.50 | 16.70 | 16.86 | 16.58 |
| | 3/0 | 17.50 | 16.63 | 16.76 | 16.54 | | 8/0 | 17.50 | 16.72 | 16.86 | 16.65 |
| | 3/1 | 17.50 | 16.67 | 16.86 | 16.62 | | 8/3 | 17.50 | 16.72 | 16.87 | 16.68 |
| | 3/3 | 17.50 | 16.62 | 16.81 | 16.55 | | 8/7 | 17.50 | 16.69 | 16.85 | 16.61 |
| | 6/0 | 17.50 | 16.67 | 16.74 | 16.54 | | 15/0 | 17.50 | 16.72 | 16.87 | 16.67 |
| 16QAM | 1/0 | 17.50 | 16.73 | 16.86 | 16.99 | 16QAM | 1/0 | 17.50 | 16.72 | 16.92 | 16.78 |
| | 1/2 | 17.50 | 16.82 | 16.93 | 16.76 | | 1/7 | 17.50 | 16.79 | 16.78 | 16.84 |
| | 1/5 | 17.50 | 16.77 | 16.99 | 16.70 | | 1/14 | 17.50 | 16.68 | 16.70 | 16.71 |
| | 3/0 | 17.50 | 16.90 | 16.88 | 16.90 | | 8/0 | 17.50 | 16.93 | 16.72 | 16.80 |
| | 3/1 | 17.50 | 16.98 | 17.00 | 16.94 | | 8/3 | 17.50 | 16.94 | 16.74 | 16.80 |
| | 3/3 | 17.50 | 16.89 | 16.96 | 16.85 | | 8/7 | 17.50 | 16.94 | 16.71 | 16.77 |
| | 6/0 | 17.50 | 16.92 | 17.01 | 16.57 | | 15/0 | 17.50 | 16.87 | 16.99 | 16.74 |
| 64QAM | 1/0 | 17.50 | 16.88 | 16.88 | 16.81 | 64QAM | 1/0 | 17.50 | 16.84 | 16.91 | 16.92 |
| | 1/2 | 17.50 | 16.94 | 16.95 | 16.86 | | 1/7 | 17.50 | 16.93 | 16.82 | 16.94 |
| | 1/5 | 17.50 | 16.84 | 16.94 | 16.82 | | 1/14 | 17.50 | 16.79 | 16.70 | 16.82 |
| | 3/0 | 17.50 | 16.76 | 16.90 | 16.61 | | 8/0 | 17.50 | 16.93 | 16.98 | 16.66 |
| | 3/1 | 17.50 | 16.86 | 16.75 | 16.70 | | 8/3 | 17.50 | 16.92 | 16.70 | 16.70 |
| | 3/3 | 17.50 | 16.80 | 16.71 | 16.58 | | 8/7 | 17.50 | 16.93 | 16.97 | 16.64 |
| | 6/0 | 17.50 | 16.78 | 16.82 | 16.74 | | 15/0 | 17.50 | 16.81 | 16.95 | 16.78 |

| LTE B2/BW=5M | | Average Conducted Power(dBm) | | | | LTE B2/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18625/ 1852.5 | 18900/ 1880 | 19175/ 1907.5 | | | | 18650/ 1855 | 18900/ 1880 | 19150/ 1905 |
| QPSK | 1/0 | 17.50 | 16.85 | 16.75 | 16.77 | QPSK | 1/0 | 17.50 | 16.75 | 16.82 | 16.83 |
| | 1/12 | 17.50 | 16.88 | 16.86 | 16.75 | | 1/24 | 17.50 | 16.70 | 16.87 | 16.63 |
| | 1/24 | 17.50 | 16.81 | 16.83 | 16.73 | | 1/49 | 17.50 | 16.79 | 16.78 | 16.63 |
| | 12/0 | 17.50 | 16.73 | 16.82 | 16.72 | | 25/0 | 17.50 | 16.75 | 16.81 | 16.73 |
| | 12/6 | 17.50 | 16.76 | 16.88 | 16.71 | | 25/12 | 17.50 | 16.93 | 16.92 | 16.71 |
| | 12/13 | 17.50 | 16.71 | 16.88 | 16.66 | | 25/25 | 17.50 | 16.86 | 16.87 | 16.69 |
| | 25/0 | 17.50 | 16.77 | 16.92 | 16.67 | | 50/0 | 17.50 | 16.86 | 16.89 | 16.72 |
| 16QAM | 1/0 | 17.50 | 16.72 | 16.77 | 16.90 | 16QAM | 1/0 | 17.50 | 16.78 | 16.96 | 16.96 |
| | 1/12 | 17.50 | 16.76 | 16.90 | 16.91 | | 1/24 | 17.50 | 16.73 | 17.00 | 16.79 |
| | 1/24 | 17.50 | 16.97 | 16.85 | 16.86 | | 1/49 | 17.50 | 16.77 | 16.87 | 16.72 |
| | 12/0 | 17.50 | 16.97 | 16.70 | 16.84 | | 25/0 | 17.50 | 16.91 | 16.94 | 16.92 |
| | 12/6 | 17.50 | 16.96 | 16.83 | 16.86 | | 25/12 | 17.50 | 16.99 | 16.75 | 16.91 |
| | 12/13 | 17.50 | 16.94 | 16.78 | 16.85 | | 25/25 | 17.50 | 16.90 | 16.97 | 16.89 |
| | 25/0 | 17.50 | 16.89 | 16.73 | 16.73 | | 50/0 | 17.50 | 16.96 | 16.94 | 16.86 |
| 64QAM | 1/0 | 17.50 | 16.83 | 16.88 | 16.96 | 64QAM | 1/0 | 17.50 | 16.92 | 16.73 | 16.80 |
| | 1/12 | 17.50 | 16.88 | 17.01 | 16.94 | | 1/24 | 17.50 | 16.80 | 16.77 | 16.91 |
| | 1/24 | 17.50 | 16.74 | 16.91 | 16.96 | | 1/49 | 17.50 | 16.85 | 16.92 | 16.85 |
| | 12/0 | 17.50 | 16.94 | 16.84 | 16.84 | | 25/0 | 17.50 | 16.91 | 16.99 | 16.90 |
| | 12/6 | 17.50 | 16.93 | 16.91 | 16.86 | | 25/12 | 17.50 | 16.99 | 16.79 | 16.89 |
| | 12/13 | 17.50 | 16.93 | 16.88 | 16.81 | | 25/25 | 17.50 | 16.99 | 16.71 | 16.87 |
| | 25/0 | 17.50 | 16.87 | 16.94 | 16.81 | | 50/0 | 17.50 | 16.97 | 16.77 | 16.83 |

| LTE B2/BW=15M | | Average Conducted Power(dBm) | | | | LTE B2/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18675/ 1857.5 | 18900/ 1880 | 19125/ 1902.5 | | | | 18700/ 1860 | 18900/ 1880 | 19100/ 1900 |
| QPSK | 1/0 | 17.50 | 16.85 | 16.98 | 16.92 | QPSK | 1/0 | 17.50 | **16.95** | **17.02** | **16.90** |
| | 1/37 | 17.50 | 16.81 | 16.90 | 16.78 | | 1/50 | 17.50 | 16.84 | 16.86 | 16.78 |
| | 1/74 | 17.50 | 16.67 | 16.76 | 16.71 | | 1/99 | 17.50 | 16.84 | 16.79 | 16.64 |
| | 36/0 | 17.50 | 16.93 | 16.76 | 16.82 | | 50/0 | 17.50 | **16.92** | **17.00** | **16.85** |
| | 36/19 | 17.50 | 16.87 | 16.92 | 16.72 | | 50/25 | 17.50 | 16.89 | 16.94 | 16.78 |
| | 36/39 | 17.50 | 16.83 | 16.87 | 16.69 | | 50/50 | 17.50 | 16.86 | 16.86 | 16.76 |
| | 75/0 | 17.50 | 16.89 | 16.90 | 16.75 | | 100/0 | 17.50 | 16.91 | **16.93** | 16.79 |
| 16QAM | 1/0 | 17.50 | 16.88 | 16.78 | 16.76 | 16QAM | 1/0 | 17.50 | 16.75 | 17.00 | 16.82 |
| | 1/37 | 17.50 | 16.83 | 16.74 | 16.95 | | 1/50 | 17.50 | 16.82 | 16.67 | 16.96 |
| | 1/74 | 17.50 | 16.71 | 16.89 | 16.88 | | 1/99 | 17.50 | 16.88 | 16.79 | 16.85 |
| | 36/0 | 17.50 | 16.71 | 16.89 | 16.87 | | 50/0 | 17.50 | 16.78 | 16.81 | 16.65 |
| | 36/19 | 17.50 | 16.93 | 16.79 | 16.83 | | 50/25 | 17.50 | 16.73 | 16.80 | 16.59 |
| | 36/39 | 17.50 | 16.92 | 16.74 | 16.77 | | 50/50 | 17.50 | 16.67 | 16.72 | 16.54 |
| | 75/0 | 17.50 | 16.71 | 16.77 | 16.87 | | 100/0 | 17.50 | 16.73 | 16.75 | 16.58 |
| 64QAM | 1/0 | 17.50 | 16.99 | 16.85 | 16.90 | 64QAM | 1/0 | 17.50 | 16.85 | 16.81 | 16.98 |
| | 1/37 | 17.50 | 16.93 | 16.79 | 16.82 | | 1/50 | 17.50 | 16.80 | 16.62 | 16.88 |
| | 1/74 | 17.50 | 16.82 | 16.95 | 16.71 | | 1/99 | 17.50 | 16.83 | 16.84 | 16.73 |
| | 36/0 | 17.50 | 16.72 | 16.95 | 16.87 | | 50/0 | 17.50 | 16.77 | 16.85 | 16.96 |
| | 36/19 | 17.50 | 16.99 | 16.76 | 16.84 | | 50/25 | 17.50 | 16.71 | 16.83 | 16.88 |
| | 36/39 | 17.50 | 16.98 | 16.73 | 16.80 | | 50/50 | 17.50 | 16.92 | 16.76 | 16.87 |
| | 75/0 | 17.50 | 16.75 | 16.71 | 16.89 | | 100/0 | 17.50 | 16.72 | 16.76 | 16.85 |

4) Second antenna_Receiver off

| LTE B2/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B2/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18607/ 1850.7 | 18900/ 1880 | 19193/ 1909.3 | | | | 18615/ 1851.5 | 18900/ 1880 | 19185/ 1908.5 |
| QPSK | 1/0 | 21.00 | 20.32 | 20.35 | 20.18 | QPSK | 1/0 | 21.00 | 20.37 | 20.44 | 20.24 |
| | 1/2 | 21.00 | 20.34 | 20.40 | 20.25 | | 1/7 | 21.00 | 20.45 | 20.60 | 20.30 |
| | 1/5 | 21.00 | 20.26 | 20.47 | 20.19 | | 1/14 | 21.00 | 20.39 | 20.47 | 20.19 |
| | 3/0 | 21.00 | 20.31 | 20.29 | 20.21 | | 8/0 | 21.00 | 20.37 | 20.53 | 20.25 |
| | 3/1 | 21.00 | 20.33 | 20.45 | 20.27 | | 8/3 | 21.00 | 20.43 | 20.52 | 20.29 |
| | 3/3 | 21.00 | 20.34 | 20.42 | 20.22 | | 8/7 | 21.00 | 20.38 | 20.51 | 20.24 |
| | 6/0 | 21.00 | 20.34 | 20.41 | 20.16 | | 15/0 | 21.00 | 20.41 | 20.47 | 20.27 |
| 16QAM | 1/0 | 21.00 | 20.45 | 20.55 | 20.49 | 16QAM | 1/0 | 21.00 | 20.36 | 20.58 | 20.42 |
| | 1/2 | 21.00 | 20.48 | 20.58 | 20.56 | | 1/7 | 21.00 | 20.39 | 20.56 | 20.46 |
| | 1/5 | 21.00 | 20.44 | 20.60 | 20.57 | | 1/14 | 21.00 | 20.33 | 20.62 | 20.31 |
| | 3/0 | 21.00 | 20.57 | 20.48 | 20.43 | | 8/0 | 21.00 | 20.62 | 20.48 | 20.39 |
| | 3/1 | 21.00 | 20.53 | 20.51 | 20.41 | | 8/3 | 21.00 | 20.59 | 20.50 | 20.44 |
| | 3/3 | 21.00 | 20.49 | 20.48 | 20.32 | | 8/7 | 21.00 | 20.59 | 20.46 | 20.38 |
| | 6/0 | 21.00 | 20.52 | 20.52 | 20.11 | | 15/0 | 21.00 | 20.51 | 20.43 | 20.33 |
| 64QAM | 1/0 | 21.00 | 20.52 | 20.48 | 20.32 | 64QAM | 1/0 | 21.00 | 20.52 | 20.42 | 20.58 |
| | 1/2 | 21.00 | 20.57 | 20.57 | 20.41 | | 1/7 | 21.00 | 20.59 | 20.63 | 20.57 |
| | 1/5 | 21.00 | 20.57 | 20.61 | 20.26 | | 1/14 | 21.00 | 20.50 | 20.51 | 20.55 |
| | 3/0 | 21.00 | 20.34 | 20.45 | 20.36 | | 8/0 | 21.00 | 20.49 | 20.49 | 20.39 |
| | 3/1 | 21.00 | 20.37 | 20.61 | 20.44 | | 8/3 | 21.00 | 20.54 | 20.51 | 20.44 |
| | 3/3 | 21.00 | 20.29 | 20.60 | 20.35 | | 8/7 | 21.00 | 20.51 | 20.50 | 20.33 |
| | 6/0 | 21.00 | 20.43 | 20.43 | 20.55 | | 15/0 | 21.00 | 20.41 | 20.50 | 20.45 |

| LTE B2/BW=5M | | Average Conducted Power(dBm) | | | | LTE B2/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18625/ 1852.5 | 18900/ 1880 | 19175/ 1907.5 | | | | 18650/ 1855 | 18900/ 1880 | 19150/ 1905 |
| QPSK | 1/0 | 21.00 | 20.49 | 20.45 | 20.38 | QPSK | 1/0 | 21.00 | 20.38 | 20.51 | 20.47 |
| | 1/12 | 21.00 | 20.55 | 20.57 | 20.38 | | 1/24 | 21.00 | 20.36 | 20.53 | 20.24 |
| | 1/24 | 21.00 | 20.46 | 20.52 | 20.36 | | 1/49 | 21.00 | 20.43 | 20.38 | 20.21 |
| | 12/0 | 21.00 | 20.43 | 20.42 | 20.35 | | 25/0 | 21.00 | 20.40 | 20.47 | 20.34 |
| | 12/6 | 21.00 | 20.45 | 20.54 | 20.30 | | 25/12 | 21.00 | 20.51 | 20.56 | 20.36 |
| | 12/13 | 21.00 | 20.38 | 20.51 | 20.29 | | 25/25 | 21.00 | 20.48 | 20.50 | 20.33 |
| | 25/0 | 21.00 | 20.46 | 20.54 | 20.34 | | 50/0 | 21.00 | 20.49 | 20.54 | 20.34 |
| 16QAM | 1/0 | 21.00 | 20.61 | 20.43 | 20.52 | 16QAM | 1/0 | 21.00 | 20.42 | 20.51 | 20.61 |
| | 1/12 | 21.00 | 20.63 | 20.58 | 20.53 | | 1/24 | 21.00 | 20.32 | 20.56 | 20.41 |
| | 1/24 | 21.00 | 20.48 | 20.47 | 20.44 | | 1/49 | 21.00 | 20.40 | 20.40 | 20.32 |
| | 12/0 | 21.00 | 20.51 | 20.58 | 20.48 | | 25/0 | 21.00 | 20.53 | 20.37 | 20.58 |
| | 12/6 | 21.00 | 20.50 | 20.67 | 20.48 | | 25/12 | 21.00 | 20.65 | 20.46 | 20.55 |
| | 12/13 | 21.00 | 20.62 | 20.53 | 20.42 | | 25/25 | 21.00 | 20.60 | 20.44 | 20.50 |
| | 25/0 | 21.00 | 20.54 | 20.51 | 20.40 | | 50/0 | 21.00 | 20.62 | 20.46 | 20.45 |
| 64QAM | 1/0 | 21.00 | 20.50 | 20.36 | 20.58 | 64QAM | 1/0 | 21.00 | 20.55 | 20.49 | 20.57 |
| | 1/12 | 21.00 | 20.51 | 20.49 | 20.59 | | 1/24 | 21.00 | 20.52 | 20.54 | 20.47 |
| | 1/24 | 21.00 | 20.49 | 20.42 | 20.55 | | 1/49 | 21.00 | 20.56 | 20.43 | 20.44 |
| | 12/0 | 21.00 | 20.60 | 20.54 | 20.49 | | 25/0 | 21.00 | 20.39 | 20.44 | 20.52 |
| | 12/6 | 21.00 | 20.59 | 20.53 | 20.51 | | 25/12 | 21.00 | 20.52 | 20.54 | 20.48 |
| | 12/13 | 21.00 | 20.59 | 20.50 | 20.46 | | 25/25 | 21.00 | 20.48 | 20.52 | 20.43 |
| | 25/0 | 21.00 | 20.52 | 20.56 | 20.47 | | 50/0 | 21.00 | 20.46 | 20.52 | 20.41 |

| LTE B2/BW=15M | | Average Conducted Power(dBm) | | | | LTE B2/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 18675/ 1857.5 | 18900/ 1880 | 19125/ 1902.5 | | | | 18700/ 1860 | 18900/ 1880 | 19100/ 1900 |
| QPSK | 1/0 | 21.00 | 20.51 | 20.61 | 20.53 | QPSK | 1/0 | 21.00 | 20.56 | **20.67** | 20.58 |
| | 1/37 | 21.00 | 20.49 | 20.55 | 20.48 | | 1/50 | 21.00 | 20.47 | 20.52 | 20.40 |
| | 1/74 | 21.00 | 20.33 | 20.41 | 20.37 | | 1/99 | 21.00 | 20.48 | 20.42 | 20.27 |
| | 36/0 | 21.00 | 20.53 | 20.41 | 20.46 | | 50/0 | 21.00 | 20.58 | **20.63** | 20.50 |
| | 36/19 | 21.00 | 20.51 | 20.53 | 20.36 | | 50/25 | 21.00 | 20.56 | 20.62 | 20.43 |
| | 36/39 | 21.00 | 20.49 | 20.52 | 20.32 | | 50/50 | 21.00 | 20.52 | 20.56 | 20.39 |
| | 75/0 | 21.00 | 20.51 | 20.53 | 20.39 | | 100/0 | 21.00 | 20.54 | 20.58 | 20.44 |
| 16QAM | 1/0 | 21.00 | 20.53 | 20.60 | 20.52 | 16QAM | 1/0 | 21.00 | 20.53 | 20.65 | 20.46 |
| | 1/37 | 21.00 | 20.46 | 20.56 | 20.51 | | 1/50 | 21.00 | 20.59 | 20.25 | 20.57 |
| | 1/74 | 21.00 | 20.41 | 20.48 | 20.32 | | 1/99 | 21.00 | 20.50 | 20.47 | 20.49 |
| | 36/0 | 21.00 | 20.49 | 20.58 | 20.48 | | 50/0 | 21.00 | 20.54 | 20.56 | 20.37 |
| | 36/19 | 21.00 | 20.47 | 20.52 | 20.51 | | 50/25 | 21.00 | 20.46 | 20.50 | 20.34 |
| | 36/39 | 21.00 | 20.39 | 20.49 | 20.42 | | 50/50 | 21.00 | 20.45 | 20.48 | 20.29 |
| | 75/0 | 21.00 | 20.43 | 20.49 | 20.48 | | 100/0 | 21.00 | 20.48 | 20.48 | 20.32 |
| 64QAM | 1/0 | 21.00 | 20.65 | 20.52 | 20.59 | 64QAM | 1/0 | 21.00 | 20.48 | 20.52 | 20.63 |
| | 1/37 | 21.00 | 20.61 | 20.48 | 20.51 | | 1/50 | 21.00 | 20.53 | 20.48 | 20.63 |
| | 1/74 | 21.00 | 20.61 | 20.44 | 20.56 | | 1/99 | 21.00 | 20.63 | 20.54 | 20.50 |
| | 36/0 | 21.00 | 20.54 | 20.44 | 20.49 | | 50/0 | 21.00 | 20.54 | 20.55 | 20.43 |
| | 36/19 | 21.00 | 20.51 | 20.60 | 20.47 | | 50/25 | 21.00 | 20.54 | 20.51 | 20.37 |
| | 36/39 | 21.00 | 20.49 | 20.54 | 20.41 | | 50/50 | 21.00 | 20.48 | 20.46 | 20.32 |
| | 75/0 | 21.00 | 20.50 | 20.51 | 20.48 | | 100/0 | 21.00 | 20.51 | 20.52 | 20.37 |

Note: The tested channels are marks in bold.

2. Conducted power measurement results of LTE B4

1) Main antenna_Receiver on

| LTE B4/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B4/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19957/ 1710.7 | 20175/ 1732.5 | 20393/ 1754.3 | | | | 19965/ 1711.5 | 20175/ 1732.5 | 20385/ 1753.5 |
| QPSK | 1/0 | 25.00 | 23.88 | 23.82 | 23.69 | QPSK | 1/0 | 25.00 | 23.85 | 23.94 | 23.78 |
| | 1/2 | 25.00 | 23.92 | 23.90 | 23.78 | | 1/7 | 25.00 | 23.98 | 24.03 | 23.86 |
| | 1/5 | 25.00 | 23.87 | 23.83 | 23.72 | | 1/14 | 25.00 | 23.91 | 23.91 | 23.76 |
| | 3/0 | 25.00 | 23.79 | 23.83 | 23.68 | | 8/0 | 24.00 | 23.13 | 23.13 | 22.96 |
| | 3/1 | 25.00 | 23.83 | 23.88 | 23.73 | | 8/3 | 24.00 | 23.17 | 23.15 | 23.04 |
| | 3/3 | 25.00 | 23.86 | 23.91 | 23.77 | | 8/7 | 24.00 | 23.11 | 23.14 | 22.98 |
| | 6/0 | 24.00 | 23.02 | 23.02 | 22.92 | | 15/0 | 24.00 | 23.13 | 23.14 | 23.02 |
| 16QAM | 1/0 | 24.00 | 23.21 | 23.45 | 23.00 | 16QAM | 1/0 | 24.00 | 23.10 | 23.56 | 23.13 |
| | 1/2 | 24.00 | 23.27 | 23.50 | 23.09 | | 1/7 | 24.00 | 23.17 | 23.59 | 23.16 |
| | 1/5 | 24.00 | 23.22 | 23.45 | 23.05 | | 1/14 | 24.00 | 23.04 | 23.49 | 23.09 |
| | 3/0 | 24.00 | 23.14 | 23.27 | 23.12 | | 8/0 | 23.00 | 22.29 | 22.28 | 22.12 |
| | 3/1 | 24.00 | 23.21 | 23.32 | 23.23 | | 8/3 | 23.00 | 22.29 | 22.26 | 22.13 |
| | 3/3 | 24.00 | 23.20 | 23.30 | 23.21 | | 8/7 | 23.00 | 22.27 | 22.23 | 22.06 |
| | 6/0 | 23.00 | 22.27 | 22.06 | 22.16 | | 15/0 | 23.00 | 22.23 | 22.25 | 22.05 |
| 64QAM | 1/0 | 23.00 | 22.08 | 22.03 | 22.17 | 64QAM | 1/0 | 23.00 | 22.24 | 22.07 | 22.08 |
| | 1/2 | 23.00 | 22.16 | 22.11 | 22.31 | | 1/7 | 23.00 | 22.34 | 22.19 | 22.16 |
| | 1/5 | 23.00 | 22.11 | 22.03 | 22.19 | | 1/14 | 23.00 | 22.23 | 22.11 | 22.03 |
| | 3/0 | 23.00 | 21.88 | 22.04 | 22.14 | | 8/0 | 22.00 | 21.03 | 21.07 | 20.83 |
| | 3/1 | 23.00 | 21.95 | 22.12 | 22.18 | | 8/3 | 22.00 | 21.09 | 21.10 | 20.92 |
| | 3/3 | 23.00 | 21.85 | 22.04 | 22.07 | | 8/7 | 22.00 | 21.02 | 21.04 | 20.84 |
| | 6/0 | 22.00 | 21.02 | 21.24 | 20.80 | | 15/0 | 22.00 | 20.95 | 21.03 | 20.93 |

| LTE B4/BW=5M | | Average Conducted Power(dBm) | | | | LTE B4/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19975/ 1712.5 | 20175/ 1732.5 | 20375/ 1752.5 | | | | 20000/ 1715 | 20175/ 1732.5 | 20350/ 1750 |
| QPSK | 1/0 | 25.00 | 24.04 | 23.97 | 23.93 | QPSK | 1/0 | 25.00 | 23.96 | 24.07 | 23.78 |
| | 1/12 | 25.00 | 24.06 | 23.98 | 23.93 | | 1/24 | 25.00 | 23.86 | 23.93 | 23.78 |
| | 1/24 | 25.00 | 23.99 | 23.94 | 23.82 | | 1/49 | 25.00 | 23.97 | 23.88 | 23.74 |
| | 12/0 | 24.00 | 23.08 | 23.19 | 23.05 | | 25/0 | 24.00 | 23.17 | 23.17 | 23.08 |
| | 12/6 | 24.00 | 23.09 | 23.19 | 23.06 | | 25/12 | 24.00 | 23.13 | 23.20 | 23.07 |
| | 12/13 | 24.00 | 23.11 | 23.14 | 23.05 | | 25/25 | 24.00 | 23.20 | 23.13 | 23.03 |
| | 25/0 | 24.00 | 23.17 | 23.16 | 23.02 | | 50/0 | 24.00 | 23.23 | 23.13 | 23.02 |
| 16QAM | 1/0 | 24.00 | 23.38 | 23.73 | 23.24 | 16QAM | 1/0 | 24.00 | 23.19 | 23.61 | 23.12 |
| | 1/12 | 24.00 | 23.38 | 23.75 | 23.26 | | 1/24 | 24.00 | 23.03 | 23.50 | 23.09 |
| | 1/24 | 24.00 | 23.34 | 23.65 | 23.19 | | 1/49 | 24.00 | 23.15 | 23.44 | 23.03 |
| | 12/0 | 23.00 | 22.30 | 22.34 | 22.17 | | 25/0 | 23.00 | 22.25 | 22.32 | 22.22 |
| | 12/6 | 23.00 | 22.28 | 22.35 | 22.20 | | 25/12 | 23.00 | 22.26 | 22.27 | 22.24 |
| | 12/13 | 23.00 | 22.24 | 22.35 | 22.13 | | 25/25 | 23.00 | 22.30 | 22.25 | 22.16 |
| | 25/0 | 23.00 | 22.22 | 22.27 | 22.05 | | 50/0 | 23.00 | 22.33 | 22.23 | 22.16 |
| 64QAM | 1/0 | 23.00 | 21.92 | 22.36 | 22.15 | 64QAM | 1/0 | 23.00 | 22.36 | 22.21 | 22.01 |
| | 1/12 | 23.00 | 21.97 | 22.36 | 22.19 | | 1/24 | 23.00 | 22.24 | 22.12 | 22.04 |
| | 1/24 | 23.00 | 21.92 | 22.25 | 22.13 | | 1/49 | 23.00 | 22.34 | 22.10 | 22.01 |
| | 12/0 | 22.00 | 21.06 | 20.98 | 20.98 | | 25/0 | 22.00 | 21.05 | 21.14 | 21.00 |
| | 12/6 | 22.00 | 21.06 | 20.98 | 20.98 | | 25/12 | 22.00 | 21.05 | 21.14 | 21.02 |
| | 12/13 | 22.00 | 21.01 | 20.96 | 20.96 | | 25/25 | 22.00 | 21.11 | 21.13 | 21.00 |
| | 25/0 | 22.00 | 21.00 | 20.99 | 20.92 | | 50/0 | 22.00 | 21.15 | 21.11 | 20.90 |

| LTE B4/BW=15M | | Average Conducted Power(dBm) | | | | LTE B4/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20025/ 1717.5 | 20175/ 1732.5 | 20325/ 1747.5 | | | | 20050/ 1720 | 20175/ 1732.5 | 20300/ 1745 |
| QPSK | 1/0 | 25.00 | 24.06 | 24.01 | 24.02 | QPSK | 1/0 | 25.00 | 24.01 | **24.09** | 24.00 |
| | 1/37 | 25.00 | 23.88 | 23.92 | 23.86 | | 1/50 | 25.00 | 23.97 | 23.91 | 23.74 |
| | 1/74 | 25.00 | 23.86 | 23.96 | 23.86 | | 1/99 | 25.00 | 23.94 | 23.88 | 23.81 |
| | 36/0 | 24.00 | 23.18 | 23.20 | 23.13 | | 50/0 | 24.00 | 23.28 | **23.30** | 23.18 |
| | 36/19 | 24.00 | 23.20 | 23.15 | 23.09 | | 50/25 | 24.00 | 23.23 | 23.22 | 23.15 |
| | 36/39 | 24.00 | 23.17 | 23.16 | 23.02 | | 50/50 | 24.00 | 23.17 | 23.15 | 23.03 |
| | 75/0 | 24.00 | 23.23 | 23.17 | 23.08 | | 100/0 | 24.00 | 23.20 | 23.19 | 23.09 |
| 16QAM | 1/0 | 24.00 | 23.21 | 23.61 | 23.55 | 16QAM | 1/0 | 24.00 | 23.82 | 23.82 | 23.61 |
| | 1/37 | 24.00 | 23.03 | 23.53 | 23.50 | | 1/50 | 24.00 | 23.74 | 23.57 | 23.36 |
| | 1/74 | 24.00 | 23.06 | 23.47 | 23.48 | | 1/99 | 24.00 | 23.72 | 23.52 | 23.46 |
| | 36/0 | 23.00 | 22.29 | 22.34 | 22.21 | | 50/0 | 23.00 | 22.39 | 22.34 | 22.22 |
| | 36/19 | 23.00 | 22.34 | 22.28 | 22.18 | | 50/25 | 23.00 | 22.34 | 22.26 | 22.18 |
| | 36/39 | 23.00 | 22.27 | 22.25 | 22.11 | | 50/50 | 23.00 | 22.29 | 22.23 | 22.13 |
| | 75/0 | 23.00 | 22.33 | 22.30 | 22.16 | | 100/0 | 23.00 | 22.31 | 22.21 | 22.18 |
| 64QAM | 1/0 | 23.00 | 22.36 | 22.17 | 22.58 | 64QAM | 1/0 | 23.00 | 22.27 | 22.48 | 22.65 |
| | 1/37 | 23.00 | 22.23 | 22.10 | 22.43 | | 1/50 | 23.00 | 22.22 | 22.27 | 22.41 |
| | 1/74 | 23.00 | 22.22 | 22.09 | 22.48 | | 1/99 | 23.00 | 22.25 | 22.27 | 22.52 |
| | 36/0 | 22.00 | 21.10 | 21.14 | 20.98 | | 50/0 | 22.00 | 21.18 | 21.17 | 21.07 |
| | 36/19 | 22.00 | 21.16 | 21.10 | 20.97 | | 50/25 | 22.00 | 21.15 | 21.13 | 21.05 |
| | 36/39 | 22.00 | 21.12 | 21.07 | 20.94 | | 50/50 | 22.00 | 21.10 | 21.05 | 20.97 |
| | 75/0 | 22.00 | 21.14 | 21.08 | 20.99 | | 100/0 | 22.00 | 21.12 | 21.08 | 20.98 |

2) Main antenna_Receiver off

| LTE B4/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B4/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19957/ 1710.7 | 20175/ 1732.5 | 20393/ 1754.3 | | | | 19965/ 1711.5 | 20175/ 1732.5 | 20385/ 1753.5 |
| QPSK | 1/0 | 21.50 | 20.94 | 20.94 | 20.94 | QPSK | 1/0 | 21.50 | 21.05 | 21.03 | 20.88 |
| | 1/2 | 21.50 | 21.03 | 21.01 | 21.00 | | 1/7 | 21.50 | 21.14 | 21.10 | 21.06 |
| | 1/5 | 21.50 | 20.98 | 20.95 | 20.94 | | 1/14 | 21.50 | 21.04 | 20.98 | 20.98 |
| | 3/0 | 21.50 | 20.96 | 20.88 | 20.94 | | 8/0 | 21.50 | 21.07 | 20.98 | 20.90 |
| | 3/1 | 21.50 | 21.04 | 20.96 | 20.99 | | 8/3 | 21.50 | 21.12 | 20.99 | 20.92 |
| | 3/3 | 21.50 | 20.96 | 20.87 | 20.93 | | 8/7 | 21.50 | 21.07 | 20.99 | 20.96 |
| | 6/0 | 21.50 | 20.98 | 20.88 | 20.88 | | 15/0 | 21.50 | 21.05 | 20.98 | 20.88 |
| 16QAM | 1/0 | 21.50 | 20.77 | 20.76 | 20.97 | 16QAM | 1/0 | 21.50 | 20.73 | 20.81 | 20.65 |
| | 1/2 | 21.50 | 20.84 | 20.84 | 21.08 | | 1/7 | 21.50 | 20.82 | 20.91 | 20.80 |
| | 1/5 | 21.50 | 20.82 | 20.76 | 20.99 | | 1/14 | 21.50 | 20.72 | 20.83 | 20.77 |
| | 3/0 | 21.50 | 20.93 | 20.75 | 20.90 | | 8/0 | 21.50 | 20.93 | 20.85 | 20.72 |
| | 3/1 | 21.50 | 21.01 | 20.82 | 20.93 | | 8/3 | 21.50 | 20.96 | 20.86 | 20.72 |
| | 3/3 | 21.50 | 20.93 | 20.77 | 20.87 | | 8/7 | 21.50 | 20.96 | 20.80 | 20.76 |
| | 6/0 | 21.50 | 20.94 | 20.80 | 20.59 | | 15/0 | 21.50 | 20.87 | 20.84 | 20.62 |
| 64QAM | 1/0 | 21.50 | 20.82 | 20.79 | 20.81 | 64QAM | 1/0 | 21.50 | 21.08 | 20.84 | 20.84 |
| | 1/2 | 21.50 | 20.94 | 20.87 | 20.90 | | 1/7 | 21.50 | 21.18 | 20.94 | 21.00 |
| | 1/5 | 21.50 | 20.82 | 20.73 | 20.84 | | 1/14 | 21.50 | 21.06 | 20.83 | 20.92 |
| | 3/0 | 21.50 | 21.02 | 20.80 | 20.63 | | 8/0 | 21.50 | 20.94 | 20.81 | 20.64 |
| | 3/1 | 21.50 | 21.11 | 20.87 | 20.73 | | 8/3 | 21.50 | 20.96 | 20.82 | 20.67 |
| | 3/3 | 21.50 | 21.02 | 21.13 | 20.97 | | 8/7 | 21.50 | 20.91 | 20.78 | 20.72 |
| | 6/0 | 21.50 | 20.73 | 21.00 | 20.77 | | 15/0 | 21.50 | 20.87 | 20.81 | 20.72 |

| LTE B4/BW=5M | | Average Conducted Power(dBm) | | | | LTE B4/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19975/ 1712.5 | 20175/ 1732.5 | 20375/ 1752.5 | | | | 20000/ 1715 | 20175/ 1732.5 | 20350/ 1750 |
| QPSK | 1/0 | 21.50 | 21.16 | 21.13 | 20.88 | QPSK | 1/0 | 21.50 | 21.06 | 21.08 | 21.01 |
| | 1/12 | 21.50 | 21.15 | 21.12 | 20.91 | | 1/24 | 21.50 | 21.02 | 21.01 | 20.83 |
| | 1/24 | 21.50 | 21.14 | 21.09 | 21.03 | | 1/49 | 21.50 | 21.16 | 20.97 | 20.92 |
| | 12/0 | 21.50 | 21.12 | 21.01 | 20.95 | | 25/0 | 21.50 | 21.11 | 21.01 | 20.93 |
| | 12/6 | 21.50 | 21.11 | 21.03 | 20.93 | | 25/12 | 21.50 | 21.06 | 21.00 | 20.95 |
| | 12/13 | 21.50 | 21.10 | 20.97 | 20.93 | | 25/25 | 21.50 | 21.06 | 20.97 | 20.87 |
| | 25/0 | 21.50 | 21.08 | 21.01 | 20.94 | | 50/0 | 21.50 | 21.07 | 21.00 | 20.94 |
| 16QAM | 1/0 | 21.50 | 21.04 | 21.00 | 20.79 | 16QAM | 1/0 | 21.50 | 20.81 | 21.15 | 20.70 |
| | 1/12 | 21.50 | 21.07 | 21.03 | 20.76 | | 1/24 | 21.50 | 20.72 | 21.09 | 20.47 |
| | 1/24 | 21.50 | 21.05 | 20.99 | 20.89 | | 1/49 | 21.50 | 20.82 | 21.12 | 20.58 |
| | 12/0 | 21.50 | 20.93 | 20.96 | 20.76 | | 25/0 | 21.50 | 20.90 | 20.84 | 20.75 |
| | 12/6 | 21.50 | 20.96 | 20.96 | 20.73 | | 25/12 | 21.50 | 20.87 | 20.83 | 20.73 |
| | 12/13 | 21.50 | 20.92 | 20.89 | 20.76 | | 25/25 | 21.50 | 20.86 | 20.81 | 20.71 |
| | 25/0 | 21.50 | 20.89 | 20.85 | 20.63 | | 50/0 | 21.50 | 20.86 | 20.83 | 20.69 |
| 64QAM | 1/0 | 21.50 | 21.08 | 20.72 | 20.97 | 64QAM | 1/0 | 21.50 | 21.16 | 20.90 | 21.00 |
| | 1/12 | 21.50 | 21.06 | 20.75 | 21.01 | | 1/24 | 21.50 | 21.09 | 20.84 | 20.79 |
| | 1/24 | 21.50 | 21.03 | 20.68 | 21.03 | | 1/49 | 21.50 | 21.18 | 20.88 | 20.84 |
| | 12/0 | 21.50 | 20.91 | 20.87 | 20.68 | | 25/0 | 21.50 | 20.94 | 20.86 | 20.82 |
| | 12/6 | 21.50 | 20.94 | 20.85 | 20.65 | | 25/12 | 21.50 | 20.94 | 20.85 | 20.77 |
| | 12/13 | 21.50 | 20.89 | 20.79 | 20.65 | | 25/25 | 21.50 | 20.87 | 20.83 | 20.74 |
| | 25/0 | 21.50 | 20.86 | 20.75 | 20.67 | | 50/0 | 21.50 | 20.87 | 20.84 | 20.69 |

| LTE B4/BW=15M | | Average Conducted Power(dBm) | | | | LTE B4/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20025/ 1717.5 | 20175/ 1732.5 | 20325/ 1747.5 | | | | 20050/ 1720 | 20175/ 1732.5 | 20300/ 1745 |
| QPSK | 1/0 | 21.50 | 21.19 | 21.15 | 21.10 | QPSK | 1/0 | 21.50 | **21.25** | **21.23** | **21.15** |
| | 1/37 | 21.50 | 21.01 | 20.98 | 21.07 | | 1/50 | 21.50 | 21.10 | 21.03 | 21.01 |
| | 1/74 | 21.50 | 21.03 | 20.99 | 21.05 | | 1/99 | 21.50 | 20.97 | 21.04 | 20.99 |
| | 36/0 | 21.50 | 21.11 | 20.99 | 20.99 | | 50/0 | 21.50 | **21.15** | **21.10** | **21.04** |
| | 36/19 | 21.50 | 21.12 | 21.04 | 20.96 | | 50/25 | 21.50 | 21.08 | 21.02 | 20.98 |
| | 36/39 | 21.50 | 21.07 | 20.98 | 20.89 | | 50/50 | 21.50 | 21.03 | 21.04 | 20.92 |
| | 75/0 | 21.50 | 21.07 | 20.99 | 20.91 | | 100/0 | 21.50 | 21.09 | 21.04 | 21.00 |
| 16QAM | 1/0 | 21.50 | 20.56 | 20.91 | 20.93 | 16QAM | 1/0 | 21.50 | 21.18 | 21.00 | 20.91 |
| | 1/37 | 21.50 | 20.41 | 20.79 | 20.86 | | 1/50 | 21.50 | 21.08 | 20.88 | 21.13 |
| | 1/74 | 21.50 | 20.38 | 20.78 | 20.89 | | 1/99 | 21.50 | 21.01 | 20.99 | 21.12 |
| | 36/0 | 21.50 | 20.61 | 20.78 | 20.45 | | 50/0 | 21.50 | 20.96 | 20.91 | 21.09 |
| | 36/19 | 21.50 | 20.61 | 20.56 | 20.43 | | 50/25 | 21.50 | 20.94 | 20.89 | 21.08 |
| | 36/39 | 21.50 | 20.57 | 20.57 | 20.42 | | 50/50 | 21.50 | 20.88 | 20.85 | 21.03 |
| | 75/0 | 21.50 | 20.55 | 20.55 | 20.41 | | 100/0 | 21.50 | 20.91 | 20.84 | 21.08 |
| 64QAM | 1/0 | 21.50 | 20.91 | 20.71 | 21.03 | 64QAM | 1/0 | 21.50 | 20.92 | 20.88 | 21.15 |
| | 1/37 | 21.50 | 20.77 | 20.53 | 21.00 | | 1/50 | 21.50 | 20.87 | 20.28 | 21.07 |
| | 1/74 | 21.50 | 20.77 | 20.54 | 21.07 | | 1/99 | 21.50 | 20.84 | 20.85 | 21.09 |
| | 36/0 | 21.50 | 20.93 | 21.14 | 20.80 | | 50/0 | 21.50 | 20.97 | 20.94 | 20.88 |
| | 36/19 | 21.50 | 20.94 | 20.93 | 20.73 | | 50/25 | 21.50 | 20.90 | 20.86 | 20.80 |
| | 36/39 | 21.50 | 20.87 | 20.85 | 20.69 | | 50/50 | 21.50 | 20.88 | 20.82 | 20.78 |
| | 75/0 | 21.50 | 20.87 | 20.85 | 20.81 | | 100/0 | 21.50 | 20.88 | 20.83 | 20.76 |

3) Second antenna_Receiver on

| LTE B4/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B4/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19957/ 1710.7 | 20175/ 1732.5 | 20393/ 1754.3 | | | | 19965/ 1711.5 | 20175/ 1732.5 | 20385/ 1753.5 |
| QPSK | 1/0 | 19.50 | 19.03 | 19.00 | 19.02 | QPSK | 1/0 | 19.50 | 19.06 | 19.08 | 18.98 |
| | 1/2 | 19.50 | 19.10 | 19.05 | 19.06 | | 1/7 | 19.50 | 19.15 | 19.13 | 19.13 |
| | 1/5 | 19.50 | 19.02 | 18.97 | 18.97 | | 1/14 | 19.50 | 19.03 | 19.08 | 19.07 |
| | 3/0 | 19.50 | 18.99 | 19.01 | 18.99 | | 8/0 | 19.50 | 19.06 | 19.02 | 18.99 |
| | 3/1 | 19.50 | 19.07 | 19.04 | 19.08 | | 8/3 | 19.50 | 19.11 | 19.10 | 19.07 |
| | 3/3 | 19.50 | 19.04 | 18.98 | 19.04 | | 8/7 | 19.50 | 19.08 | 19.02 | 19.11 |
| | 6/0 | 19.50 | 19.01 | 18.94 | 19.05 | | 15/0 | 19.50 | 19.08 | 19.08 | 19.03 |
| 16QAM | 1/0 | 19.50 | 19.20 | 19.24 | 19.07 | 16QAM | 1/0 | 19.50 | 19.11 | 19.12 | 19.11 |
| | 1/2 | 19.50 | 19.26 | 19.28 | 19.11 | | 1/7 | 19.50 | 19.15 | 19.21 | 19.26 |
| | 1/5 | 19.50 | 19.21 | 19.24 | 19.13 | | 1/14 | 19.50 | 19.07 | 19.08 | 19.18 |
| | 3/0 | 19.50 | 19.19 | 19.10 | 19.27 | | 8/0 | 19.50 | 19.31 | 19.22 | 19.12 |
| | 3/1 | 19.50 | 19.25 | 19.16 | 19.17 | | 8/3 | 19.50 | 19.15 | 19.24 | 19.18 |
| | 3/3 | 19.50 | 19.17 | 19.06 | 19.27 | | 8/7 | 19.50 | 19.26 | 19.22 | 19.21 |
| | 6/0 | 19.50 | 19.25 | 19.00 | 19.28 | | 15/0 | 19.50 | 19.24 | 19.20 | 19.09 |
| 64QAM | 1/0 | 19.50 | 19.18 | 18.99 | 19.08 | 64QAM | 1/0 | 19.50 | 19.05 | 19.07 | 19.13 |
| | 1/2 | 19.50 | 19.25 | 19.06 | 19.13 | | 1/7 | 19.50 | 19.13 | 19.17 | 19.23 |
| | 1/5 | 19.50 | 19.22 | 18.97 | 19.11 | | 1/14 | 19.50 | 19.05 | 19.07 | 19.16 |
| | 3/0 | 19.50 | 19.23 | 18.99 | 19.11 | | 8/0 | 19.50 | 19.04 | 19.19 | 19.08 |
| | 3/1 | 19.50 | 19.29 | 19.11 | 19.20 | | 8/3 | 19.50 | 19.08 | 19.23 | 19.14 |
| | 3/3 | 19.50 | 19.19 | 19.02 | 19.11 | | 8/7 | 19.50 | 19.06 | 19.16 | 19.13 |
| | 6/0 | 19.50 | 19.07 | 19.16 | 19.19 | | 15/0 | 19.50 | 19.16 | 19.19 | 19.14 |

| LTE B4/BW=5M | | Average Conducted Power(dBm) | | | | LTE B4/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19975/ 1712.5 | 20175/ 1732.5 | 20375/ 1752.5 | | | | 20000/ 1715 | 20175/ 1732.5 | 20350/ 1750 |
| QPSK | 1/0 | 19.50 | 19.25 | 19.10 | 19.11 | QPSK | 1/0 | 19.50 | 19.13 | 19.16 | 19.17 |
| | 1/12 | 19.50 | 19.20 | 19.09 | 19.11 | | 1/24 | 19.50 | 19.08 | 19.06 | 18.97 |
| | 1/24 | 19.50 | 19.19 | 19.08 | 19.16 | | 1/49 | 19.50 | 19.20 | 19.11 | 19.06 |
| | 12/0 | 19.50 | 19.08 | 19.10 | 19.08 | | 25/0 | 19.50 | 19.17 | 19.16 | 19.10 |
| | 12/6 | 19.50 | 19.10 | 19.13 | 19.08 | | 25/12 | 19.50 | 19.11 | 19.11 | 19.04 |
| | 12/13 | 19.50 | 19.08 | 19.10 | 19.06 | | 25/25 | 19.50 | 19.14 | 19.09 | 19.07 |
| | 25/0 | 19.50 | 19.14 | 19.13 | 19.03 | | 50/0 | 19.50 | 19.14 | 19.12 | 19.04 |
| 16QAM | 1/0 | 19.50 | 19.18 | 19.15 | 19.02 | 16QAM | 1/0 | 19.50 | 19.17 | 19.21 | 19.25 |
| | 1/12 | 19.50 | 19.22 | 19.13 | 19.00 | | 1/24 | 19.50 | 19.09 | 19.11 | 19.06 |
| | 1/24 | 19.50 | 19.14 | 19.10 | 19.13 | | 1/49 | 19.50 | 19.15 | 19.13 | 19.15 |
| | 12/0 | 19.50 | 19.13 | 19.15 | 19.05 | | 25/0 | 19.50 | 19.28 | 19.09 | 19.28 |
| | 12/6 | 19.50 | 19.10 | 18.95 | 19.03 | | 25/12 | 19.50 | 19.06 | 19.08 | 19.30 |
| | 12/13 | 19.50 | 19.12 | 19.11 | 19.20 | | 25/25 | 19.50 | 19.07 | 19.06 | 19.22 |
| | 25/0 | 19.50 | 19.21 | 19.24 | 19.12 | | 50/0 | 19.50 | 19.27 | 19.08 | 19.18 |
| 64QAM | 1/0 | 19.50 | 19.15 | 19.13 | 19.21 | 64QAM | 1/0 | 19.50 | 19.32 | 19.17 | 19.25 |
| | 1/12 | 19.50 | 19.18 | 19.15 | 19.22 | | 1/24 | 19.50 | 19.26 | 19.06 | 19.05 |
| | 1/24 | 19.50 | 19.15 | 19.07 | 19.28 | | 1/49 | 19.50 | 19.17 | 19.08 | 19.13 |
| | 12/0 | 19.50 | 19.29 | 19.18 | 19.23 | | 25/0 | 19.50 | 19.12 | 19.08 | 19.26 |
| | 12/6 | 19.50 | 19.29 | 19.18 | 19.24 | | 25/12 | 19.50 | 19.08 | 19.07 | 19.25 |
| | 12/13 | 19.50 | 19.27 | 19.12 | 19.20 | | 25/25 | 19.50 | 19.23 | 19.26 | 19.24 |
| | 25/0 | 19.50 | 19.21 | 19.16 | 19.17 | | 50/0 | 19.50 | 19.30 | 19.25 | 19.17 |

| LTE B4/BW=15M | | Average Conducted Power(dBm) | | | | LTE B4/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20025/ 1717.5 | 20175/ 1732.5 | 20325/ 1747.5 | | | | 20050/ 1720 | 20175/ 1732.5 | 20300/ 1745 |
| QPSK | 1/0 | 19.50 | 19.25 | 19.26 | 19.26 | QPSK | 1/0 | 19.50 | **19.36** | **19.34** | **19.31** |
| | 1/37 | 19.50 | 19.07 | 19.10 | 19.17 | | 1/50 | 19.50 | 19.16 | 19.12 | 19.12 |
| | 1/74 | 19.50 | 19.05 | 19.09 | 19.20 | | 1/99 | 19.50 | 19.05 | 19.14 | 19.10 |
| | 36/0 | 19.50 | 19.15 | 19.09 | 19.10 | | 50/0 | 19.50 | **19.25** | **19.21** | **19.17** |
| | 36/19 | 19.50 | 19.14 | 19.12 | 19.08 | | 50/25 | 19.50 | 19.21 | 19.19 | 19.12 |
| | 36/39 | 19.50 | 19.10 | 19.09 | 19.04 | | 50/50 | 19.50 | 19.12 | 19.15 | 19.07 |
| | 75/0 | 19.50 | 19.12 | 19.12 | 19.10 | | 100/0 | 19.50 | 19.15 | **19.18** | 19.14 |
| 16QAM | 1/0 | 19.50 | 19.24 | 19.08 | 19.10 | 16QAM | 1/0 | 19.50 | 19.26 | 19.07 | 19.09 |
| | 1/37 | 19.50 | 19.04 | 19.21 | 19.21 | | 1/50 | 19.50 | 19.09 | 18.69 | 18.93 |
| | 1/74 | 19.50 | 19.00 | 19.24 | 19.28 | | 1/99 | 19.50 | 19.11 | 19.11 | 19.02 |
| | 36/0 | 19.50 | 19.29 | 19.14 | 19.22 | | 50/0 | 19.50 | 19.10 | 19.03 | 18.95 |
| | 36/19 | 19.50 | 19.26 | 19.25 | 19.16 | | 50/25 | 19.50 | 19.04 | 18.97 | 18.93 |
| | 36/39 | 19.50 | 19.20 | 19.26 | 19.14 | | 50/50 | 19.50 | 18.99 | 18.96 | 18.87 |
| | 75/0 | 19.50 | 19.25 | 19.26 | 19.17 | | 100/0 | 19.50 | 19.02 | 18.99 | 18.96 |
| 64QAM | 1/0 | 19.50 | 19.21 | 19.25 | 19.13 | 64QAM | 1/0 | 19.50 | 19.03 | 19.17 | 19.22 |
| | 1/37 | 19.50 | 19.26 | 19.09 | 19.07 | | 1/50 | 19.50 | 19.31 | 19.03 | 19.11 |
| | 1/74 | 19.50 | 19.27 | 19.10 | 19.12 | | 1/99 | 19.50 | 18.93 | 19.09 | 19.12 |
| | 36/0 | 19.50 | 19.16 | 19.10 | 19.02 | | 50/0 | 19.50 | 19.10 | 19.03 | 19.00 |
| | 36/19 | 19.50 | 19.11 | 19.09 | 19.01 | | 50/25 | 19.50 | 19.04 | 19.00 | 18.95 |
| | 36/39 | 19.50 | 19.04 | 19.11 | 18.96 | | 50/50 | 19.50 | 19.03 | 18.95 | 18.93 |
| | 75/0 | 19.50 | 19.05 | 19.05 | 19.03 | | 100/0 | 19.50 | 18.99 | 18.95 | 18.94 |

4) Second antenna_Receiver off

| LTE B4/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B4/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19957/ 1710.7 | 20175/ 1732.5 | 20393/ 1754.3 | | | | 19965/ 1711.5 | 20175/ 1732.5 | 20385/ 1753.5 |
| QPSK | 1/0 | 22.50 | 22.17 | 22.16 | 22.19 | QPSK | 1/0 | 22.50 | 22.26 | 22.24 | 22.17 |
| | 1/2 | 22.50 | 22.23 | 22.24 | 22.27 | | 1/7 | 22.50 | 22.30 | 22.36 | 22.29 |
| | 1/5 | 22.50 | 22.13 | 22.20 | 22.21 | | 1/14 | 22.50 | 22.28 | 22.22 | 22.24 |
| | 3/0 | 22.50 | 22.15 | 22.14 | 22.20 | | 8/0 | 22.50 | 22.27 | 22.25 | 22.17 |
| | 3/1 | 22.50 | 22.22 | 22.18 | 22.31 | | 8/3 | 22.50 | 22.29 | 22.24 | 22.23 |
| | 3/3 | 22.50 | 22.19 | 22.15 | 22.21 | | 8/7 | 22.50 | 22.29 | 22.22 | 22.29 |
| | 6/0 | 22.50 | 22.20 | 22.17 | 22.21 | | 15/0 | 22.50 | 22.26 | 22.23 | 22.21 |
| 16QAM | 1/0 | 22.50 | 22.35 | 22.19 | 22.34 | 16QAM | 1/0 | 22.50 | 22.13 | 22.36 | 22.31 |
| | 1/2 | 22.50 | 22.39 | 22.27 | 22.42 | | 1/7 | 22.50 | 22.26 | 22.39 | 22.44 |
| | 1/5 | 22.50 | 22.35 | 22.25 | 22.37 | | 1/14 | 22.50 | 22.12 | 22.30 | 22.37 |
| | 3/0 | 22.50 | 22.37 | 22.38 | 22.29 | | 8/0 | 22.50 | 22.11 | 22.07 | 22.00 |
| | 3/1 | 22.50 | 22.42 | 22.45 | 22.37 | | 8/3 | 22.50 | 22.14 | 22.11 | 22.04 |
| | 3/3 | 22.50 | 22.35 | 22.38 | 22.31 | | 8/7 | 22.50 | 22.13 | 22.07 | 22.08 |
| | 6/0 | 22.50 | 21.85 | 22.07 | 22.10 | | 15/0 | 22.50 | 22.04 | 22.05 | 21.90 |
| 64QAM | 1/0 | 22.50 | 22.05 | 22.03 | 22.34 | 64QAM | 1/0 | 22.50 | 22.30 | 22.05 | 22.18 |
| | 1/2 | 22.50 | 22.12 | 22.13 | 22.45 | | 1/7 | 22.50 | 22.40 | 22.18 | 22.30 |
| | 1/5 | 22.50 | 22.01 | 22.08 | 22.33 | | 1/14 | 22.50 | 22.29 | 22.07 | 22.22 |
| | 3/0 | 22.50 | 22.06 | 21.87 | 22.30 | | 8/0 | 22.50 | 21.12 | 21.04 | 20.93 |
| | 3/1 | 22.50 | 22.16 | 21.95 | 22.38 | | 8/3 | 22.50 | 21.15 | 21.10 | 20.96 |
| | 3/3 | 22.50 | 22.07 | 21.90 | 22.28 | | 8/7 | 22.50 | 21.10 | 21.04 | 20.99 |
| | 6/0 | 22.50 | 21.26 | 20.98 | 20.97 | | 15/0 | 22.50 | 21.04 | 21.03 | 21.02 |

| LTE B4/BW=5M | | Average Conducted Power(dBm) | | | | LTE B4/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 19975/ 1712.5 | 20175/ 1732.5 | 20375/ 1752.5 | | | | 20000/ 1715 | 20175/ 1732.5 | 20350/ 1750 |
| QPSK | 1/0 | 22.50 | 22.40 | 22.20 | 22.26 | QPSK | 1/0 | 22.50 | 22.26 | 22.28 | 22.31 |
| | 1/12 | 22.50 | 22.37 | 22.24 | 22.28 | | 1/24 | 22.50 | 22.19 | 22.22 | 22.12 |
| | 1/24 | 22.50 | 22.32 | 22.26 | 22.32 | | 1/49 | 22.50 | 22.32 | 22.25 | 22.22 |
| | 12/0 | 22.50 | 22.28 | 22.26 | 22.21 | | 25/0 | 22.50 | 22.29 | 22.25 | 22.23 |
| | 12/6 | 22.50 | 22.24 | 22.27 | 22.24 | | 25/12 | 22.50 | 22.28 | 22.24 | 22.20 |
| | 12/13 | 22.50 | 22.27 | 22.25 | 22.18 | | 25/25 | 22.50 | 22.27 | 22.23 | 22.19 |
| | 25/0 | 22.50 | 22.26 | 22.24 | 22.22 | | 50/0 | 22.50 | 22.29 | 22.27 | 22.22 |
| 16QAM | 1/0 | 22.50 | 22.47 | 22.40 | 22.29 | 16QAM | 1/0 | 22.50 | 22.22 | 22.40 | 22.44 |
| | 1/12 | 22.50 | 22.37 | 22.30 | 22.30 | | 1/24 | 22.50 | 22.20 | 22.32 | 22.25 |
| | 1/24 | 22.50 | 22.32 | 22.39 | 22.38 | | 1/49 | 22.50 | 22.31 | 22.33 | 22.35 |
| | 12/0 | 22.50 | 22.06 | 22.11 | 22.07 | | 25/0 | 22.50 | 22.05 | 22.09 | 22.08 |
| | 12/6 | 22.50 | 22.09 | 22.13 | 22.06 | | 25/12 | 22.50 | 22.06 | 22.09 | 22.12 |
| | 12/13 | 22.50 | 22.04 | 22.12 | 22.01 | | 25/25 | 22.50 | 22.03 | 22.06 | 22.06 |
| | 25/0 | 22.50 | 22.06 | 22.08 | 21.93 | | 50/0 | 22.50 | 22.00 | 22.02 | 22.00 |
| 64QAM | 1/0 | 22.50 | 22.00 | 22.27 | 22.22 | 64QAM | 1/0 | 22.50 | 22.33 | 22.15 | 22.28 |
| | 1/12 | 22.50 | 22.00 | 22.31 | 22.23 | | 1/24 | 22.50 | 22.25 | 22.09 | 22.09 |
| | 1/24 | 22.50 | 21.97 | 22.22 | 22.33 | | 1/49 | 22.50 | 22.37 | 22.09 | 22.17 |
| | 12/0 | 22.50 | 21.06 | 20.98 | 21.04 | | 25/0 | 22.50 | 21.12 | 21.10 | 21.06 |
| | 12/6 | 22.50 | 21.08 | 20.95 | 21.06 | | 25/12 | 22.50 | 21.05 | 21.08 | 21.06 |
| | 12/13 | 22.50 | 21.06 | 20.93 | 21.05 | | 25/25 | 22.50 | 21.09 | 21.13 | 21.04 |
| | 25/0 | 22.50 | 21.03 | 21.00 | 21.00 | | 50/0 | 22.50 | 21.08 | 21.08 | 20.99 |

| LTE B4/BW=15M | | Average Conducted Power(dBm) | | | | LTE B4/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20025/ 1717.5 | 20175/ 1732.5 | 20325/ 1747.5 | | | | 20050/ 1720 | 20175/ 1732.5 | 20300/ 1745 |
| QPSK | 1/0 | 22.50 | 22.35 | 22.37 | 22.33 | QPSK | 1/0 | 22.50 | **22.48** | 22.43 | 22.45 |
| | 1/37 | 22.50 | 22.21 | 22.20 | 22.31 | | 1/50 | 22.50 | 22.31 | 22.29 | 22.31 |
| | 1/74 | 22.50 | 22.24 | 22.22 | 22.37 | | 1/99 | 22.50 | 22.26 | 22.31 | 22.33 |
| | 36/0 | 22.50 | 22.33 | 22.22 | 22.23 | | 50/0 | 22.50 | **22.35** | 22.33 | 22.30 |
| | 36/19 | 22.50 | 22.27 | 22.30 | 22.26 | | 50/25 | 22.50 | 22.29 | 22.28 | 22.26 |
| | 36/39 | 22.50 | 22.27 | 22.25 | 22.21 | | 50/50 | 22.50 | 22.29 | 22.27 | 22.27 |
| | 75/0 | 22.50 | 22.26 | 22.22 | 22.20 | | 100/0 | 22.50 | 22.30 | 22.27 | 22.30 |
| 16QAM | 1/0 | 22.50 | 22.24 | 22.35 | 22.38 | 16QAM | 1/0 | 22.50 | 22.30 | 22.26 | 22.31 |
| | 1/37 | 22.50 | 22.16 | 22.19 | 22.30 | | 1/50 | 22.50 | 22.34 | 22.09 | 22.43 |
| | 1/74 | 22.50 | 22.20 | 22.21 | 22.34 | | 1/99 | 22.50 | 22.36 | 22.32 | 22.37 |
| | 36/0 | 22.50 | 22.08 | 22.11 | 22.04 | | 50/0 | 22.50 | 22.13 | 22.14 | 22.19 |
| | 36/19 | 22.50 | 22.07 | 22.06 | 21.98 | | 50/25 | 22.50 | 22.11 | 22.07 | 22.09 |
| | 36/39 | 22.50 | 22.04 | 22.06 | 21.96 | | 50/50 | 22.50 | 22.09 | 22.05 | 22.00 |
| | 75/0 | 22.50 | 22.04 | 22.05 | 21.99 | | 100/0 | 22.50 | 22.09 | 22.08 | 22.09 |
| 64QAM | 1/0 | 22.50 | 22.40 | 22.22 | 22.31 | 64QAM | 1/0 | 22.50 | 22.31 | 22.42 | 22.30 |
| | 1/37 | 22.50 | 22.25 | 22.07 | 22.29 | | 1/50 | 22.50 | 22.27 | 21.06 | 22.31 |
| | 1/74 | 22.50 | 22.29 | 22.11 | 22.32 | | 1/99 | 22.50 | 22.20 | 22.41 | 22.30 |
| | 36/0 | 22.50 | 21.15 | 22.11 | 21.04 | | 50/0 | 22.50 | 21.13 | 21.15 | 21.11 |
| | 36/19 | 22.50 | 21.10 | 21.12 | 21.05 | | 50/25 | 22.50 | 21.11 | 21.12 | 21.08 |
| | 36/39 | 22.50 | 21.10 | 21.13 | 21.02 | | 50/50 | 22.50 | 21.06 | 21.11 | 21.09 |
| | 75/0 | 22.50 | 21.06 | 21.06 | 21.07 | | 100/0 | 22.50 | 21.07 | 21.10 | 21.04 |

Note: The tested channels are marks in bold.

3. Conducted power measurement results of LTE B5

1) Main antenna_Receiver on

| LTE B5/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B5/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20407/ 824.7 | 20525/ 836.5 | 20643/ 848.3 | | | | 20415/ 825.5 | 20525/ 836.5 | 20635/ 847.5 |
| QPSK | 1/0 | 25.00 | 24.08 | 24.01 | 24.10 | QPSK | 1/0 | 25.00 | 24.16 | 24.07 | 24.01 |
| | 1/2 | 25.00 | 24.12 | 24.06 | 24.12 | | 1/7 | 25.00 | 24.11 | 24.13 | 24.04 |
| | 1/5 | 25.00 | 24.04 | 23.97 | 24.05 | | 1/14 | 25.00 | 24.04 | 24.02 | 24.06 |
| | 3/0 | 25.00 | 24.01 | 23.93 | 24.09 | | 8/0 | 24.00 | 23.36 | 23.23 | 23.26 |
| | 3/1 | 25.00 | 24.10 | 23.98 | 24.12 | | 8/3 | 24.00 | 23.41 | 23.28 | 23.27 |
| | 3/3 | 25.00 | 24.08 | 23.98 | 24.12 | | 8/7 | 24.00 | 23.25 | 23.19 | 23.21 |
| | 6/0 | 24.00 | 23.32 | 23.20 | 23.25 | | 15/0 | 24.00 | 23.36 | 23.26 | 23.23 |
| 16QAM | 1/0 | 24.00 | 23.38 | 23.37 | 23.66 | 16QAM | 1/0 | 24.00 | 23.34 | 23.74 | 23.40 |
| | 1/2 | 24.00 | 23.46 | 23.43 | 23.71 | | 1/7 | 24.00 | 23.27 | 23.75 | 23.39 |
| | 1/5 | 24.00 | 23.37 | 23.35 | 23.64 | | 1/14 | 24.00 | 23.19 | 23.65 | 23.35 |
| | 3/0 | 24.00 | 23.49 | 23.28 | 23.48 | | 8/0 | 23.00 | 22.54 | 22.39 | 22.36 |
| | 3/1 | 24.00 | 23.58 | 23.35 | 23.53 | | 8/3 | 23.00 | 22.55 | 22.41 | 22.38 |
| | 3/3 | 24.00 | 23.56 | 23.34 | 23.51 | | 8/7 | 23.00 | 22.39 | 22.33 | 22.32 |
| | 6/0 | 23.00 | 22.55 | 22.40 | 22.25 | | 15/0 | 23.00 | 22.44 | 22.37 | 22.25 |
| 64QAM | 1/0 | 23.00 | 22.21 | 22.14 | 22.38 | 64QAM | 1/0 | 23.00 | 22.46 | 22.14 | 22.25 |
| | 1/2 | 23.00 | 22.33 | 22.21 | 22.49 | | 1/7 | 23.00 | 22.39 | 22.23 | 22.25 |
| | 1/5 | 23.00 | 22.21 | 22.19 | 22.37 | | 1/14 | 23.00 | 22.29 | 22.17 | 22.25 |
| | 3/0 | 23.00 | 22.20 | 21.89 | 22.28 | | 8/0 | 22.00 | 21.21 | 21.09 | 20.96 |
| | 3/1 | 23.00 | 22.27 | 21.96 | 22.34 | | 8/3 | 22.00 | 21.25 | 21.11 | 21.00 |
| | 3/3 | 23.00 | 22.23 | 21.91 | 22.27 | | 8/7 | 22.00 | 21.09 | 21.05 | 20.94 |
| | 6/0 | 22.00 | 21.40 | 21.05 | 21.01 | | 15/0 | 22.00 | 21.12 | 21.06 | 21.03 |

| LTE B5/BW=5M | | Average Conducted Power(dBm) | | | | LTE B5/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20425/ 826.5 | 20525/ 836.5 | 20625/ 846.5 | | | | 20450/ 829 | 20525/ 836.5 | 20600/ 844 |
| QPSK | 1/0 | 25.00 | 24.31 | 24.12 | 24.16 | QPSK | 1/0 | 25.00 | **24.36** | 24.33 | 24.19 |
| | 1/12 | 25.00 | 24.16 | 24.08 | 24.12 | | 1/24 | 25.00 | 24.09 | 24.05 | 24.02 |
| | 1/24 | 25.00 | 24.15 | 24.02 | 24.17 | | 1/49 | 25.00 | 24.07 | 24.08 | 24.09 |
| | 12/0 | 24.00 | 23.39 | 23.29 | 23.32 | | 25/0 | 24.00 | **23.44** | 23.32 | 23.23 |
| | 12/6 | 24.00 | 23.35 | 23.31 | 23.30 | | 25/12 | 24.00 | 23.40 | 23.27 | 23.33 |
| | 12/13 | 24.00 | 23.35 | 23.28 | 23.25 | | 25/25 | 24.00 | 23.29 | 23.22 | 23.25 |
| | 25/0 | 24.00 | 23.37 | 23.28 | 23.26 | | 50/0 | 24.00 | 23.34 | 23.30 | 23.29 |
| 16QAM | 1/0 | 24.00 | 23.65 | 23.89 | 23.55 | 16QAM | 1/0 | 24.00 | 23.48 | 23.82 | 23.44 |
| | 1/12 | 24.00 | 23.50 | 23.89 | 23.48 | | 1/24 | 24.00 | 23.32 | 23.68 | 23.37 |
| | 1/24 | 24.00 | 23.58 | 23.81 | 23.48 | | 1/49 | 24.00 | 23.28 | 23.74 | 23.33 |
| | 12/0 | 23.00 | 22.52 | 22.48 | 22.39 | | 25/0 | 23.00 | 22.45 | 22.42 | 22.37 |
| | 12/6 | 23.00 | 22.51 | 22.48 | 22.38 | | 25/12 | 23.00 | 22.44 | 22.36 | 22.43 |
| | 12/13 | 23.00 | 22.47 | 22.42 | 22.36 | | 25/25 | 23.00 | 22.37 | 22.32 | 22.36 |
| | 25/0 | 23.00 | 22.45 | 22.36 | 22.28 | | 50/0 | 23.00 | 22.38 | 22.32 | 22.36 |
| 64QAM | 1/0 | 23.00 | 22.16 | 22.41 | 22.37 | 64QAM | 1/0 | 23.00 | 22.52 | 22.30 | 22.28 |
| | 1/12 | 23.00 | 22.04 | 22.43 | 22.36 | | 1/24 | 23.00 | 22.42 | 22.17 | 22.25 |
| | 1/24 | 23.00 | 22.12 | 22.32 | 22.38 | | 1/49 | 23.00 | 22.40 | 22.25 | 22.27 |
| | 12/0 | 22.00 | 21.23 | 21.03 | 21.10 | | 25/0 | 22.00 | 21.17 | 21.14 | 21.06 |
| | 12/6 | 22.00 | 21.23 | 21.01 | 21.11 | | 25/12 | 22.00 | 21.18 | 21.14 | 21.15 |
| | 12/13 | 22.00 | 21.19 | 20.97 | 21.08 | | 25/25 | 22.00 | 21.14 | 21.08 | 21.10 |
| | 25/0 | 22.00 | 21.14 | 21.01 | 21.05 | | 50/0 | 22.00 | 21.11 | 21.09 | 21.06 |

2) Main antenna_Receiver off

| LTE B5/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B5/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20407/ 824.7 | 20525/ 836.5 | 20643/ 848.3 | | | | 20415/ 825.5 | 20525/ 836.5 | 20635/ 847.5 |
| QPSK | 1/0 | 24.50 | 23.00 | 23.15 | 23.09 | QPSK | 1/0 | 24.50 | 23.09 | 23.21 | 23.03 |
| | 1/2 | 24.50 | 23.06 | 23.19 | 23.13 | | 1/7 | 24.50 | 23.25 | 23.26 | 23.17 |
| | 1/5 | 24.50 | 23.01 | 23.11 | 23.07 | | 1/14 | 24.50 | 23.18 | 23.16 | 23.07 |
| | 3/0 | 24.50 | 22.98 | 23.02 | 23.09 | | 8/0 | 23.50 | 22.90 | 22.93 | 22.75 |
| | 3/1 | 24.50 | 23.05 | 23.09 | 23.12 | | 8/3 | 23.50 | 22.93 | 22.89 | 22.87 |
| | 3/3 | 24.50 | 22.98 | 23.06 | 23.05 | | 8/7 | 23.50 | 22.87 | 22.86 | 22.83 |
| | 6/0 | 23.50 | 22.78 | 22.84 | 22.80 | | 15/0 | 23.50 | 22.92 | 22.90 | 22.75 |
| 16QAM | 1/0 | 23.50 | 22.83 | 22.96 | 23.14 | 16QAM | 1/0 | 23.50 | 22.77 | 23.30 | 22.86 |
| | 1/2 | 23.50 | 22.87 | 23.01 | 23.18 | | 1/7 | 23.50 | 22.96 | 23.33 | 22.95 |
| | 1/5 | 23.50 | 22.86 | 22.95 | 23.10 | | 1/14 | 23.50 | 22.83 | 23.26 | 22.83 |
| | 3/0 | 23.50 | 22.92 | 22.86 | 22.92 | | 8/0 | 22.50 | 22.07 | 22.00 | 21.85 |
| | 3/1 | 23.50 | 22.97 | 22.92 | 23.01 | | 8/3 | 22.50 | 22.11 | 22.01 | 21.98 |
| | 3/3 | 23.50 | 22.91 | 22.87 | 22.90 | | 8/7 | 22.50 | 22.04 | 21.98 | 21.91 |
| | 6/0 | 22.50 | 21.99 | 22.03 | 21.73 | | 15/0 | 22.50 | 21.99 | 21.97 | 21.75 |
| 64QAM | 1/0 | 22.50 | 21.89 | 22.03 | 22.16 | 64QAM | 1/0 | 22.50 | 22.15 | 22.04 | 22.04 |
| | 1/2 | 22.50 | 21.99 | 22.09 | 22.27 | | 1/7 | 22.50 | 22.30 | 22.11 | 22.12 |
| | 1/5 | 22.50 | 21.87 | 22.04 | 22.14 | | 1/14 | 22.50 | 22.22 | 22.03 | 22.03 |
| | 3/0 | 22.50 | 21.88 | 21.77 | 22.05 | | 8/0 | 21.50 | 21.01 | 20.98 | 20.77 |
| | 3/1 | 22.50 | 21.99 | 21.85 | 22.14 | | 8/3 | 21.50 | 21.07 | 21.02 | 20.90 |
| | 3/3 | 22.50 | 21.90 | 21.76 | 22.06 | | 8/7 | 21.50 | 20.99 | 20.95 | 20.84 |
| | 6/0 | 21.50 | 21.09 | 20.94 | 20.81 | | 15/0 | 21.50 | 20.93 | 20.97 | 20.84 |

| LTE B5/BW=5M | | Average Conducted Power(dBm) | | | | LTE B5/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20425/ 826.5 | 20525/ 836.5 | 20625/ 846.5 | | | | 20450/ 829 | 20525/ 836.5 | 20600/ 844 |
| QPSK | 1/0 | 24.50 | 23.26 | 23.12 | 23.16 | QPSK | 1/0 | 24.50 | 23.26 | 23.25 | 23.24 |
| | 1/12 | 24.50 | 23.36 | 23.22 | 23.28 | | 1/24 | 24.50 | 23.25 | 23.25 | 23.21 |
| | 1/24 | 24.50 | 23.28 | 23.08 | 23.22 | | 1/49 | 24.50 | 23.32 | 23.38 | **23.41** |
| | 12/0 | 23.50 | 22.92 | 22.95 | 22.83 | | 25/0 | 23.50 | 22.92 | **22.98** | 22.87 |
| | 12/6 | 23.50 | 22.95 | 22.90 | 22.83 | | 25/12 | 23.50 | 22.93 | 22.96 | 22.85 |
| | 12/13 | 23.50 | 22.92 | 22.90 | 22.89 | | 25/25 | 23.50 | 22.89 | 22.90 | 22.77 |
| | 25/0 | 23.50 | 22.95 | 22.93 | 22.79 | | 50/0 | 23.50 | 22.88 | 22.91 | 22.80 |
| 16QAM | 1/0 | 23.50 | 23.10 | 23.16 | 23.00 | 16QAM | 1/0 | 23.50 | 22.88 | 23.29 | 22.90 |
| | 1/12 | 23.50 | 23.18 | 23.30 | 23.08 | | 1/24 | 23.50 | 22.84 | 23.28 | 22.86 |
| | 1/24 | 23.50 | 23.16 | 23.14 | 22.99 | | 1/49 | 23.50 | 22.81 | 23.28 | 22.88 |
| | 12/0 | 22.50 | 22.06 | 22.08 | 21.89 | | 25/0 | 22.50 | 21.96 | 22.05 | 21.98 |
| | 12/6 | 22.50 | 22.07 | 22.08 | 21.91 | | 25/12 | 22.50 | 21.97 | 21.99 | 21.97 |
| | 12/13 | 22.50 | 22.04 | 22.06 | 22.00 | | 25/25 | 22.50 | 21.93 | 21.95 | 21.92 |
| | 25/0 | 22.50 | 22.02 | 21.98 | 21.80 | | 50/0 | 22.50 | 21.92 | 21.98 | 21.89 |
| 64QAM | 1/0 | 22.50 | 21.84 | 22.15 | 22.13 | 64QAM | 1/0 | 22.50 | 22.21 | 22.05 | 22.11 |
| | 1/12 | 22.50 | 21.94 | 22.31 | 22.20 | | 1/24 | 22.50 | 22.21 | 22.07 | 22.13 |
| | 1/24 | 22.50 | 21.88 | 22.08 | 22.14 | | 1/49 | 22.50 | 22.20 | 22.07 | 22.19 |
| | 12/0 | 21.50 | 21.03 | 20.92 | 20.89 | | 25/0 | 21.50 | 21.02 | 21.04 | 20.92 |
| | 12/6 | 21.50 | 21.02 | 20.91 | 20.89 | | 25/12 | 21.50 | 20.99 | 21.04 | 20.93 |
| | 12/13 | 21.50 | 20.98 | 20.91 | 20.97 | | 25/25 | 21.50 | 20.95 | 21.00 | 20.86 |
| | 25/0 | 21.50 | 20.95 | 20.91 | 20.85 | | 50/0 | 21.50 | 20.94 | 21.00 | 20.85 |

3) Second antenna_Receiver on

| LTE B5/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B5/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20407/ 824.7 | 20525/ 836.5 | 20643/ 848.3 | | | | 20415/ 825.5 | 20525/ 836.5 | 20635/ 847.5 |
| QPSK | 1/0 | 24.50 | 23.39 | 23.44 | 23.36 | QPSK | 1/0 | 24.50 | 23.41 | 23.53 | 23.39 |
| | 1/2 | 24.50 | 23.46 | 23.51 | 23.43 | | 1/7 | 24.50 | 23.58 | 23.59 | 23.50 |
| | 1/5 | 24.50 | 23.39 | 23.46 | 23.36 | | 1/14 | 24.50 | 23.52 | 23.54 | 23.45 |
| | 3/0 | 24.50 | 23.30 | 23.42 | 23.35 | | 8/0 | 23.50 | 23.24 | 23.20 | 23.09 |
| | 3/1 | 24.50 | 23.37 | 23.48 | 23.42 | | 8/3 | 23.50 | 23.26 | 23.24 | 23.22 |
| | 3/3 | 24.50 | 23.32 | 23.42 | 23.35 | | 8/7 | 23.50 | 23.21 | 23.19 | 23.15 |
| | 6/0 | 23.50 | 23.10 | 23.16 | 23.14 | | 15/0 | 23.50 | 23.22 | 23.22 | 23.12 |
| 16QAM | 1/0 | 23.50 | 23.14 | 23.30 | 23.43 | 16QAM | 1/0 | 23.50 | 23.13 | 23.33 | 23.17 |
| | 1/2 | 23.50 | 23.22 | 23.34 | 23.22 | | 1/7 | 23.50 | 23.28 | 23.38 | 23.27 |
| | 1/5 | 23.50 | 23.19 | 23.28 | 23.45 | | 1/14 | 23.50 | 23.17 | 23.33 | 23.20 |
| | 3/0 | 23.50 | 23.26 | 23.19 | 23.25 | | 8/0 | 22.50 | 22.43 | 22.34 | 22.17 |
| | 3/1 | 23.50 | 23.35 | 23.26 | 23.33 | | 8/3 | 22.50 | 22.45 | 22.35 | 22.30 |
| | 3/3 | 23.50 | 23.24 | 23.20 | 23.25 | | 8/7 | 22.50 | 22.34 | 22.29 | 22.26 |
| | 6/0 | 22.50 | 22.34 | 22.33 | 22.08 | | 15/0 | 22.50 | 22.32 | 22.30 | 22.08 |
| 64QAM | 1/0 | 22.50 | 22.48 | 22.28 | 22.28 | 64QAM | 1/0 | 22.50 | 22.49 | 22.38 | 22.36 |
| | 1/2 | 22.50 | 22.31 | 22.38 | 22.34 | | 1/7 | 22.50 | 22.33 | 22.45 | 22.45 |
| | 1/5 | 22.50 | 22.47 | 22.28 | 22.32 | | 1/14 | 22.50 | 22.26 | 22.35 | 22.38 |
| | 3/0 | 22.50 | 22.45 | 22.27 | 22.02 | | 8/0 | 21.50 | 21.36 | 21.30 | 21.09 |
| | 3/1 | 22.50 | 22.22 | 22.35 | 22.13 | | 8/3 | 21.50 | 21.42 | 21.34 | 21.24 |
| | 3/3 | 22.50 | 22.41 | 22.28 | 22.05 | | 8/7 | 21.50 | 21.33 | 21.27 | 21.18 |
| | 6/0 | 21.50 | 21.12 | 21.20 | 21.25 | | 15/0 | 21.50 | 21.26 | 21.27 | 21.17 |

| LTE B5/BW=5M | | Average Conducted Power(dBm) | | | | LTE B5/BW=10M | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20425/ 826.5 | 20525/ 836.5 | 20625/ 846.5 | | | | 20450/ 829 | 20525/ 836.5 | 20600/ 844 |
| QPSK | 1/0 | 24.50 | 23.59 | 23.45 | 23.48 | QPSK | 1/0 | 24.50 | 23.69 | **23.77** | 23.65 |
| | 1/12 | 24.50 | 23.71 | 23.54 | 23.61 | | 1/24 | 24.50 | 23.50 | 23.64 | 23.40 |
| | 1/24 | 24.50 | 23.65 | 23.42 | 23.54 | | 1/49 | 24.50 | 23.48 | 23.52 | 23.49 |
| | 12/0 | 23.50 | 23.27 | 23.28 | 23.14 | | 25/0 | 23.50 | 23.27 | **23.29** | 23.23 |
| | 12/6 | 23.50 | 23.25 | 23.25 | 23.17 | | 25/12 | 23.50 | 23.26 | 23.24 | 23.20 |
| | 12/13 | 23.50 | 23.26 | 23.24 | 23.21 | | 25/25 | 23.50 | 23.24 | 23.24 | 23.17 |
| | 25/0 | 23.50 | 23.29 | 23.25 | 23.16 | | 50/0 | 23.50 | 23.22 | 23.21 | 23.19 |
| 16QAM | 1/0 | 23.50 | 23.41 | 23.30 | 23.34 | 16QAM | 1/0 | 23.50 | 23.21 | 23.33 | 23.22 |
| | 1/12 | 23.50 | 23.22 | 23.44 | 23.39 | | 1/24 | 23.50 | 23.18 | 23.33 | 23.23 |
| | 1/24 | 23.50 | 23.46 | 23.28 | 23.33 | | 1/49 | 23.50 | 23.15 | 23.35 | 23.24 |
| | 12/0 | 22.50 | 22.39 | 22.43 | 22.26 | | 25/0 | 22.50 | 22.32 | 22.35 | 22.32 |
| | 12/6 | 22.50 | 22.41 | 22.45 | 22.25 | | 25/12 | 22.50 | 22.33 | 22.38 | 22.34 |
| | 12/13 | 22.50 | 22.38 | 22.41 | 22.33 | | 25/25 | 22.50 | 22.27 | 22.30 | 22.26 |
| | 25/0 | 22.50 | 22.31 | 22.35 | 22.14 | | 50/0 | 22.50 | 22.26 | 22.32 | 22.25 |
| 64QAM | 1/0 | 22.50 | 22.17 | 22.50 | 22.49 | 64QAM | 1/0 | 22.50 | 22.23 | 22.38 | 22.38 |
| | 1/12 | 22.50 | 22.29 | 22.33 | 22.24 | | 1/24 | 22.50 | 22.25 | 22.41 | 22.37 |
| | 1/24 | 22.50 | 22.23 | 22.42 | 22.45 | | 1/49 | 22.50 | 22.22 | 22.39 | 22.40 |
| | 12/0 | 21.50 | 21.34 | 21.25 | 21.27 | | 25/0 | 21.50 | 21.34 | 21.40 | 21.29 |
| | 12/6 | 21.50 | 21.35 | 21.24 | 21.25 | | 25/12 | 21.50 | 21.33 | 21.38 | 21.28 |
| | 12/13 | 21.50 | 21.35 | 21.19 | 21.33 | | 25/25 | 21.50 | 21.30 | 21.32 | 21.26 |
| | 25/0 | 21.50 | 21.29 | 21.24 | 21.19 | | 50/0 | 21.50 | 21.28 | 21.32 | 21.21 |

4) Second antenna_Receiver off

| LTE B5/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B5/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20407/ 824.7 | 20525/ 836.5 | 20643/ 848.3 | | | | 20415/ 825.5 | 20525/ 836.5 | 20635/ 847.5 |
| QPSK | 1/0 | 25.00 | 23.84 | 23.98 | 23.89 | QPSK | 1/0 | 25.00 | 23.92 | 24.06 | 23.88 |
| | 1/2 | 25.00 | 23.91 | 24.05 | 23.95 | | 1/7 | 25.00 | 24.09 | 24.12 | 24.00 |
| | 1/5 | 25.00 | 23.85 | 23.96 | 23.87 | | 1/14 | 25.00 | 24.00 | 24.04 | 23.90 |
| | 3/0 | 25.00 | 23.79 | 23.91 | 23.91 | | 8/0 | 24.00 | 23.21 | 23.25 | 23.08 |
| | 3/1 | 25.00 | 23.87 | 23.97 | 23.97 | | 8/3 | 24.00 | 23.25 | 23.26 | 23.24 |
| | 3/3 | 25.00 | 23.80 | 23.95 | 23.87 | | 8/7 | 24.00 | 23.20 | 23.20 | 23.19 |
| | 6/0 | 24.00 | 23.10 | 23.17 | 23.10 | | 15/0 | 24.00 | 23.25 | 23.18 | 23.12 |
| 16QAM | 1/0 | 24.00 | 23.12 | 23.27 | 23.47 | 16QAM | 1/0 | 24.00 | 23.12 | 23.62 | 23.18 |
| | 1/2 | 24.00 | 23.22 | 23.33 | 23.52 | | 1/7 | 24.00 | 23.29 | 23.69 | 23.27 |
| | 1/5 | 24.00 | 23.18 | 23.31 | 23.43 | | 1/14 | 24.00 | 23.19 | 23.63 | 23.19 |
| | 3/0 | 24.00 | 23.25 | 23.22 | 23.27 | | 8/0 | 23.00 | 22.42 | 22.34 | 22.16 |
| | 3/1 | 24.00 | 23.31 | 23.27 | 23.32 | | 8/3 | 23.00 | 22.45 | 22.38 | 22.33 |
| | 3/3 | 24.00 | 23.26 | 23.21 | 23.24 | | 8/7 | 23.00 | 22.39 | 22.31 | 22.23 |
| | 6/0 | 23.00 | 22.31 | 22.37 | 22.09 | | 15/0 | 23.00 | 22.32 | 22.28 | 22.05 |
| 64QAM | 1/0 | 23.00 | 22.27 | 22.59 | 22.25 | 64QAM | 1/0 | 23.00 | 22.49 | 22.37 | 22.38 |
| | 1/2 | 23.00 | 22.37 | 22.67 | 22.33 | | 1/7 | 23.00 | 22.64 | 22.46 | 22.45 |
| | 1/5 | 23.00 | 22.31 | 22.58 | 22.21 | | 1/14 | 23.00 | 22.57 | 22.39 | 22.35 |
| | 3/0 | 23.00 | 22.06 | 22.48 | 22.22 | | 8/0 | 22.00 | 21.36 | 21.31 | 21.10 |
| | 3/1 | 23.00 | 22.17 | 22.56 | 22.31 | | 8/3 | 22.00 | 21.42 | 21.36 | 21.25 |
| | 3/3 | 23.00 | 22.06 | 22.47 | 22.22 | | 8/7 | 22.00 | 21.34 | 21.29 | 21.18 |
| | 6/0 | 22.00 | 21.23 | 21.21 | 21.46 | | 15/0 | 22.00 | 21.28 | 21.29 | 21.18 |

| LTE B5/BW=5M | | Average Conducted Power(dBm) | | | | LTE B5/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20425/ 826.5 | 20525/ 836.5 | 20625/ 846.5 | | | | 20450/ 829 | 20525/ 836.5 | 20600/ 844 |
| QPSK | 1/0 | 25.00 | 24.13 | 23.97 | 24.02 | QPSK | 1/0 | 25.00 | 24.09 | **24.16** | 24.02 |
| | 1/12 | 25.00 | 24.14 | 24.08 | 24.11 | | 1/24 | 25.00 | 23.99 | 24.06 | 23.93 |
| | 1/24 | 25.00 | 24.11 | 23.92 | 24.05 | | 1/49 | 25.00 | 23.97 | 24.04 | 23.95 |
| | 12/0 | 24.00 | 23.24 | 23.28 | 23.17 | | 25/0 | 24.00 | 23.27 | 23.27 | 23.20 |
| | 12/6 | 24.00 | 23.30 | 23.29 | 23.16 | | 25/12 | 24.00 | 23.23 | **23.31** | 23.21 |
| | 12/13 | 24.00 | 23.24 | 23.25 | 23.25 | | 25/25 | 24.00 | 23.20 | 23.23 | 23.13 |
| | 25/0 | 24.00 | 23.27 | 23.29 | 23.15 | | 50/0 | 24.00 | 23.25 | 23.27 | 23.17 |
| 16QAM | 1/0 | 24.00 | 23.42 | 23.73 | 23.35 | 16QAM | 1/0 | 24.00 | 23.21 | 23.64 | 23.14 |
| | 1/12 | 24.00 | 23.51 | 23.87 | 23.41 | | 1/24 | 24.00 | 23.18 | 23.65 | 23.12 |
| | 1/24 | 24.00 | 23.47 | 23.70 | 23.36 | | 1/49 | 24.00 | 23.15 | 23.64 | 23.10 |
| | 12/0 | 23.00 | 22.39 | 22.45 | 22.26 | | 25/0 | 23.00 | 22.33 | 22.35 | 22.26 |
| | 12/6 | 23.00 | 22.41 | 22.45 | 22.26 | | 25/12 | 23.00 | 22.30 | 22.35 | 22.27 |
| | 12/13 | 23.00 | 22.39 | 22.42 | 22.33 | | 25/25 | 23.00 | 22.30 | 22.33 | 22.22 |
| | 25/0 | 23.00 | 22.35 | 22.34 | 22.13 | | 50/0 | 23.00 | 22.28 | 22.30 | 22.21 |
| 64QAM | 1/0 | 23.00 | 22.20 | 22.54 | 22.49 | 64QAM | 1/0 | 23.00 | 22.57 | 22.53 | 22.30 |
| | 1/12 | 23.00 | 22.28 | 22.66 | 22.56 | | 1/24 | 23.00 | 22.56 | 22.57 | 22.31 |
| | 1/24 | 23.00 | 22.24 | 22.43 | 22.50 | | 1/49 | 23.00 | 22.52 | 22.55 | 22.39 |
| | 12/0 | 22.00 | 21.37 | 21.26 | 21.25 | | 25/0 | 22.00 | 21.35 | 21.34 | 21.28 |
| | 12/6 | 22.00 | 21.37 | 21.28 | 21.25 | | 25/12 | 22.00 | 21.36 | 21.35 | 21.29 |
| | 12/13 | 22.00 | 21.35 | 21.22 | 21.34 | | 25/25 | 22.00 | 21.31 | 21.28 | 21.26 |
| | 25/0 | 22.00 | 21.29 | 21.26 | 21.21 | | 50/0 | 22.00 | 21.30 | 21.30 | 21.23 |

Note: The tested channels are marks in bold.

4. Conducted power measurement results of LTE B7

1) Main antenna_Receiver on

| LTE B7/BW=5M | | Average Conducted Power(dBm) | | | | LTE B7/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20775/ 2502.5 | 21100/ 2535 | 21425/ 2567.5 | | | | 20800/ 2505 | 21100/ 2535 | 21400/ 2565 |
| QPSK | 1/0 | 25.00 | 23.85 | 23.97 | 23.88 | QPSK | 1/0 | 25.00 | 23.78 | 23.92 | 23.80 |
| | 1/12 | 25.00 | 23.92 | 24.14 | 23.92 | | 1/24 | 25.00 | 23.72 | 24.00 | 23.74 |
| | 1/24 | 25.00 | 23.79 | 24.00 | 23.85 | | 1/49 | 25.00 | 23.82 | 23.92 | 23.79 |
| | 12/0 | 24.00 | 23.00 | 23.20 | 23.10 | | 25/0 | 24.00 | 23.03 | 23.25 | 22.99 |
| | 12/6 | 24.00 | 23.02 | 23.20 | 23.12 | | 25/12 | 24.00 | 22.99 | 23.22 | 23.02 |
| | 12/13 | 24.00 | 22.98 | 23.20 | 23.10 | | 25/25 | 24.00 | 23.09 | 23.19 | 22.97 |
| | 25/0 | 24.00 | 22.99 | 23.22 | 23.10 | | 50/0 | 24.00 | 23.03 | 23.16 | 22.98 |
| 16QAM | 1/0 | 24.00 | 23.22 | 23.63 | 23.29 | 16QAM | 1/0 | 24.00 | 23.00 | 23.55 | 23.14 |
| | 1/12 | 24.00 | 23.27 | 23.78 | 23.29 | | 1/24 | 24.00 | 22.92 | 23.56 | 23.07 |
| | 1/24 | 24.00 | 23.17 | 23.69 | 23.22 | | 1/49 | 24.00 | 22.89 | 23.53 | 23.08 |
| | 12/0 | 23.00 | 22.15 | 22.40 | 22.23 | | 25/0 | 23.00 | 22.06 | 22.31 | 22.18 |
| | 12/6 | 23.00 | 22.13 | 22.42 | 22.24 | | 25/12 | 23.00 | 22.09 | 22.31 | 22.14 |
| | 12/13 | 23.00 | 22.07 | 22.42 | 22.21 | | 25/25 | 23.00 | 22.16 | 22.27 | 22.12 |
| | 25/0 | 23.00 | 22.03 | 22.33 | 22.12 | | 50/0 | 23.00 | 22.08 | 22.28 | 22.05 |
| 64QAM | 1/0 | 23.00 | 22.07 | 21.89 | 22.24 | 64QAM | 1/0 | 23.00 | 22.15 | 22.09 | 22.06 |
| | 1/12 | 23.00 | 22.13 | 22.07 | 22.31 | | 1/24 | 23.00 | 22.13 | 22.18 | 22.05 |
| | 1/24 | 23.00 | 22.05 | 21.95 | 22.18 | | 1/49 | 23.00 | 22.19 | 22.14 | 22.05 |
| | 12/0 | 22.00 | 20.89 | 21.13 | 20.92 | | 25/0 | 22.00 | 20.91 | 21.16 | 20.92 |
| | 12/6 | 22.00 | 20.90 | 21.14 | 20.94 | | 25/12 | 22.00 | 20.88 | 21.17 | 20.97 |
| | 12/13 | 22.00 | 20.90 | 21.08 | 20.91 | | 25/25 | 22.00 | 21.00 | 21.14 | 20.91 |
| | 25/0 | 22.00 | 20.84 | 21.04 | 20.95 | | 50/0 | 22.00 | 20.94 | 21.10 | 20.83 |

| LTE B7/BW=15M | | Average Conducted Power(dBm) | | | | LTE B7/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20825/ 2507.5 | 21100/ 2535 | 21375/ 2562.5 | | | | 20850/ 2510 | 21100/ 2535 | 21350/ 2560 |
| QPSK | 1/0 | 25.00 | 23.85 | 23.98 | 23.96 | QPSK | 1/0 | 25.00 | 24.08 | **24.18** | 24.11 |
| | 1/37 | 25.00 | 23.71 | 23.96 | 23.84 | | 1/50 | 25.00 | 23.91 | 24.04 | 23.89 |
| | 1/74 | 25.00 | 23.66 | 23.97 | 23.91 | | 1/99 | 25.00 | 23.84 | 23.99 | 23.93 |
| | 36/0 | 24.00 | 23.01 | 23.10 | 23.03 | | 50/0 | 24.00 | 23.07 | **23.26** | 23.08 |
| | 36/19 | 24.00 | 23.11 | 23.21 | 22.99 | | 50/25 | 24.00 | 23.04 | 23.22 | 23.04 |
| | 36/39 | 24.00 | 23.02 | 23.14 | 22.95 | | 50/50 | 24.00 | 23.05 | 23.14 | 22.94 |
| | 75/0 | 24.00 | 23.06 | 23.16 | 22.99 | | 100/0 | 24.00 | 23.03 | 23.21 | 23.02 |
| 16QAM | 1/0 | 24.00 | 23.07 | 23.60 | 23.47 | 16QAM | 1/0 | 24.00 | 23.67 | 23.65 | 23.50 |
| | 1/37 | 24.00 | 22.87 | 23.55 | 23.45 | | 1/50 | 24.00 | 23.56 | 23.60 | 23.43 |
| | 1/74 | 24.00 | 22.86 | 23.51 | 23.49 | | 1/99 | 24.00 | 23.54 | 23.48 | 23.44 |
| | 36/0 | 23.00 | 22.12 | 22.26 | 22.12 | | 50/0 | 23.00 | 22.23 | 22.33 | 22.12 |
| | 36/19 | 23.00 | 22.21 | 22.34 | 22.11 | | 50/25 | 23.00 | 22.17 | 22.28 | 22.07 |
| | 36/39 | 23.00 | 22.10 | 22.26 | 22.03 | | 50/50 | 23.00 | 22.09 | 22.23 | 22.03 |
| | 75/0 | 23.00 | 22.17 | 22.27 | 22.10 | | 100/0 | 23.00 | 22.17 | 22.31 | 22.08 |
| 64QAM | 1/0 | 23.00 | 22.22 | 22.21 | 22.47 | 64QAM | 1/0 | 23.00 | 22.23 | 22.35 | 22.58 |
| | 1/37 | 23.00 | 22.10 | 22.16 | 22.40 | | 1/50 | 23.00 | 22.17 | 22.30 | 22.50 |
| | 1/74 | 23.00 | 22.06 | 22.14 | 22.46 | | 1/99 | 23.00 | 22.18 | 22.28 | 22.48 |
| | 36/0 | 22.00 | 20.92 | 21.11 | 20.94 | | 50/0 | 22.00 | 21.03 | 21.16 | 20.98 |
| | 36/19 | 22.00 | 21.03 | 21.20 | 20.93 | | 50/25 | 22.00 | 21.03 | 21.15 | 20.96 |
| | 36/39 | 22.00 | 21.00 | 21.15 | 20.88 | | 50/50 | 22.00 | 20.92 | 21.10 | 20.88 |
| | 75/0 | 22.00 | 20.95 | 21.11 | 20.91 | | 100/0 | 22.00 | 20.93 | 21.10 | 20.87 |

2) Main antenna_Receiver off

| LTE B7/BW=5M | | Average Conducted Power(dBm) | | | | LTE B7/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20775/ 2502.5 | 21100/ 2535 | 21425/ 2567.5 | | | | 20800/ 2505 | 21100/ 2535 | 21400/ 2565 |
| QPSK | 1/0 | 21.50 | 20.66 | 20.79 | 20.80 | QPSK | 1/0 | 21.50 | 20.68 | 20.89 | 20.86 |
| | 1/12 | 21.50 | 20.71 | 20.95 | 20.85 | | 1/24 | 21.50 | 20.73 | 20.93 | 20.79 |
| | 1/24 | 21.50 | 20.80 | 20.88 | 20.76 | | 1/49 | 21.50 | 20.64 | 20.92 | 20.76 |
| | 12/0 | 21.50 | 20.71 | 20.93 | 20.84 | | 25/0 | 21.50 | 20.84 | 20.98 | 20.84 |
| | 12/6 | 21.50 | 20.70 | 20.95 | 20.90 | | 25/12 | 21.50 | 20.83 | 20.94 | 20.87 |
| | 12/13 | 21.50 | 20.69 | 20.90 | 20.86 | | 25/25 | 21.50 | 20.81 | 20.91 | 20.83 |
| | 25/0 | 21.50 | 20.83 | 20.95 | 20.86 | | 50/0 | 21.50 | 20.84 | 20.97 | 20.88 |
| 16QAM | 1/0 | 21.50 | 20.81 | 20.67 | 20.75 | 16QAM | 1/0 | 21.50 | 20.67 | 20.64 | 20.64 |
| | 1/12 | 21.50 | 20.87 | 20.83 | 20.82 | | 1/24 | 21.50 | 20.75 | 20.71 | 20.57 |
| | 1/24 | 21.50 | 20.92 | 20.81 | 20.76 | | 1/49 | 21.50 | 20.64 | 20.69 | 20.56 |
| | 12/0 | 21.50 | 20.78 | 20.74 | 20.72 | | 25/0 | 21.50 | 20.92 | 20.76 | 20.67 |
| | 12/6 | 21.50 | 20.80 | 20.75 | 20.72 | | 25/12 | 21.50 | 20.90 | 20.77 | 20.71 |
| | 12/13 | 21.50 | 20.76 | 20.73 | 20.72 | | 25/25 | 21.50 | 20.90 | 20.75 | 20.62 |
| | 25/0 | 21.50 | 20.78 | 20.65 | 20.61 | | 50/0 | 21.50 | 20.82 | 20.73 | 20.65 |
| 64QAM | 1/0 | 21.50 | 20.63 | 20.52 | 20.83 | 64QAM | 1/0 | 21.50 | 20.80 | 20.73 | 20.77 |
| | 1/12 | 21.50 | 20.71 | 20.64 | 20.91 | | 1/24 | 21.50 | 20.85 | 20.77 | 20.75 |
| | 1/24 | 21.50 | 20.77 | 20.54 | 20.78 | | 1/49 | 21.50 | 20.68 | 20.80 | 20.67 |
| | 12/0 | 21.50 | 20.30 | 20.52 | 20.34 | | 25/0 | 21.50 | 20.41 | 20.55 | 20.49 |
| | 12/6 | 21.50 | 20.33 | 20.54 | 20.34 | | 25/12 | 21.50 | 20.40 | 20.59 | 20.49 |
| | 12/13 | 21.50 | 20.31 | 20.52 | 20.33 | | 25/25 | 21.50 | 20.40 | 20.55 | 20.50 |
| | 25/0 | 21.50 | 20.37 | 20.44 | 20.34 | | 50/0 | 21.50 | 20.39 | 20.53 | 20.38 |

| LTE B7/BW=15M | | Average Conducted Power(dBm) | | | | LTE B7/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20825/ 2507.5 | 21100/ 2535 | 21375/ 2562.5 | | | | 20850/ 2510 | 21100/ 2535 | 21350/ 2560 |
| QPSK | 1/0 | 21.50 | 20.72 | 20.91 | 20.81 | QPSK | 1/0 | 21.50 | 20.80 | **20.99** | 20.98 |
| | 1/37 | 21.50 | 20.70 | 20.82 | 20.80 | | 1/50 | 21.50 | 20.55 | 20.79 | 20.84 |
| | 1/74 | 21.50 | 20.67 | 20.79 | 20.73 | | 1/99 | 21.50 | 20.63 | 20.86 | 20.77 |
| | 36/0 | 21.50 | 20.82 | 20.94 | 20.82 | | 50/0 | 21.50 | 20.83 | **20.91** | 20.73 |
| | 36/19 | 21.50 | 20.81 | 20.89 | 20.88 | | 50/25 | 21.50 | 20.82 | 20.86 | 20.81 |
| | 36/39 | 21.50 | 20.75 | 20.92 | 20.85 | | 50/50 | 21.50 | 20.72 | 20.55 | 20.86 |
| | 75/0 | 21.50 | 20.74 | 20.92 | 20.74 | | 100/0 | 21.50 | 20.76 | 20.96 | 20.77 |
| 16QAM | 1/0 | 21.50 | 20.70 | 20.78 | 20.68 | 16QAM | 1/0 | 21.50 | 20.80 | 20.88 | 20.90 |
| | 1/37 | 21.50 | 20.71 | 20.68 | 20.64 | | 1/50 | 21.50 | 20.58 | 20.75 | 20.78 |
| | 1/74 | 21.50 | 20.67 | 20.63 | 20.67 | | 1/99 | 21.50 | 20.65 | 20.71 | 20.76 |
| | 36/0 | 21.50 | 20.89 | 20.74 | 20.86 | | 50/0 | 21.50 | 20.58 | 20.73 | 20.61 |
| | 36/19 | 21.50 | 20.84 | 20.73 | 20.91 | | 50/25 | 21.50 | 20.56 | 20.75 | 20.58 |
| | 36/39 | 21.50 | 20.84 | 20.70 | 20.87 | | 50/50 | 21.50 | 20.53 | 20.69 | 20.59 |
| | 75/0 | 21.50 | 20.85 | 20.70 | 20.81 | | 100/0 | 21.50 | 20.57 | 20.74 | 20.55 |
| 64QAM | 1/0 | 21.50 | 20.80 | 20.84 | 20.82 | 64QAM | 1/0 | 21.50 | 20.71 | 20.86 | 20.77 |
| | 1/37 | 21.50 | 20.82 | 20.75 | 20.83 | | 1/50 | 21.50 | 20.58 | 20.85 | 20.82 |
| | 1/74 | 21.50 | 20.77 | 20.69 | 20.80 | | 1/99 | 21.50 | 20.71 | 20.80 | 20.69 |
| | 36/0 | 21.50 | 20.44 | 20.58 | 20.34 | | 50/0 | 21.50 | 20.42 | 20.60 | 20.38 |
| | 36/19 | 21.50 | 20.42 | 20.59 | 20.43 | | 50/25 | 21.50 | 20.44 | 20.58 | 20.38 |
| | 36/39 | 21.50 | 20.35 | 20.58 | 20.42 | | 50/50 | 21.50 | 20.35 | 20.55 | 20.39 |
| | 75/0 | 21.50 | 20.36 | 20.54 | 20.36 | | 100/0 | 21.50 | 20.34 | 20.53 | 20.29 |

3) Second antenna_Receiver on

| LTE B7/BW=5M | | Average Conducted Power(dBm) | | | | LTE B7/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20775/ 2502.5 | 21100/ 2535 | 21425/ 2567.5 | | | | 20800/ 2505 | 21100/ 2535 | 21400/ 2565 |
| QPSK | 1/0 | 15.50 | 15.35 | 15.18 | 15.24 | QPSK | 1/0 | 15.50 | 15.28 | 15.24 | 15.25 |
| | 1/12 | 15.50 | 15.34 | 15.28 | 15.29 | | 1/24 | 15.50 | 15.26 | 15.27 | 15.18 |
| | 1/24 | 15.50 | 15.34 | 15.22 | 15.20 | | 1/49 | 15.50 | 15.17 | 15.23 | 15.14 |
| | 12/0 | 15.50 | 15.24 | 15.30 | 15.23 | | 25/0 | 15.50 | 15.32 | 15.33 | 15.25 |
| | 12/6 | 15.50 | 15.22 | 15.30 | 15.21 | | 25/12 | 15.50 | 15.34 | 15.27 | 15.21 |
| | 12/13 | 15.50 | 15.16 | 15.29 | 15.18 | | 25/25 | 15.50 | 15.31 | 15.23 | 15.17 |
| | 25/0 | 15.50 | 15.33 | 15.27 | 15.23 | | 50/0 | 15.50 | 15.27 | 15.24 | 15.25 |
| 16QAM | 1/0 | 15.50 | 15.21 | 15.20 | 15.39 | 16QAM | 1/0 | 15.50 | 15.16 | 15.31 | 15.29 |
| | 1/12 | 15.50 | 15.24 | 15.32 | 15.43 | | 1/24 | 15.50 | 15.17 | 15.35 | 15.19 |
| | 1/24 | 15.50 | 15.26 | 15.22 | 15.32 | | 1/49 | 15.50 | 15.01 | 15.30 | 15.13 |
| | 12/0 | 15.50 | 15.35 | 15.37 | 15.43 | | 25/0 | 15.50 | 15.33 | 15.29 | 15.30 |
| | 12/6 | 15.50 | 15.33 | 15.39 | 15.45 | | 25/12 | 15.50 | 15.27 | 15.25 | 15.28 |
| | 12/13 | 15.50 | 15.33 | 15.37 | 15.38 | | 25/25 | 15.50 | 15.27 | 15.21 | 15.24 |
| | 25/0 | 15.50 | 15.36 | 15.36 | 15.32 | | 50/0 | 15.50 | 15.28 | 15.22 | 15.18 |
| 64QAM | 1/0 | 15.50 | 15.35 | 15.27 | 15.23 | 64QAM | 1/0 | 15.50 | 15.29 | 15.27 | 15.24 |
| | 1/12 | 15.50 | 15.36 | 15.40 | 15.25 | | 1/24 | 15.50 | 15.32 | 15.31 | 15.35 |
| | 1/24 | 15.50 | 15.35 | 15.33 | 15.17 | | 1/49 | 15.50 | 15.17 | 15.28 | 15.27 |
| | 12/0 | 15.50 | 15.26 | 15.44 | 15.34 | | 25/0 | 15.50 | 15.16 | 15.37 | 15.33 |
| | 12/6 | 15.50 | 15.28 | 15.43 | 15.34 | | 25/12 | 15.50 | 15.11 | 15.35 | 15.32 |
| | 12/13 | 15.50 | 15.21 | 15.36 | 15.30 | | 25/25 | 15.50 | 15.28 | 15.32 | 15.25 |
| | 25/0 | 15.50 | 15.31 | 15.37 | 15.24 | | 50/0 | 15.50 | 15.28 | 15.28 | 15.19 |

| LTE B7/BW=15M | | Average Conducted Power(dBm) | | | | LTE B7/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20825/ 2507.5 | 21100/ 2535 | 21375/ 2562.5 | | | | 20850/ 2510 | 21100/ 2535 | 21350/ 2560 |
| QPSK | 1/0 | 15.50 | 15.32 | 15.42 | 15.33 | QPSK | 1/0 | 15.50 | **15.46** | **15.39** | **15.43** |
| | 1/37 | 15.50 | 15.23 | 15.24 | 15.26 | | 1/50 | 15.50 | 15.21 | 15.31 | 15.29 |
| | 1/74 | 15.50 | 15.19 | 15.18 | 15.19 | | 1/99 | 15.50 | 15.25 | 15.26 | 15.23 |
| | 36/0 | 15.50 | 15.36 | 15.28 | 15.18 | | 50/0 | 15.50 | **15.34** | **15.33** | **15.28** |
| | 36/19 | 15.50 | 15.29 | 15.26 | 15.22 | | 50/25 | 15.50 | 15.29 | 15.28 | 15.19 |
| | 36/39 | 15.50 | 15.24 | 15.20 | 15.17 | | 50/50 | 15.50 | 15.19 | 15.23 | 15.21 |
| | 75/0 | 15.50 | 15.28 | 15.22 | 15.14 | | 100/0 | 15.50 | 15.26 | **15.29** | 15.15 |
| 16QAM | 1/0 | 15.50 | 15.22 | 15.25 | 15.23 | 16QAM | 1/0 | 15.50 | 15.19 | 15.20 | 15.28 |
| | 1/37 | 15.50 | 15.16 | 15.12 | 15.17 | | 1/50 | 15.50 | 15.16 | 15.31 | 15.22 |
| | 1/74 | 15.50 | 15.06 | 15.07 | 15.08 | | 1/99 | 15.50 | 15.25 | 15.27 | 15.11 |
| | 36/0 | 15.50 | 15.35 | 15.31 | 15.13 | | 50/0 | 15.50 | 15.32 | 15.32 | 15.22 |
| | 36/19 | 15.50 | 15.32 | 15.28 | 15.20 | | 50/25 | 15.50 | 15.28 | 15.30 | 15.16 |
| | 36/39 | 15.50 | 15.25 | 15.22 | 15.15 | | 50/50 | 15.50 | 15.18 | 15.19 | 15.15 |
| | 75/0 | 15.50 | 15.33 | 15.23 | 15.12 | | 100/0 | 15.50 | 15.26 | 15.29 | 15.15 |
| 64QAM | 1/0 | 15.50 | 15.34 | 15.25 | 15.29 | 64QAM | 1/0 | 15.50 | 15.26 | 15.33 | 15.32 |
| | 1/37 | 15.50 | 15.25 | 15.33 | 15.26 | | 1/50 | 15.50 | 15.26 | 15.28 | 15.21 |
| | 1/74 | 15.50 | 15.40 | 15.24 | 15.16 | | 1/99 | 15.50 | 15.29 | 15.17 | 15.15 |
| | 36/0 | 15.50 | 15.37 | 15.38 | 15.22 | | 50/0 | 15.50 | 15.38 | 15.33 | 15.28 |
| | 36/19 | 15.50 | 15.34 | 15.37 | 15.27 | | 50/25 | 15.50 | 15.30 | 15.35 | 15.24 |
| | 36/39 | 15.50 | 15.25 | 15.29 | 15.14 | | 50/50 | 15.50 | 15.24 | 15.32 | 15.27 |
| | 75/0 | 15.50 | 15.26 | 15.31 | 15.15 | | 100/0 | 15.50 | 15.27 | 15.33 | 15.26 |

4) Second antenna_Receiver off

| LTE B7/BW=5M | | Average Conducted Power(dBm) | | | | LTE B7/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20775/ 2502.5 | 21100/ 2535 | 21425/ 2567.5 | | | | 20800/ 2505 | 21100/ 2535 | 21400/ 2565 |
| QPSK | 1/0 | 17.00 | 16.85 | 16.87 | 16.85 | QPSK | 1/0 | 17.00 | 16.79 | 16.85 | 16.90 |
| | 1/12 | 17.00 | 16.89 | 16.92 | 16.87 | | 1/24 | 17.00 | 16.83 | 16.84 | 16.78 |
| | 1/24 | 17.00 | 16.89 | 16.92 | 16.79 | | 1/49 | 17.00 | 16.74 | 16.78 | 16.74 |
| | 12/0 | 17.00 | 16.83 | 16.86 | 16.85 | | 25/0 | 17.00 | 16.92 | 16.90 | 16.91 |
| | 12/6 | 17.00 | 16.83 | 16.87 | 16.86 | | 25/12 | 17.00 | 16.92 | 16.84 | 16.85 |
| | 12/13 | 17.00 | 16.76 | 16.85 | 16.85 | | 25/25 | 17.00 | 16.87 | 16.81 | 16.83 |
| | 25/0 | 17.00 | 16.91 | 16.85 | 16.89 | | 50/0 | 17.00 | 16.86 | 16.87 | 16.88 |
| 16QAM | 1/0 | 17.00 | 16.90 | 16.88 | 16.89 | 16QAM | 1/0 | 17.00 | 16.75 | 16.83 | 16.89 |
| | 1/12 | 17.00 | 16.94 | 16.84 | 16.87 | | 1/24 | 17.00 | 16.73 | 16.83 | 16.80 |
| | 1/24 | 17.00 | 16.94 | 16.86 | 16.94 | | 1/49 | 17.00 | 16.62 | 16.80 | 16.72 |
| | 12/0 | 17.00 | 16.81 | 16.89 | 16.84 | | 25/0 | 17.00 | 16.94 | 16.87 | 16.93 |
| | 12/6 | 17.00 | 16.82 | 16.92 | 16.95 | | 25/12 | 17.00 | 16.87 | 16.91 | 16.85 |
| | 12/13 | 17.00 | 16.81 | 16.88 | 16.95 | | 25/25 | 17.00 | 16.88 | 16.84 | 16.89 |
| | 25/0 | 17.00 | 16.81 | 16.87 | 16.90 | | 50/0 | 17.00 | 16.86 | 16.86 | 16.89 |
| 64QAM | 1/0 | 17.00 | 16.75 | 16.88 | 16.75 | 64QAM | 1/0 | 17.00 | 16.87 | 16.83 | 16.92 |
| | 1/12 | 17.00 | 16.85 | 16.92 | 16.79 | | 1/24 | 17.00 | 16.88 | 16.82 | 16.85 |
| | 1/24 | 17.00 | 16.83 | 16.84 | 16.70 | | 1/49 | 17.00 | 16.82 | 16.85 | 16.82 |
| | 12/0 | 17.00 | 16.78 | 16.94 | 16.92 | | 25/0 | 17.00 | 16.75 | 16.84 | 16.83 |
| | 12/6 | 17.00 | 16.76 | 16.93 | 16.90 | | 25/12 | 17.00 | 16.76 | 16.88 | 16.85 |
| | 12/13 | 17.00 | 16.71 | 16.90 | 16.86 | | 25/25 | 17.00 | 16.73 | 16.94 | 16.86 |
| | 25/0 | 17.00 | 16.89 | 16.89 | 16.79 | | 50/0 | 17.00 | 16.72 | 16.88 | 16.87 |

| LTE B7/BW=15M | | Average Conducted Power(dBm) | | | | LTE B7/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 20825/ 2507.5 | 21100/ 2535 | 21375/ 2562.5 | | | | 20850/ 2510 | 21100/ 2535 | 21350/ 2560 |
| QPSK | 1/0 | 17.00 | 16.88 | 16.92 | 16.89 | QPSK | 1/0 | 17.00 | 16.90 | **16.95** | 16.92 |
| | 1/37 | 17.00 | 16.85 | 16.82 | 16.83 | | 1/50 | 17.00 | 16.70 | 16.80 | 16.82 |
| | 1/74 | 17.00 | 16.73 | 16.77 | 16.82 | | 1/99 | 17.00 | 16.74 | 16.75 | 16.75 |
| | 36/0 | 17.00 | 16.89 | 16.88 | 16.75 | | 50/0 | 17.00 | 16.85 | **16.94** | 16.84 |
| | 36/19 | 17.00 | 16.85 | 16.88 | 16.84 | | 50/25 | 17.00 | 16.89 | 16.91 | 16.81 |
| | 36/39 | 17.00 | 16.81 | 16.78 | 16.79 | | 50/50 | 17.00 | 16.78 | 16.82 | 16.88 |
| | 75/0 | 17.00 | 16.81 | 16.83 | 16.73 | | 100/0 | 17.00 | 16.82 | 16.86 | 16.81 |
| 16QAM | 1/0 | 17.00 | 16.78 | 16.91 | 16.94 | 16QAM | 1/0 | 17.00 | 16.80 | 16.90 | 16.78 |
| | 1/37 | 17.00 | 16.73 | 16.81 | 16.86 | | 1/50 | 17.00 | 16.64 | 16.72 | 16.79 |
| | 1/74 | 17.00 | 16.64 | 16.78 | 16.83 | | 1/99 | 17.00 | 16.70 | 16.64 | 16.75 |
| | 36/0 | 17.00 | 16.90 | 16.86 | 16.76 | | 50/0 | 17.00 | 16.85 | 16.86 | 16.77 |
| | 36/19 | 17.00 | 16.89 | 16.90 | 16.89 | | 50/25 | 17.00 | 16.79 | 16.76 | 16.74 |
| | 36/39 | 17.00 | 16.79 | 16.81 | 16.78 | | 50/50 | 17.00 | 16.67 | 16.71 | 16.77 |
| | 75/0 | 17.00 | 16.81 | 16.83 | 16.74 | | 100/0 | 17.00 | 16.76 | 16.77 | 16.68 |
| 64QAM | 1/0 | 17.00 | 16.86 | 16.81 | 16.75 | 64QAM | 1/0 | 17.00 | 16.75 | 16.81 | 16.85 |
| | 1/37 | 17.00 | 16.83 | 16.84 | 16.85 | | 1/50 | 17.00 | 16.81 | 16.90 | 16.89 |
| | 1/74 | 17.00 | 16.87 | 16.86 | 16.92 | | 1/99 | 17.00 | 16.83 | 16.88 | 16.87 |
| | 36/0 | 17.00 | 16.86 | 16.87 | 16.83 | | 50/0 | 17.00 | 16.87 | 16.93 | 16.81 |
| | 36/19 | 17.00 | 16.83 | 16.85 | 16.93 | | 50/25 | 17.00 | 16.77 | 16.89 | 16.72 |
| | 36/39 | 17.00 | 16.79 | 16.81 | 16.82 | | 50/50 | 17.00 | 16.72 | 16.79 | 16.77 |
| | 75/0 | 17.00 | 16.79 | 16.82 | 16.78 | | 100/0 | 17.00 | 16.77 | 16.79 | 16.70 |

Note: The tested channels are marks in bold.

5. Conducted power measurement results of LTE B26

1) Main antenna_Receiver on

| LTE B26/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B26/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26697/ 814.7 | 26865/ 831 | 27033/ 848.3 | | | | 26705/ 815.5 | 26865/ 831 | 27025/ 847.5 |
| QPSK | 1/0 | 25.00 | 23.85 | 23.81 | 23.55 | QPSK | 1/0 | 25.00 | 20.03 | 23.85 | 23.69 |
| | 1/2 | 25.00 | 23.84 | 23.95 | 23.58 | | 1/7 | 25.00 | 24.00 | 23.99 | 23.62 |
| | 1/5 | 25.00 | 23.79 | 23.90 | 23.56 | | 1/14 | 25.00 | 24.01 | 23.90 | 23.63 |
| | 3/0 | 25.00 | 23.79 | 23.91 | 23.59 | | 8/0 | 24.00 | 23.24 | 23.20 | 22.90 |
| | 3/1 | 25.00 | 23.82 | 23.95 | 23.59 | | 8/3 | 24.00 | 23.23 | 23.18 | 22.93 |
| | 3/3 | 25.00 | 23.80 | 23.90 | 23.57 | | 8/7 | 24.00 | 23.21 | 23.15 | 22.86 |
| | 6/0 | 24.00 | 23.07 | 23.09 | 22.81 | | 15/0 | 24.00 | 23.27 | 23.19 | 22.90 |
| 16QAM | 1/0 | 24.00 | 23.25 | 23.07 | 22.93 | 16QAM | 1/0 | 24.00 | 19.61 | 23.20 | 23.09 |
| | 1/2 | 24.00 | 23.36 | 23.23 | 23.00 | | 1/7 | 24.00 | 23.44 | 23.31 | 22.92 |
| | 1/5 | 24.00 | 23.22 | 23.19 | 22.91 | | 1/14 | 24.00 | 23.36 | 23.22 | 23.01 |
| | 3/0 | 24.00 | 22.99 | 23.26 | 22.78 | | 8/0 | 23.00 | 22.31 | 22.28 | 22.00 |
| | 3/1 | 24.00 | 23.00 | 23.35 | 22.78 | | 8/3 | 23.00 | 22.32 | 22.30 | 21.99 |
| | 3/3 | 24.00 | 23.01 | 23.24 | 22.79 | | 8/7 | 23.00 | 22.30 | 22.24 | 21.93 |
| | 6/0 | 23.00 | 22.20 | 22.35 | 21.77 | | 15/0 | 23.00 | 22.23 | 22.19 | 21.91 |
| 64QAM | 1/0 | 23.00 | 21.96 | 22.23 | 22.08 | 64QAM | 1/0 | 23.00 | 19.42 | 22.38 | 22.29 |
| | 1/2 | 23.00 | 22.44 | 22.39 | 22.17 | | 1/7 | 23.00 | 22.59 | 22.49 | 22.28 |
| | 1/5 | 23.00 | 22.37 | 22.32 | 22.07 | | 1/14 | 23.00 | 22.49 | 22.38 | 22.19 |
| | 3/0 | 23.00 | 22.09 | 22.04 | 22.05 | | 8/0 | 22.00 | 21.31 | 21.23 | 21.03 |
| | 3/1 | 23.00 | 22.15 | 22.15 | 22.15 | | 8/3 | 22.00 | 21.35 | 21.25 | 21.05 |
| | 3/3 | 23.00 | 22.17 | 22.04 | 22.11 | | 8/7 | 22.00 | 21.29 | 21.19 | 21.01 |
| | 6/0 | 22.00 | 21.40 | 21.28 | 21.31 | | 15/0 | 22.00 | 21.21 | 21.28 | 21.09 |

| LTE B26/BW=5M | | Average Conducted Power(dBm) | | | | LTE B26/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26715/ 816.5 | 26865/ 831 | 27015/ 846.5 | | | | 26740/ 819 | 26865/ 831 | 26990/ 844 |
| QPSK | 1/0 | 25.00 | 21.01 | 23.98 | 23.77 | QPSK | 1/0 | 25.00 | 23.93 | 24.00 | 23.69 |
| | 1/12 | 25.00 | 24.12 | 24.07 | 23.80 | | 1/24 | 25.00 | 23.94 | 23.93 | 23.71 |
| | 1/24 | 25.00 | 24.15 | 23.95 | 23.65 | | 1/49 | 25.00 | 23.77 | 23.88 | 23.55 |
| | 12/0 | 24.00 | 23.30 | 23.23 | 22.97 | | 25/0 | 24.00 | 23.22 | 23.22 | 22.97 |
| | 12/6 | 24.00 | 23.27 | 23.22 | 22.99 | | 25/12 | 24.00 | 23.20 | 23.23 | 22.99 |
| | 12/13 | 24.00 | 23.26 | 23.18 | 22.99 | | 25/25 | 24.00 | 23.18 | 23.15 | 22.96 |
| | 25/0 | 24.00 | 23.33 | 23.19 | 22.92 | | 50/0 | 24.00 | 23.18 | 23.20 | 22.91 |
| 16QAM | 1/0 | 24.00 | 20.02 | 23.31 | 23.25 | 16QAM | 1/0 | 24.00 | 23.11 | 23.32 | 23.22 |
| | 1/12 | 24.00 | 23.60 | 23.39 | 23.23 | | 1/24 | 24.00 | 23.15 | 23.22 | 23.15 |
| | 1/24 | 24.00 | 23.59 | 23.31 | 23.08 | | 1/49 | 24.00 | 22.95 | 23.13 | 23.00 |
| | 12/0 | 23.00 | 22.43 | 22.33 | 22.07 | | 25/0 | 23.00 | 22.33 | 22.36 | 22.04 |
| | 12/6 | 23.00 | 22.39 | 22.32 | 22.10 | | 25/12 | 23.00 | 22.24 | 22.39 | 22.02 |
| | 12/13 | 23.00 | 22.38 | 22.30 | 22.07 | | 25/25 | 23.00 | 22.22 | 22.32 | 22.02 |
| | 25/0 | 23.00 | 22.38 | 22.20 | 22.01 | | 50/0 | 23.00 | 22.25 | 22.30 | 21.93 |
| 64QAM | 1/0 | 23.00 | 19.16 | 22.44 | 22.35 | 64QAM | 1/0 | 23.00 | 22.47 | 22.50 | 22.32 |
| | 1/12 | 23.00 | 22.24 | 22.55 | 22.39 | | 1/24 | 23.00 | 22.53 | 22.40 | 22.39 |
| | 1/24 | 23.00 | 22.25 | 22.47 | 22.29 | | 1/49 | 23.00 | 22.34 | 22.32 | 22.27 |
| | 12/0 | 22.00 | 21.31 | 21.33 | 21.18 | | 25/0 | 22.00 | 21.35 | 21.36 | 21.09 |
| | 12/6 | 22.00 | 21.33 | 21.33 | 21.17 | | 25/12 | 22.00 | 21.28 | 21.35 | 21.18 |
| | 12/13 | 22.00 | 21.37 | 21.30 | 21.15 | | 25/25 | 22.00 | 21.24 | 21.30 | 21.12 |
| | 25/0 | 22.00 | 21.34 | 21.28 | 21.09 | | 50/0 | 22.00 | 21.25 | 21.25 | 21.01 |

| LTE B26/BW=15M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26765/ 821.5 | 26865/ 831 | 26965/ 841.5 |
| QPSK | 1/0 | 25.00 | **24.08** | 23.85 | 23.85 |
| | 1/37 | 25.00 | 23.97 | 23.83 | 23.80 |
| | 1/74 | 25.00 | 23.91 | 23.77 | 23.57 |
| | 36/0 | 24.00 | **23.12** | 23.08 | 22.98 |
| | 36/19 | 24.00 | 23.19 | 23.09 | 22.99 |
| | 36/39 | 24.00 | 23.21 | 23.10 | 23.01 |
| | 75/0 | 24.00 | 23.17 | 23.08 | 22.94 |
| 16QAM | 1/0 | 24.00 | 23.16 | 23.06 | 23.39 |
| | 1/37 | 24.00 | 23.13 | 23.04 | 23.35 |
| | 1/74 | 24.00 | 23.09 | 22.96 | 23.12 |
| | 36/0 | 23.00 | 22.27 | 22.18 | 22.17 |
| | 36/19 | 23.00 | 22.24 | 22.19 | 22.15 |
| | 36/39 | 23.00 | 22.27 | 22.19 | 22.16 |
| | 75/0 | 23.00 | 22.22 | 22.14 | 22.01 |
| 64QAM | 1/0 | 23.00 | 22.52 | 22.45 | 22.64 |
| | 1/37 | 23.00 | 22.47 | 22.42 | 22.68 |
| | 1/74 | 23.00 | 22.45 | 22.31 | 22.57 |
| | 36/0 | 22.00 | 21.33 | 21.25 | 21.09 |
| | 36/19 | 22.00 | 21.28 | 21.23 | 21.06 |
| | 36/39 | 22.00 | 21.29 | 21.17 | 21.11 |
| | 75/0 | 22.00 | 21.24 | 21.16 | 21.08 |

2) Main antenna_Receiver off

| LTE B26/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B26/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26697/ 814.7 | 26865/ 831 | 27033/ 848.3 | | | | 26705/ 815.5 | 26865/ 831 | 27025/ 847.5 |
| QPSK | 1/0 | 25.00 | 23.85 | 23.81 | 23.55 | QPSK | 1/0 | 25.00 | 20.03 | 23.85 | 23.69 |
| | 1/2 | 25.00 | 23.84 | 23.95 | 23.58 | | 1/7 | 25.00 | 24.00 | 23.99 | 23.62 |
| | 1/5 | 25.00 | 23.79 | 23.90 | 23.56 | | 1/14 | 25.00 | 24.01 | 23.90 | 23.63 |
| | 3/0 | 25.00 | 23.79 | 23.91 | 23.59 | | 8/0 | 24.00 | 23.24 | 23.20 | 22.90 |
| | 3/1 | 25.00 | 23.82 | 23.95 | 23.59 | | 8/3 | 24.00 | 23.23 | 23.18 | 22.93 |
| | 3/3 | 25.00 | 23.80 | 23.90 | 23.57 | | 8/7 | 24.00 | 23.21 | 23.15 | 22.86 |
| | 6/0 | 24.00 | 23.07 | 23.09 | 22.81 | | 15/0 | 24.00 | 23.27 | 23.19 | 22.90 |
| 16QAM | 1/0 | 24.00 | 23.25 | 23.07 | 22.93 | 16QAM | 1/0 | 24.00 | 19.61 | 23.20 | 23.09 |
| | 1/2 | 24.00 | 23.36 | 23.23 | 23.00 | | 1/7 | 24.00 | 23.44 | 23.31 | 22.92 |
| | 1/5 | 24.00 | 23.22 | 23.19 | 22.91 | | 1/14 | 24.00 | 23.36 | 23.22 | 23.01 |
| | 3/0 | 24.00 | 22.99 | 23.26 | 22.78 | | 8/0 | 23.00 | 22.31 | 22.28 | 22.00 |
| | 3/1 | 24.00 | 23.00 | 23.35 | 22.78 | | 8/3 | 23.00 | 22.32 | 22.30 | 21.99 |
| | 3/3 | 24.00 | 23.01 | 23.24 | 22.79 | | 8/7 | 23.00 | 22.30 | 22.24 | 21.93 |
| | 6/0 | 23.00 | 22.20 | 22.35 | 21.77 | | 15/0 | 23.00 | 22.23 | 22.19 | 21.91 |
| 64QAM | 1/0 | 23.00 | 21.96 | 22.23 | 22.08 | 64QAM | 1/0 | 23.00 | 19.42 | 22.38 | 22.29 |
| | 1/2 | 23.00 | 22.44 | 22.39 | 22.17 | | 1/7 | 23.00 | 22.59 | 22.49 | 22.28 |
| | 1/5 | 23.00 | 22.37 | 22.32 | 22.07 | | 1/14 | 23.00 | 22.49 | 22.38 | 22.19 |
| | 3/0 | 23.00 | 22.09 | 22.04 | 22.05 | | 8/0 | 22.00 | 21.31 | 21.23 | 21.03 |
| | 3/1 | 23.00 | 22.15 | 22.15 | 22.15 | | 8/3 | 22.00 | 21.35 | 21.25 | 21.05 |
| | 3/3 | 23.00 | 22.17 | 22.04 | 22.11 | | 8/7 | 22.00 | 21.29 | 21.19 | 21.01 |
| | 6/0 | 22.00 | 21.40 | 21.28 | 21.31 | | 15/0 | 22.00 | 21.21 | 21.28 | 21.09 |

| LTE B26/BW=5M | | Average Conducted Power(dBm) | | | | LTE B26/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26715/ 816.5 | 26865/ 831 | 27015/ 846.5 | | | | 26740/ 819 | 26865/ 831 | 26990/ 844 |
| QPSK | 1/0 | 25.00 | 21.01 | 23.98 | 23.77 | QPSK | 1/0 | 25.00 | 23.93 | 24.00 | 23.69 |
| | 1/12 | 25.00 | 24.12 | 24.07 | 23.80 | | 1/24 | 25.00 | 23.94 | 23.93 | 23.71 |
| | 1/24 | 25.00 | 24.15 | 23.95 | 23.65 | | 1/49 | 25.00 | 23.77 | 23.88 | 23.55 |
| | 12/0 | 24.00 | 23.30 | 23.23 | 22.97 | | 25/0 | 24.00 | 23.22 | 23.22 | 22.97 |
| | 12/6 | 24.00 | 23.27 | 23.22 | 22.99 | | 25/12 | 24.00 | 23.20 | 23.23 | 22.99 |
| | 12/13 | 24.00 | 23.26 | 23.18 | 22.99 | | 25/25 | 24.00 | 23.18 | 23.15 | 22.96 |
| | 25/0 | 24.00 | 23.33 | 23.19 | 22.92 | | 50/0 | 24.00 | 23.18 | 23.20 | 22.91 |
| 16QAM | 1/0 | 24.00 | 20.02 | 23.31 | 23.25 | 16QAM | 1/0 | 24.00 | 23.11 | 23.32 | 23.22 |
| | 1/12 | 24.00 | 23.60 | 23.39 | 23.23 | | 1/24 | 24.00 | 23.15 | 23.22 | 23.15 |
| | 1/24 | 24.00 | 23.59 | 23.31 | 23.08 | | 1/49 | 24.00 | 22.95 | 23.13 | 23.00 |
| | 12/0 | 23.00 | 22.43 | 22.33 | 22.07 | | 25/0 | 23.00 | 22.33 | 22.36 | 22.04 |
| | 12/6 | 23.00 | 22.39 | 22.32 | 22.10 | | 25/12 | 23.00 | 22.24 | 22.39 | 22.02 |
| | 12/13 | 23.00 | 22.38 | 22.30 | 22.07 | | 25/25 | 23.00 | 22.22 | 22.32 | 22.02 |
| | 25/0 | 23.00 | 22.38 | 22.20 | 22.01 | | 50/0 | 23.00 | 22.25 | 22.30 | 21.93 |
| 64QAM | 1/0 | 23.00 | 19.16 | 22.44 | 22.35 | 64QAM | 1/0 | 23.00 | 22.47 | 22.50 | 22.32 |
| | 1/12 | 23.00 | 22.24 | 22.55 | 22.39 | | 1/24 | 23.00 | 22.53 | 22.40 | 22.39 |
| | 1/24 | 23.00 | 22.25 | 22.47 | 22.29 | | 1/49 | 23.00 | 22.34 | 22.32 | 22.27 |
| | 12/0 | 22.00 | 21.31 | 21.33 | 21.18 | | 25/0 | 22.00 | 21.35 | 21.36 | 21.09 |
| | 12/6 | 22.00 | 21.33 | 21.33 | 21.17 | | 25/12 | 22.00 | 21.28 | 21.35 | 21.18 |
| | 12/13 | 22.00 | 21.37 | 21.30 | 21.15 | | 25/25 | 22.00 | 21.24 | 21.30 | 21.12 |
| | 25/0 | 22.00 | 21.34 | 21.28 | 21.09 | | 50/0 | 22.00 | 21.25 | 21.25 | 21.01 |

| LTE B26/BW=15M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26765/ 821.5 | 26865/ 831 | 26965/ 841.5 |
| QPSK | 1/0 | 25.00 | **24.08** | 23.85 | 23.85 |
| | 1/37 | 25.00 | 23.97 | 23.83 | 23.80 |
| | 1/74 | 25.00 | 23.91 | 23.77 | 23.57 |
| | 36/0 | 24.00 | **23.12** | 23.08 | 22.98 |
| | 36/19 | 24.00 | 23.19 | 23.09 | 22.99 |
| | 36/39 | 24.00 | 23.21 | 23.10 | 23.01 |
| | 75/0 | 24.00 | 23.17 | 23.08 | 22.94 |
| 16QAM | 1/0 | 24.00 | 23.16 | 23.06 | 23.39 |
| | 1/37 | 24.00 | 23.13 | 23.04 | 23.35 |
| | 1/74 | 24.00 | 23.09 | 22.96 | 23.12 |
| | 36/0 | 23.00 | 22.27 | 22.18 | 22.17 |
| | 36/19 | 23.00 | 22.24 | 22.19 | 22.15 |
| | 36/39 | 23.00 | 22.27 | 22.19 | 22.16 |
| | 75/0 | 23.00 | 22.22 | 22.14 | 22.01 |
| 64QAM | 1/0 | 23.00 | 22.52 | 22.45 | 22.64 |
| | 1/37 | 23.00 | 22.47 | 22.42 | 22.68 |
| | 1/74 | 23.00 | 22.45 | 22.31 | 22.57 |
| | 36/0 | 22.00 | 21.33 | 21.25 | 21.09 |
| | 36/19 | 22.00 | 21.28 | 21.23 | 21.06 |
| | 36/39 | 22.00 | 21.29 | 21.17 | 21.11 |
| | 75/0 | 22.00 | 21.24 | 21.16 | 21.08 |

3) Second antenna_Receiver on

| LTE B26/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B26/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26697/ 814.7 | 26865/ 831 | 27033/ 848.3 | | | | 26705/ 815.5 | 26865/ 831 | 27025/ 847.5 |
| QPSK | 1/0 | 25.00 | 24.18 | 24.07 | 24.13 | QPSK | 1/0 | 25.00 | 20.41 | 24.18 | 24.26 |
| | 1/2 | 25.00 | 24.24 | 24.24 | 24.18 | | 1/7 | 25.00 | 24.28 | 24.31 | 24.30 |
| | 1/5 | 25.00 | 24.15 | 24.16 | 24.10 | | 1/14 | 25.00 | 24.21 | 24.20 | 24.20 |
| | 3/0 | 25.00 | 24.11 | 24.17 | 24.15 | | 8/0 | 24.00 | 23.48 | 23.50 | 23.46 |
| | 3/1 | 25.00 | 24.18 | 24.25 | 24.21 | | 8/3 | 24.00 | 23.49 | 23.53 | 23.44 |
| | 3/3 | 25.00 | 24.14 | 24.18 | 24.13 | | 8/7 | 24.00 | 23.42 | 23.47 | 23.39 |
| | 6/0 | 24.00 | 23.39 | 23.43 | 23.34 | | 15/0 | 24.00 | 23.48 | 23.50 | 23.43 |
| 16QAM | 1/0 | 24.00 | 23.75 | 23.48 | 23.35 | 16QAM | 1/0 | 24.00 | 19.40 | 23.52 | 23.84 |
| | 1/2 | 24.00 | 23.80 | 23.63 | 23.39 | | 1/7 | 24.00 | 23.44 | 23.62 | 23.92 |
| | 1/5 | 24.00 | 23.74 | 23.55 | 23.36 | | 1/14 | 24.00 | 23.32 | 23.49 | 23.76 |
| | 3/0 | 24.00 | 23.56 | 23.49 | 23.47 | | 8/0 | 23.00 | 22.60 | 22.63 | 22.56 |
| | 3/1 | 24.00 | 23.63 | 23.55 | 23.57 | | 8/3 | 23.00 | 22.62 | 22.63 | 22.59 |
| | 3/3 | 24.00 | 23.55 | 23.47 | 23.48 | | 8/7 | 23.00 | 22.55 | 22.57 | 22.51 |
| | 6/0 | 23.00 | 22.38 | 22.66 | 22.60 | | 15/0 | 23.00 | 22.52 | 22.54 | 22.52 |
| 64QAM | 1/0 | 23.00 | 22.80 | 22.55 | 22.52 | 64QAM | 1/0 | 23.00 | 19.77 | 22.71 | 22.58 |
| | 1/2 | 23.00 | 22.89 | 22.70 | 22.56 | | 1/7 | 23.00 | 22.82 | 22.80 | 22.66 |
| | 1/5 | 23.00 | 22.75 | 22.67 | 22.49 | | 1/14 | 23.00 | 22.74 | 22.71 | 22.55 |
| | 3/0 | 23.00 | 22.68 | 22.37 | 22.45 | | 8/0 | 22.00 | 21.54 | 21.55 | 21.55 |
| | 3/1 | 23.00 | 22.75 | 22.49 | 22.52 | | 8/3 | 22.00 | 21.60 | 21.55 | 21.57 |
| | 3/3 | 23.00 | 22.66 | 22.37 | 22.46 | | 8/7 | 22.00 | 21.52 | 21.51 | 21.52 |
| | 6/0 | 22.00 | 21.45 | 21.61 | 21.70 | | 15/0 | 22.00 | 21.49 | 21.62 | 21.54 |

| LTE B26/BW=5M | | Average Conducted Power(dBm) | | | | LTE B26/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26715/ 816.5 | 26865/ 831 | 27015/ 846.5 | | | | 26740/ 819 | 26865/ 831 | 26990/ 844 |
| QPSK | 1/0 | 25.00 | 21.56 | 24.26 | 24.29 | QPSK | 1/0 | 25.00 | 24.27 | 24.35 | 24.25 |
| | 1/12 | 25.00 | 24.26 | 24.29 | 24.16 | | 1/24 | 25.00 | 24.30 | 24.26 | 24.29 |
| | 1/24 | 25.00 | 24.39 | 24.32 | 24.19 | | 1/49 | 25.00 | 24.11 | 24.15 | 24.17 |
| | 12/0 | 24.00 | 23.48 | 23.54 | 23.52 | | 25/0 | 24.00 | 23.57 | 23.57 | 23.47 |
| | 12/6 | 24.00 | 23.48 | 23.56 | 23.49 | | 25/12 | 24.00 | 23.56 | 23.54 | 23.52 |
| | 12/13 | 24.00 | 23.55 | 23.56 | 23.46 | | 25/25 | 24.00 | 23.50 | 23.47 | 23.47 |
| | 25/0 | 24.00 | 23.57 | 23.55 | 23.51 | | 50/0 | 24.00 | 23.55 | 23.53 | 23.41 |
| 16QAM | 1/0 | 24.00 | 20.65 | 23.63 | 23.93 | 16QAM | 1/0 | 24.00 | 23.41 | 23.65 | 23.86 |
| | 1/12 | 24.00 | 23.66 | 23.69 | 23.94 | | 1/24 | 24.00 | 23.45 | 23.55 | 23.86 |
| | 1/24 | 24.00 | 23.70 | 23.63 | 23.89 | | 1/49 | 24.00 | 23.26 | 23.46 | 23.71 |
| | 12/0 | 23.00 | 22.59 | 22.68 | 22.68 | | 25/0 | 23.00 | 22.60 | 22.71 | 22.53 |
| | 12/6 | 23.00 | 22.61 | 22.66 | 22.69 | | 25/12 | 23.00 | 22.60 | 22.73 | 22.60 |
| | 12/13 | 23.00 | 22.66 | 22.65 | 22.65 | | 25/25 | 23.00 | 22.54 | 22.61 | 22.58 |
| | 25/0 | 23.00 | 22.65 | 22.54 | 22.57 | | 50/0 | 23.00 | 22.54 | 22.60 | 22.45 |
| 64QAM | 1/0 | 23.00 | 19.47 | 22.72 | 22.80 | 64QAM | 1/0 | 23.00 | 22.80 | 22.80 | 22.59 |
| | 1/12 | 23.00 | 22.50 | 22.84 | 22.86 | | 1/24 | 23.00 | 22.83 | 22.71 | 22.63 |
| | 1/24 | 23.00 | 22.53 | 22.74 | 22.72 | | 1/49 | 23.00 | 22.64 | 22.61 | 22.58 |
| | 12/0 | 22.00 | 21.56 | 21.68 | 21.50 | | 25/0 | 22.00 | 21.65 | 21.69 | 21.56 |
| | 12/6 | 22.00 | 21.56 | 21.65 | 21.50 | | 25/12 | 22.00 | 21.62 | 21.67 | 21.64 |
| | 12/13 | 22.00 | 21.64 | 21.64 | 21.47 | | 25/25 | 22.00 | 21.55 | 21.64 | 21.61 |
| | 25/0 | 22.00 | 21.56 | 21.61 | 21.50 | | 50/0 | 22.00 | 21.53 | 21.57 | 21.47 |

| LTE B26/BW=15M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26765/ 821.5 | 26865/ 831 | 26965/ 841.5 |
| QPSK | 1/0 | 25.00 | 24.27 | 24.34 | 24.29 |
| | 1/37 | 25.00 | **24.39** | 24.31 | 24.32 |
| | 1/74 | 25.00 | 24.36 | 24.22 | 24.17 |
| | 36/0 | 24.00 | **23.65** | 23.22 | 23.43 |
| | 36/19 | 24.00 | 23.63 | 23.52 | 23.44 |
| | 36/39 | 24.00 | 23.62 | 23.44 | 23.47 |
| | 75/0 | 24.00 | 23.62 | 23.51 | 23.42 |
| 16QAM | 1/0 | 24.00 | 23.42 | 23.98 | 23.87 |
| | 1/37 | 24.00 | 23.43 | 23.86 | 23.90 |
| | 1/74 | 24.00 | 23.41 | 23.82 | 23.70 |
| | 36/0 | 23.00 | 22.58 | 22.82 | 22.58 |
| | 36/19 | 23.00 | 22.53 | 22.56 | 22.54 |
| | 36/39 | 23.00 | 22.57 | 22.53 | 22.57 |
| | 75/0 | 23.00 | 22.51 | 22.56 | 22.51 |
| 64QAM | 1/0 | 23.00 | 22.83 | 22.63 | 22.68 |
| | 1/37 | 23.00 | 22.81 | 22.58 | 22.66 |
| | 1/74 | 23.00 | 22.76 | 22.51 | 22.53 |
| | 36/0 | 22.00 | 21.62 | 21.51 | 21.58 |
| | 36/19 | 22.00 | 21.59 | 21.59 | 21.59 |
| | 36/39 | 22.00 | 21.63 | 21.55 | 21.62 |
| | 75/0 | 22.00 | 21.55 | 21.61 | 21.51 |

4) Second antenna_Receiver off

| LTE B26/BW=1.4M | | Average Conducted Power(dBm) | | | | LTE B26/BW=3M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26697/ 814.7 | 26865/ 831 | 27033/ 848.3 | | | | 26705/ 815.5 | 26865/ 831 | 27025/ 847.5 |
| QPSK | 1/0 | 25.00 | 24.18 | 24.07 | 24.13 | QPSK | 1/0 | 25.00 | 20.41 | 24.18 | 24.26 |
| | 1/2 | 25.00 | 24.24 | 24.24 | 24.18 | | 1/7 | 25.00 | 24.28 | 24.31 | 24.30 |
| | 1/5 | 25.00 | 24.15 | 24.16 | 24.10 | | 1/14 | 25.00 | 24.21 | 24.20 | 24.20 |
| | 3/0 | 25.00 | 24.11 | 24.17 | 24.15 | | 8/0 | 24.00 | 23.48 | 23.50 | 23.46 |
| | 3/1 | 25.00 | 24.18 | 24.25 | 24.21 | | 8/3 | 24.00 | 23.49 | 23.53 | 23.44 |
| | 3/3 | 25.00 | 24.14 | 24.18 | 24.13 | | 8/7 | 24.00 | 23.42 | 23.47 | 23.39 |
| | 6/0 | 24.00 | 23.39 | 23.43 | 23.34 | | 15/0 | 24.00 | 23.48 | 23.50 | 23.43 |
| 16QAM | 1/0 | 24.00 | 23.75 | 23.48 | 23.35 | 16QAM | 1/0 | 24.00 | 19.40 | 23.52 | 23.84 |
| | 1/2 | 24.00 | 23.80 | 23.63 | 23.39 | | 1/7 | 24.00 | 23.44 | 23.62 | 23.92 |
| | 1/5 | 24.00 | 23.74 | 23.55 | 23.36 | | 1/14 | 24.00 | 23.32 | 23.49 | 23.76 |
| | 3/0 | 24.00 | 23.56 | 23.49 | 23.47 | | 8/0 | 23.00 | 22.60 | 22.63 | 22.56 |
| | 3/1 | 24.00 | 23.63 | 23.55 | 23.57 | | 8/3 | 23.00 | 22.62 | 22.63 | 22.59 |
| | 3/3 | 24.00 | 23.55 | 23.47 | 23.48 | | 8/7 | 23.00 | 22.55 | 22.57 | 22.51 |
| | 6/0 | 23.00 | 22.38 | 22.66 | 22.60 | | 15/0 | 23.00 | 22.52 | 22.54 | 22.52 |
| 64QAM | 1/0 | 23.00 | 22.80 | 22.55 | 22.52 | 64QAM | 1/0 | 23.00 | 19.77 | 22.71 | 22.58 |
| | 1/2 | 23.00 | 22.89 | 22.70 | 22.56 | | 1/7 | 23.00 | 22.82 | 22.80 | 22.66 |
| | 1/5 | 23.00 | 22.75 | 22.67 | 22.49 | | 1/14 | 23.00 | 22.74 | 22.71 | 22.55 |
| | 3/0 | 23.00 | 22.68 | 22.37 | 22.45 | | 8/0 | 22.00 | 21.54 | 21.55 | 21.55 |
| | 3/1 | 23.00 | 22.75 | 22.49 | 22.52 | | 8/3 | 22.00 | 21.60 | 21.55 | 21.57 |
| | 3/3 | 23.00 | 22.66 | 22.37 | 22.46 | | 8/7 | 22.00 | 21.52 | 21.51 | 21.52 |
| | 6/0 | 22.00 | 21.45 | 21.61 | 21.70 | | 15/0 | 22.00 | 21.49 | 21.62 | 21.54 |

| LTE B26/BW=5M | | Average Conducted Power(dBm) | | | | LTE B26/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26715/ 816.5 | 26865/ 831 | 27015/ 846.5 | | | | 26740/ 819 | 26865/ 831 | 26990/ 844 |
| QPSK | 1/0 | 25.00 | 21.56 | 24.26 | 24.29 | QPSK | 1/0 | 25.00 | 24.27 | 24.35 | 24.25 |
| | 1/12 | 25.00 | 24.26 | 24.29 | 24.16 | | 1/24 | 25.00 | 24.30 | 24.26 | 24.29 |
| | 1/24 | 25.00 | 24.39 | 24.32 | 24.19 | | 1/49 | 25.00 | 24.11 | 24.15 | 24.17 |
| | 12/0 | 24.00 | 23.48 | 23.54 | 23.52 | | 25/0 | 24.00 | 23.57 | 23.57 | 23.47 |
| | 12/6 | 24.00 | 23.48 | 23.56 | 23.49 | | 25/12 | 24.00 | 23.56 | 23.54 | 23.52 |
| | 12/13 | 24.00 | 23.55 | 23.56 | 23.46 | | 25/25 | 24.00 | 23.50 | 23.47 | 23.47 |
| | 25/0 | 24.00 | 23.57 | 23.55 | 23.51 | | 50/0 | 24.00 | 23.55 | 23.53 | 23.41 |
| 16QAM | 1/0 | 24.00 | 20.65 | 23.63 | 23.93 | 16QAM | 1/0 | 24.00 | 23.41 | 23.65 | 23.86 |
| | 1/12 | 24.00 | 23.66 | 23.69 | 23.94 | | 1/24 | 24.00 | 23.45 | 23.55 | 23.86 |
| | 1/24 | 24.00 | 23.70 | 23.63 | 23.89 | | 1/49 | 24.00 | 23.26 | 23.46 | 23.71 |
| | 12/0 | 23.00 | 22.59 | 22.68 | 22.68 | | 25/0 | 23.00 | 22.60 | 22.71 | 22.53 |
| | 12/6 | 23.00 | 22.61 | 22.66 | 22.69 | | 25/12 | 23.00 | 22.60 | 22.73 | 22.60 |
| | 12/13 | 23.00 | 22.66 | 22.65 | 22.65 | | 25/25 | 23.00 | 22.54 | 22.61 | 22.58 |
| | 25/0 | 23.00 | 22.65 | 22.54 | 22.57 | | 50/0 | 23.00 | 22.54 | 22.60 | 22.45 |
| 64QAM | 1/0 | 23.00 | 19.47 | 22.72 | 22.80 | 64QAM | 1/0 | 23.00 | 22.80 | 22.80 | 22.59 |
| | 1/12 | 23.00 | 22.50 | 22.84 | 22.86 | | 1/24 | 23.00 | 22.83 | 22.71 | 22.63 |
| | 1/24 | 23.00 | 22.53 | 22.74 | 22.72 | | 1/49 | 23.00 | 22.64 | 22.61 | 22.58 |
| | 12/0 | 22.00 | 21.56 | 21.68 | 21.50 | | 25/0 | 22.00 | 21.65 | 21.69 | 21.56 |
| | 12/6 | 22.00 | 21.56 | 21.65 | 21.50 | | 25/12 | 22.00 | 21.62 | 21.67 | 21.64 |
| | 12/13 | 22.00 | 21.64 | 21.64 | 21.47 | | 25/25 | 22.00 | 21.55 | 21.64 | 21.61 |
| | 25/0 | 22.00 | 21.56 | 21.61 | 21.50 | | 50/0 | 22.00 | 21.53 | 21.57 | 21.47 |

| LTE B26/BW=15M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 26765/ 821.5 | 26865/ 831 | 26965/ 841.5 |
| QPSK | 1/0 | 25.00 | 24.27 | 24.34 | 24.29 |
| | 1/37 | 25.00 | **24.39** | 24.31 | 24.32 |
| | 1/74 | 25.00 | 24.36 | 24.22 | 24.17 |
| | 36/0 | 24.00 | **23.65** | 23.22 | 23.43 |
| | 36/19 | 24.00 | 23.63 | 23.52 | 23.44 |
| | 36/39 | 24.00 | 23.62 | 23.44 | 23.47 |
| | 75/0 | 24.00 | 23.62 | 23.51 | 23.42 |
| 16QAM | 1/0 | 24.00 | 23.42 | 23.98 | 23.87 |
| | 1/37 | 24.00 | 23.43 | 23.86 | 23.90 |
| | 1/74 | 24.00 | 23.41 | 23.82 | 23.70 |
| | 36/0 | 23.00 | 22.58 | 22.82 | 22.58 |
| | 36/19 | 23.00 | 22.53 | 22.56 | 22.54 |
| | 36/39 | 23.00 | 22.57 | 22.53 | 22.57 |
| | 75/0 | 23.00 | 22.51 | 22.56 | 22.51 |
| 64QAM | 1/0 | 23.00 | 22.83 | 22.63 | 22.68 |
| | 1/37 | 23.00 | 22.81 | 22.58 | 22.66 |
| | 1/74 | 23.00 | 22.76 | 22.51 | 22.53 |
| | 36/0 | 22.00 | 21.62 | 21.51 | 21.58 |
| | 36/19 | 22.00 | 21.59 | 21.59 | 21.59 |
| | 36/39 | 22.00 | 21.63 | 21.55 | 21.62 |
| | 75/0 | 22.00 | 21.55 | 21.61 | 21.51 |

Note: The tested channels are marks in bold.

6. Conducted power measurement results of LTE B38

1) Main antenna_Receiver on

| LTE B38/BW=5M | | Average Conducted Power(dBm) | | | | LTE B38/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37775/ 2572.5 | 38000/ 2595 | 38225/ 2617.5 | | | | 37800/ 2575 | 38000/ 2595 | 38200/ 2615 |
| QPSK | 1/0 | 25.00 | 23.78 | 23.68 | 23.78 | QPSK | 1/0 | 25.00 | 23.75 | 23.88 | 23.83 |
| | 1/12 | 25.00 | 23.86 | 23.80 | 23.92 | | 1/24 | 25.00 | 23.74 | 23.86 | 23.72 |
| | 1/24 | 25.00 | 23.77 | 23.74 | 23.84 | | 1/49 | 25.00 | 23.79 | 23.81 | 23.75 |
| | 12/0 | 24.00 | 22.99 | 22.90 | 22.95 | | 25/0 | 24.00 | 22.98 | 22.99 | 22.96 |
| | 12/6 | 24.00 | 22.99 | 22.99 | 23.09 | | 25/12 | 24.00 | 23.09 | 23.00 | 22.97 |
| | 12/13 | 24.00 | 22.96 | 22.98 | 23.09 | | 25/25 | 24.00 | 23.02 | 22.96 | 22.86 |
| | 25/0 | 24.00 | 22.96 | 22.96 | 22.96 | | 50/0 | 24.00 | 23.04 | 22.97 | 22.84 |
| 16QAM | 1/0 | 24.00 | 23.29 | 23.20 | 23.30 | 16QAM | 1/0 | 24.00 | 23.30 | 23.43 | 23.42 |
| | 1/12 | 24.00 | 23.30 | 23.35 | 23.42 | | 1/24 | 24.00 | 23.25 | 23.41 | 23.26 |
| | 1/24 | 24.00 | 23.19 | 23.23 | 23.34 | | 1/49 | 24.00 | 23.32 | 23.35 | 23.30 |
| | 12/0 | 23.00 | 22.06 | 21.92 | 21.99 | | 25/0 | 23.00 | 22.00 | 22.05 | 21.98 |
| | 12/6 | 23.00 | 22.07 | 22.03 | 22.12 | | 25/12 | 23.00 | 22.10 | 22.08 | 21.96 |
| | 12/13 | 23.00 | 22.06 | 22.02 | 22.10 | | 25/25 | 23.00 | 22.07 | 22.03 | 21.91 |
| | 25/0 | 23.00 | 21.99 | 22.04 | 21.92 | | 50/0 | 23.00 | 22.10 | 22.04 | 21.94 |
| 64QAM | 1/0 | 23.00 | 22.11 | 21.79 | 22.26 | 64QAM | 1/0 | 23.00 | 21.66 | 22.37 | 22.10 |
| | 1/12 | 23.00 | 22.16 | 21.96 | 22.40 | | 1/24 | 23.00 | 21.58 | 22.34 | 21.93 |
| | 1/24 | 23.00 | 22.05 | 21.86 | 22.30 | | 1/49 | 23.00 | 21.70 | 22.28 | 21.98 |
| | 12/0 | 22.00 | 20.73 | 20.69 | 20.79 | | 25/0 | 22.00 | 20.84 | 20.77 | 20.67 |
| | 12/6 | 22.00 | 20.78 | 20.82 | 20.93 | | 25/12 | 22.00 | 20.95 | 20.78 | 20.68 |
| | 12/13 | 22.00 | 20.73 | 20.83 | 20.92 | | 25/25 | 22.00 | 20.91 | 20.77 | 20.62 |
| | 25/0 | 22.00 | 20.70 | 20.87 | 20.70 | | 50/0 | 22.00 | 20.89 | 20.75 | 20.68 |

| LTE B38/BW=15M | | Average Conducted Power(dBm) | | | | LTE B38/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37825/ 2577.5 | 38000/ 2595 | 38175/ 2612.5 | | | | 37850/ 2580 | 38000/ 2595 | 38150/ 2610 |
| QPSK | 1/0 | 25.00 | 23.79 | 23.85 | 23.81 | QPSK | 1/0 | 25.00 | **23.92** | 23.89 | 23.85 |
| | 1/37 | 25.00 | 23.81 | 23.82 | 23.77 | | 1/50 | 25.00 | 23.72 | 23.84 | 23.78 |
| | 1/74 | 25.00 | 23.63 | 23.77 | 23.74 | | 1/99 | 25.00 | 23.65 | 23.73 | 23.67 |
| | 36/0 | 24.00 | 23.09 | 23.02 | 22.91 | | 50/0 | 24.00 | **23.11** | 23.04 | 22.95 |
| | 36/19 | 24.00 | 23.05 | 22.97 | 22.86 | | 50/25 | 24.00 | 23.06 | 23.00 | 22.91 |
| | 36/39 | 24.00 | 23.02 | 22.92 | 22.82 | | 50/50 | 24.00 | 22.87 | 22.93 | 22.80 |
| | 75/0 | 24.00 | 23.03 | 22.99 | 22.87 | | 100/0 | 24.00 | 23.07 | 22.97 | 22.89 |
| 16QAM | 1/0 | 24.00 | 23.35 | 23.38 | 23.34 | 16QAM | 1/0 | 24.00 | 23.42 | 23.17 | 23.50 |
| | 1/37 | 24.00 | 23.33 | 23.38 | 23.30 | | 1/50 | 24.00 | 23.29 | 23.14 | 23.38 |
| | 1/74 | 24.00 | 23.10 | 23.38 | 23.27 | | 1/99 | 24.00 | 23.17 | 23.07 | 23.34 |
| | 36/0 | 23.00 | 22.14 | 22.05 | 22.01 | | 50/0 | 23.00 | 22.11 | 22.10 | 22.02 |
| | 36/19 | 23.00 | 22.12 | 22.05 | 21.97 | | 50/25 | 23.00 | 22.09 | 22.07 | 21.99 |
| | 36/39 | 23.00 | 22.06 | 21.98 | 21.92 | | 50/50 | 23.00 | 21.93 | 22.01 | 21.92 |
| | 75/0 | 23.00 | 22.10 | 22.04 | 21.95 | | 100/0 | 23.00 | 22.07 | 22.04 | 21.94 |
| 64QAM | 1/0 | 23.00 | 21.70 | 22.27 | 21.94 | 64QAM | 1/0 | 23.00 | 22.41 | 21.94 | 22.26 |
| | 1/37 | 23.00 | 21.68 | 22.28 | 21.89 | | 1/50 | 23.00 | 22.30 | 21.95 | 22.17 |
| | 1/74 | 23.00 | 21.56 | 22.24 | 21.85 | | 1/99 | 23.00 | 22.23 | 21.87 | 22.16 |
| | 36/0 | 22.00 | 21.03 | 20.93 | 20.72 | | 50/0 | 22.00 | 20.96 | 20.87 | 20.83 |
| | 36/19 | 22.00 | 21.01 | 20.92 | 20.71 | | 50/25 | 22.00 | 20.93 | 20.86 | 20.80 |
| | 36/39 | 22.00 | 20.95 | 20.85 | 20.67 | | 50/50 | 22.00 | 20.75 | 20.80 | 20.72 |
| | 75/0 | 22.00 | 20.93 | 20.82 | 20.75 | | 100/0 | 22.00 | 20.91 | 20.83 | 20.81 |

2) Main antenna_Receiver off

| LTE B38/BW=5M | | Average Conducted Power(dBm) | | | | LTE B38/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37775/ 2572.5 | 38000/ 2595 | 38225/ 2617.5 | | | | 37800/ 2575 | 38000/ 2595 | 38200/ 2615 |
| QPSK | 1/0 | 23.00 | 22.46 | 22.46 | 22.48 | QPSK | 1/0 | 23.00 | 22.45 | 22.54 | 22.54 |
| | 1/12 | 23.00 | 22.52 | 22.55 | 22.56 | | 1/24 | 23.00 | 22.41 | 22.50 | 22.46 |
| | 1/24 | 23.00 | 22.46 | 22.43 | 22.46 | | 1/49 | 23.00 | 22.31 | 22.58 | 22.41 |
| | 12/0 | 23.00 | 22.50 | 22.48 | 22.50 | | 25/0 | 23.00 | 22.49 | 22.50 | 22.61 |
| | 12/6 | 23.00 | 22.53 | 22.47 | 22.61 | | 25/12 | 23.00 | 22.55 | 22.52 | 22.54 |
| | 12/13 | 23.00 | 22.49 | 22.49 | 22.60 | | 25/25 | 23.00 | 22.50 | 22.46 | 22.49 |
| | 25/0 | 23.00 | 22.54 | 22.45 | 22.47 | | 50/0 | 23.00 | 22.50 | 22.49 | 22.47 |
| 16QAM | 1/0 | 23.00 | 22.52 | 22.45 | 22.41 | 16QAM | 1/0 | 23.00 | 22.58 | 22.32 | 22.59 |
| | 1/12 | 23.00 | 22.58 | 22.53 | 22.50 | | 1/24 | 23.00 | 22.54 | 22.33 | 22.53 |
| | 1/24 | 23.00 | 22.47 | 22.44 | 22.39 | | 1/49 | 23.00 | 22.38 | 22.41 | 22.51 |
| | 12/0 | 22.00 | 21.44 | 21.42 | 21.31 | | 25/0 | 22.00 | 21.43 | 21.38 | 21.37 |
| | 12/6 | 22.00 | 21.47 | 21.44 | 21.33 | | 25/12 | 22.00 | 21.41 | 21.38 | 21.36 |
| | 12/13 | 22.00 | 21.45 | 21.40 | 21.33 | | 25/25 | 22.00 | 21.40 | 21.33 | 21.34 |
| | 25/0 | 22.00 | 21.38 | 21.33 | 21.37 | | 50/0 | 22.00 | 21.41 | 21.32 | 21.34 |
| 64QAM | 1/0 | 22.00 | 21.62 | 21.36 | 21.87 | 64QAM | 1/0 | 22.00 | 21.23 | 21.88 | 21.62 |
| | 1/12 | 22.00 | 21.68 | 21.46 | 21.93 | | 1/24 | 22.00 | 21.16 | 21.83 | 21.61 |
| | 1/24 | 22.00 | 21.60 | 21.32 | 21.83 | | 1/49 | 22.00 | 21.05 | 21.90 | 21.57 |
| | 12/0 | 21.00 | 20.31 | 20.29 | 20.43 | | 25/0 | 21.00 | 20.44 | 20.33 | 20.28 |
| | 12/6 | 21.00 | 20.33 | 20.36 | 20.46 | | 25/12 | 21.00 | 20.42 | 20.33 | 20.28 |
| | 12/13 | 21.00 | 20.32 | 20.32 | 20.45 | | 25/25 | 21.00 | 20.45 | 20.31 | 20.27 |
| | 25/0 | 21.00 | 20.28 | 20.36 | 20.34 | | 50/0 | 21.00 | 20.38 | 20.28 | 20.31 |

| LTE B38/BW=15M | | Average Conducted Power(dBm) | | | | LTE B38/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37825/ 2577.5 | 38000/ 2595 | 38175/ 2612.5 | | | | 37850/ 2580 | 38000/ 2595 | 38150/ 2610 |
| QPSK | 1/0 | 23.00 | 22.40 | 22.51 | 22.53 | QPSK | 1/0 | 23.00 | **22.66** | **22.59** | **22.53** |
| | 1/37 | 23.00 | 22.24 | 22.38 | 22.38 | | 1/50 | 23.00 | 22.38 | 22.37 | 22.36 |
| | 1/74 | 23.00 | 22.29 | 22.38 | 22.36 | | 1/99 | 23.00 | 22.35 | 22.31 | 22.33 |
| | 36/0 | 23.00 | 22.46 | 22.39 | 22.42 | | 50/0 | 23.00 | **22.47** | 22.46 | 22.38 |
| | 36/19 | 23.00 | 22.45 | 22.37 | 22.40 | | 50/25 | 23.00 | 22.46 | 22.40 | 22.43 |
| | 36/39 | 23.00 | 22.38 | 22.33 | 22.35 | | 50/50 | 23.00 | 22.38 | 22.37 | 22.38 |
| | 75/0 | 23.00 | 22.41 | 22.40 | 22.40 | | 100/0 | 23.00 | 22.41 | 22.37 | 22.33 |
| 16QAM | 1/0 | 23.00 | 22.62 | 22.47 | 22.57 | 16QAM | 1/0 | 23.00 | 22.52 | 22.54 | 22.55 |
| | 1/37 | 23.00 | 22.44 | 22.41 | 22.38 | | 1/50 | 23.00 | 22.48 | 22.36 | 22.42 |
| | 1/74 | 23.00 | 22.52 | 22.51 | 22.41 | | 1/99 | 23.00 | 22.46 | 22.33 | 22.39 |
| | 36/0 | 22.00 | 21.43 | 21.38 | 21.45 | | 50/0 | 22.00 | 21.42 | 21.39 | 21.35 |
| | 36/19 | 22.00 | 21.43 | 21.37 | 21.41 | | 50/25 | 22.00 | 21.39 | 21.40 | 21.43 |
| | 36/39 | 22.00 | 21.38 | 21.36 | 21.38 | | 50/50 | 22.00 | 21.31 | 21.33 | 21.36 |
| | 75/0 | 22.00 | 21.42 | 21.37 | 21.35 | | 100/0 | 22.00 | 21.37 | 21.38 | 21.30 |
| 64QAM | 1/0 | 22.00 | 21.26 | 21.91 | 21.27 | 64QAM | 1/0 | 22.00 | 21.97 | 21.55 | 21.78 |
| | 1/37 | 22.00 | 21.10 | 21.86 | 21.16 | | 1/50 | 22.00 | 21.89 | 21.42 | 21.75 |
| | 1/74 | 22.00 | 21.17 | 21.79 | 21.13 | | 1/99 | 22.00 | 21.86 | 21.39 | 21.72 |
| | 36/0 | 21.00 | 20.53 | 20.46 | 20.49 | | 50/0 | 21.00 | 20.48 | 20.42 | 20.36 |
| | 36/19 | 21.00 | 20.51 | 20.45 | 20.44 | | 50/25 | 21.00 | 20.44 | 20.41 | 20.45 |
| | 36/39 | 21.00 | 20.47 | 20.38 | 20.44 | | 50/50 | 21.00 | 20.39 | 20.35 | 20.37 |
| | 75/0 | 21.00 | 20.42 | 20.39 | 20.38 | | 100/0 | 21.00 | 20.41 | 20.41 | 20.36 |

3) Second antenna_Receiver on

| LTE B38/BW=5M | | Average Conducted Power(dBm) | | | | LTE B38/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37775/ 2572.5 | 38000/ 2595 | 38225/ 2617.5 | | | | 37800/ 2575 | 38000/ 2595 | 38200/ 2615 |
| QPSK | 1/0 | 17.50 | 17.15 | 17.00 | 17.04 | QPSK | 1/0 | 17.50 | 17.09 | 17.07 | 17.12 |
| | 1/12 | 17.50 | 17.19 | 17.05 | 17.04 | | 1/24 | 17.50 | 17.05 | 17.00 | 17.02 |
| | 1/24 | 17.50 | 17.08 | 16.99 | 16.97 | | 1/49 | 17.50 | 16.89 | 17.08 | 16.98 |
| | 12/0 | 17.50 | 17.19 | 17.03 | 17.05 | | 25/0 | 17.50 | 17.12 | 17.04 | 17.11 |
| | 12/6 | 17.50 | 17.18 | 17.02 | 17.07 | | 25/12 | 17.50 | 17.12 | 17.07 | 17.11 |
| | 12/13 | 17.50 | 17.17 | 17.00 | 17.05 | | 25/25 | 17.50 | 17.09 | 17.02 | 17.04 |
| | 25/0 | 17.50 | 17.14 | 16.99 | 17.03 | | 50/0 | 17.50 | 17.14 | 17.04 | 17.06 |
| 16QAM | 1/0 | 17.50 | 17.14 | 17.06 | 17.10 | 16QAM | 1/0 | 17.50 | 17.10 | 17.15 | 17.16 |
| | 1/12 | 17.50 | 17.16 | 17.08 | 17.18 | | 1/24 | 17.50 | 17.09 | 17.09 | 17.13 |
| | 1/24 | 17.50 | 17.06 | 17.01 | 17.10 | | 1/49 | 17.50 | 17.01 | 17.15 | 17.07 |
| | 12/0 | 17.50 | 17.09 | 17.13 | 17.15 | | 25/0 | 17.50 | 16.97 | 16.82 | 16.95 |
| | 12/6 | 17.50 | 17.13 | 17.10 | 17.16 | | 25/12 | 17.50 | 16.96 | 16.83 | 16.92 |
| | 12/13 | 17.50 | 17.11 | 17.09 | 17.14 | | 25/25 | 17.50 | 16.89 | 16.78 | 16.89 |
| | 25/0 | 17.50 | 17.03 | 17.13 | 17.15 | | 50/0 | 17.50 | 16.94 | 16.84 | 16.92 |
| 64QAM | 1/0 | 17.50 | 17.09 | 16.92 | 17.04 | 64QAM | 1/0 | 17.50 | 17.05 | 17.07 | 17.07 |
| | 1/12 | 17.50 | 17.10 | 16.93 | 17.14 | | 1/24 | 17.50 | 16.93 | 17.04 | 17.01 |
| | 1/24 | 17.50 | 17.00 | 16.87 | 16.98 | | 1/49 | 17.50 | 16.84 | 16.94 | 16.89 |
| | 12/0 | 17.50 | 17.00 | 17.05 | 17.19 | | 25/0 | 17.50 | 17.12 | 17.01 | 17.00 |
| | 12/6 | 17.50 | 17.04 | 17.06 | 17.20 | | 25/12 | 17.50 | 17.07 | 17.00 | 17.03 |
| | 12/13 | 17.50 | 16.99 | 17.06 | 17.20 | | 25/25 | 17.50 | 17.03 | 16.96 | 17.01 |
| | 25/0 | 17.50 | 16.98 | 17.05 | 17.04 | | 50/0 | 17.50 | 17.03 | 17.00 | 17.09 |

| LTE B38/BW=15M | | Average Conducted Power(dBm) | | | | LTE B38/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37825/ 2577.5 | 38000/ 2595 | 38175/ 2612.5 | | | | 37850/ 2580 | 38000/ 2595 | 38150/ 2610 |
| QPSK | 1/0 | 17.50 | 17.16 | 17.17 | 17.18 | QPSK | 1/0 | 17.50 | **17.22** | **17.20** | **17.19** |
| | 1/37 | 17.50 | 16.92 | 17.03 | 17.04 | | 1/50 | 17.50 | 17.06 | 17.03 | 17.02 |
| | 1/74 | 17.50 | 16.93 | 16.93 | 16.99 | | 1/99 | 17.50 | 17.00 | 16.94 | 16.96 |
| | 36/0 | 17.50 | 17.11 | 17.03 | 17.12 | | 50/0 | 17.50 | **17.12** | **17.10** | **17.09** |
| | 36/19 | 17.50 | 17.10 | 17.02 | 17.04 | | 50/25 | 17.50 | 17.07 | 17.03 | 17.06 |
| | 36/39 | 17.50 | 17.02 | 16.95 | 17.00 | | 50/50 | 17.50 | 17.06 | 16.98 | 17.03 |
| | 75/0 | 17.50 | 17.07 | 17.03 | 17.06 | | 100/0 | 17.50 | **17.16** | 17.05 | 16.96 |
| 16QAM | 1/0 | 17.50 | 17.07 | 16.89 | 16.86 | 16QAM | 1/0 | 17.50 | 17.03 | 17.09 | 16.96 |
| | 1/37 | 17.50 | 16.87 | 17.06 | 17.02 | | 1/50 | 17.50 | 17.07 | 16.88 | 16.81 |
| | 1/74 | 17.50 | 16.88 | 17.00 | 16.98 | | 1/99 | 17.50 | 16.99 | 16.87 | 16.75 |
| | 36/0 | 17.50 | 17.11 | 17.01 | 17.05 | | 50/0 | 17.50 | 16.92 | 16.92 | 16.87 |
| | 36/19 | 17.50 | 17.09 | 17.00 | 17.01 | | 50/25 | 17.50 | 16.88 | 16.87 | 16.93 |
| | 36/39 | 17.50 | 17.02 | 16.92 | 17.04 | | 50/50 | 17.50 | 16.83 | 16.77 | 16.86 |
| | 75/0 | 17.50 | 17.02 | 16.99 | 17.09 | | 100/0 | 17.50 | 16.91 | 16.86 | 16.78 |
| 64QAM | 1/0 | 17.50 | 17.00 | 17.02 | 17.09 | 64QAM | 1/0 | 17.50 | 17.04 | 17.01 | 17.05 |
| | 1/37 | 17.50 | 16.85 | 17.00 | 17.00 | | 1/50 | 17.50 | 17.06 | 16.95 | 16.96 |
| | 1/74 | 17.50 | 16.91 | 16.96 | 16.98 | | 1/99 | 17.50 | 17.01 | 16.87 | 17.10 |
| | 36/0 | 17.50 | 17.02 | 16.91 | 17.00 | | 50/0 | 17.50 | 17.01 | 17.18 | 17.06 |
| | 36/19 | 17.50 | 17.10 | 17.01 | 17.03 | | 50/25 | 17.50 | 17.00 | 17.11 | 17.05 |
| | 36/39 | 17.50 | 17.02 | 16.91 | 17.01 | | 50/50 | 17.50 | 17.08 | 16.97 | 17.07 |
| | 75/0 | 17.50 | 17.00 | 16.94 | 17.04 | | 100/0 | 17.50 | 17.02 | 17.02 | 16.92 |

4) Second antenna_Receiver off

| LTE B38/BW=5M | | Average Conducted Power(dBm) | | | | LTE B38/BW=10M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37775/ 2572.5 | 38000/ 2595 | 38225/ 2617.5 | | | | 37800/ 2575 | 38000/ 2595 | 38200/ 2615 |
| QPSK | 1/0 | 19.50 | 18.87 | 18.74 | 18.73 | QPSK | 1/0 | 19.50 | 18.87 | 18.83 | 18.90 |
| | 1/12 | 19.50 | 18.90 | 18.78 | 18.82 | | 1/24 | 19.50 | 18.80 | 18.78 | 18.77 |
| | 1/24 | 19.50 | 18.83 | 18.74 | 18.69 | | 1/49 | 19.50 | 18.72 | 18.85 | 18.78 |
| | 12/0 | 19.50 | 18.90 | 18.80 | 18.82 | | 25/0 | 19.50 | 18.88 | 18.84 | 18.87 |
| | 12/6 | 19.50 | 18.90 | 18.79 | 18.82 | | 25/12 | 19.50 | 18.87 | 18.84 | 18.87 |
| | 12/13 | 19.50 | 18.85 | 18.79 | 18.82 | | 25/25 | 19.50 | 18.85 | 18.79 | 18.83 |
| | 25/0 | 19.50 | 18.90 | 18.75 | 18.84 | | 50/0 | 19.50 | 18.88 | 18.83 | 18.84 |
| 16QAM | 1/0 | 19.50 | 19.02 | 18.71 | 18.88 | 16QAM | 1/0 | 19.50 | 18.91 | 18.87 | 19.08 |
| | 1/12 | 19.50 | 19.03 | 18.78 | 18.93 | | 1/24 | 19.50 | 18.84 | 18.76 | 18.97 |
| | 1/24 | 19.50 | 18.96 | 18.69 | 18.82 | | 1/49 | 19.50 | 18.74 | 18.91 | 18.99 |
| | 12/0 | 19.50 | 19.01 | 18.88 | 18.89 | | 25/0 | 19.50 | 18.94 | 18.87 | 19.00 |
| | 12/6 | 19.50 | 19.01 | 18.87 | 18.93 | | 25/12 | 19.50 | 18.98 | 18.85 | 18.99 |
| | 12/13 | 19.50 | 18.97 | 18.83 | 18.88 | | 25/25 | 19.50 | 18.93 | 18.83 | 18.92 |
| | 25/0 | 19.50 | 18.95 | 18.84 | 18.97 | | 50/0 | 19.50 | 18.95 | 18.88 | 18.98 |
| 64QAM | 1/0 | 19.50 | 19.09 | 19.15 | 19.01 | 64QAM | 1/0 | 19.50 | 18.58 | 19.17 | 18.97 |
| | 1/12 | 19.50 | 19.12 | 19.19 | 19.02 | | 1/24 | 19.50 | 18.52 | 19.13 | 18.91 |
| | 1/24 | 19.50 | 19.04 | 19.12 | 18.93 | | 1/49 | 19.50 | 18.38 | 19.17 | 18.87 |
| | 12/0 | 19.50 | 18.90 | 18.99 | 18.82 | | 25/0 | 19.50 | 18.98 | 18.90 | 18.89 |
| | 12/6 | 19.50 | 18.90 | 19.00 | 18.82 | | 25/12 | 19.50 | 18.99 | 18.88 | 18.88 |
| | 12/13 | 19.50 | 18.87 | 18.96 | 18.82 | | 25/25 | 19.50 | 18.96 | 18.84 | 18.82 |
| | 25/0 | 19.50 | 18.89 | 18.87 | 18.82 | | 50/0 | 19.50 | 18.94 | 18.86 | 18.91 |

| LTE B38/BW=15M | | Average Conducted Power(dBm) | | | | LTE B38/BW=20M | | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | | Modula -tion | RB Size/ Offset | Max. Tune-up | Channel/Frequency(MHz) | | |
| | | | 37825/ 2577.5 | 38000/ 2595 | 38175/ 2612.5 | | | | 37850/ 2580 | 38000/ 2595 | 38150/ 2610 |
| QPSK | 1/0 | 19.50 | 18.91 | 18.88 | 18.92 | QPSK | 1/0 | 19.50 | 19.16 | 19.17 | **19.21** |
| | 1/37 | 19.50 | 18.70 | 18.74 | 18.80 | | 1/50 | 19.50 | 18.89 | 18.86 | 18.95 |
| | 1/74 | 19.50 | 18.75 | 18.70 | 18.74 | | 1/99 | 19.50 | 18.84 | 18.84 | 18.87 |
| | 36/0 | 19.50 | 18.91 | 18.80 | 18.85 | | 50/0 | 19.50 | 18.93 | 18.82 | 18.83 |
| | 36/19 | 19.50 | 18.86 | 18.80 | 18.83 | | 50/25 | 19.50 | 18.90 | 18.85 | **18.90** |
| | 36/39 | 19.50 | 18.85 | 18.77 | 18.75 | | 50/50 | 19.50 | 18.79 | 18.76 | 18.83 |
| | 75/0 | 19.50 | 18.88 | 18.78 | 18.84 | | 100/0 | 19.50 | 18.88 | 18.83 | 18.78 |
| 16QAM | 1/0 | 19.50 | 18.99 | 18.89 | 19.04 | 16QAM | 1/0 | 19.50 | 18.98 | 19.10 | 18.86 |
| | 1/37 | 19.50 | 18.73 | 18.78 | 18.91 | | 1/50 | 19.50 | 18.82 | 18.93 | 18.82 |
| | 1/74 | 19.50 | 18.76 | 18.70 | 18.82 | | 1/99 | 19.50 | 18.74 | 18.85 | 18.77 |
| | 36/0 | 19.50 | 18.95 | 18.90 | 19.03 | | 50/0 | 19.50 | 18.97 | 18.98 | 18.86 |
| | 36/19 | 19.50 | 18.95 | 18.85 | 18.96 | | 50/25 | 19.50 | 18.93 | 18.93 | 18.97 |
| | 36/39 | 19.50 | 18.88 | 18.83 | 18.94 | | 50/50 | 19.50 | 18.87 | 18.91 | 18.89 |
| | 75/0 | 19.50 | 18.94 | 18.85 | 18.93 | | 100/0 | 19.50 | 18.93 | 18.87 | 18.84 |
| 64QAM | 1/0 | 19.50 | 18.64 | 19.11 | 18.85 | 64QAM | 1/0 | 19.50 | 19.10 | 19.19 | 18.87 |
| | 1/37 | 19.50 | 18.37 | 19.07 | 18.69 | | 1/50 | 19.50 | 18.92 | 19.11 | 18.75 |
| | 1/74 | 19.50 | 18.41 | 19.01 | 18.64 | | 1/99 | 19.50 | 18.89 | 19.04 | 18.70 |
| | 36/0 | 19.50 | 19.06 | 19.01 | 18.92 | | 50/0 | 19.50 | 19.07 | 19.00 | 18.93 |
| | 36/19 | 19.50 | 19.07 | 18.97 | 18.90 | | 50/25 | 19.50 | 19.03 | 18.96 | 18.98 |
| | 36/39 | 19.50 | 19.03 | 18.90 | 18.83 | | 50/50 | 19.50 | 18.96 | 18.91 | 18.91 |
| | 75/0 | 19.50 | 18.98 | 18.90 | 18.95 | | 100/0 | 19.50 | 19.02 | 18.92 | 18.86 |

Note: The tested channels are marks in bold.

7. Conducted power measurement results of LTE B41

1) Main antenna_Receiver on

| LTE B41/ BW=5M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=10M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39675/ 2498.5 | 40148/ 2545.8 | 40620/ 2593 | 41093/ 2640.3 | 41565/ 2687.5 | | | | 39700/ 2501 | 40160/ 2547 | 40620/ 2593 | 41080/ 2639 | 41540/ 2685 |
| QPSK | 1/0 | 25.00 | 23.96 | 23.70 | 23.81 | 23.67 | 23.77 | QPSK | 1/0 | 25.00 | 23.89 | 23.74 | 23.92 | 23.58 | 23.88 |
| | 1/12 | 25.00 | 23.96 | 23.68 | 23.83 | 23.64 | 23.82 | | 1/24 | 25.00 | 23.84 | 23.72 | 23.88 | 23.54 | 23.78 |
| | 1/24 | 25.00 | 23.91 | 23.72 | 23.75 | 23.60 | 23.74 | | 1/49 | 25.00 | 23.74 | 23.67 | 23.81 | 23.50 | 23.74 |
| | 12/0 | 24.00 | 23.14 | 22.93 | 22.97 | 22.81 | 23.06 | | 25/0 | 24.00 | 23.13 | 22.96 | 23.03 | 22.84 | 23.10 |
| | 12/6 | 24.00 | 23.18 | 22.94 | 23.05 | 22.84 | 23.07 | | 25/12 | 24.00 | 23.14 | 22.96 | 23.04 | 22.81 | 23.05 |
| | 12/13 | 24.00 | 23.12 | 22.88 | 22.99 | 22.79 | 23.03 | | 25/25 | 24.00 | 23.08 | 22.88 | 22.98 | 22.77 | 23.04 |
| | 25/0 | 24.00 | 23.12 | 22.91 | 22.99 | 22.79 | 23.04 | | 50/0 | 24.00 | 23.12 | 22.94 | 22.99 | 22.80 | 23.06 |
| 16QAM | 1/0 | 24.00 | 23.44 | 22.87 | 23.30 | 23.13 | 23.37 | 16QAM | 1/0 | 24.00 | 23.42 | 23.22 | 23.50 | 23.13 | 23.42 |
| | 1/12 | 24.00 | 23.44 | 22.85 | 23.35 | 23.08 | 23.44 | | 1/24 | 24.00 | 23.39 | 23.11 | 23.43 | 23.04 | 23.33 |
| | 1/24 | 24.00 | 23.35 | 22.86 | 23.24 | 23.06 | 23.35 | | 1/49 | 24.00 | 23.32 | 23.03 | 23.38 | 23.03 | 23.36 |
| | 12/0 | 23.00 | 22.24 | 21.96 | 22.07 | 22.88 | 22.19 | | 25/0 | 23.00 | 22.19 | 22.06 | 22.07 | 22.88 | 22.13 |
| | 12/6 | 23.00 | 22.26 | 21.97 | 22.09 | 22.87 | 22.19 | | 25/12 | 23.00 | 22.17 | 22.04 | 22.05 | 22.86 | 22.16 |
| | 12/13 | 23.00 | 22.20 | 22.95 | 22.03 | 22.88 | 22.18 | | 25/25 | 23.00 | 22.13 | 22.00 | 22.02 | 22.83 | 22.11 |
| | 25/0 | 23.00 | 22.15 | 21.98 | 22.07 | 22.94 | 22.10 | | 50/0 | 23.00 | 22.17 | 22.01 | 22.06 | 21.86 | 22.13 |
| 64QAM | 1/0 | 23.00 | 22.47 | 22.19 | 22.14 | 22.09 | 21.79 | 64QAM | 1/0 | 23.00 | 21.77 | 22.27 | 22.38 | 21.77 | 22.05 |
| | 1/12 | 23.00 | 22.53 | 22.07 | 22.18 | 22.05 | 21.89 | | 1/24 | 23.00 | 21.74 | 22.14 | 22.35 | 21.68 | 21.94 |
| | 1/24 | 23.00 | 22.44 | 22.10 | 22.11 | 22.03 | 21.77 | | 1/49 | 23.00 | 21.65 | 22.13 | 22.30 | 21.65 | 21.94 |
| | 12/0 | 22.00 | 21.04 | 21.23 | 20.80 | 20.88 | 20.82 | | 25/0 | 22.00 | 20.99 | 21.02 | 20.77 | 20.90 | 20.76 |
| | 12/6 | 22.00 | 21.09 | 21.03 | 20.82 | 20.91 | 20.77 | | 25/12 | 22.00 | 20.97 | 20.99 | 20.80 | 20.87 | 20.74 |
| | 12/13 | 22.00 | 21.03 | 20.97 | 20.79 | 20.86 | 20.79 | | 25/25 | 22.00 | 20.93 | 20.95 | 20.78 | 20.83 | 20.72 |
| | 25/0 | 22.00 | 20.91 | 20.90 | 20.71 | 20.89 | 20.79 | | 50/0 | 22.00 | 20.91 | 21.00 | 20.82 | 20.84 | 20.80 |

| LTE B41/ BW=15M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=20M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39725/ 2503.5 | 40173/ 2548.3 | 40620/ 2593 | 41068/ 2637.8 | 41515/ 2682.5 | | | | 39750/ 2506 | 40185/ 2549.5 | 40620/ 2593 | 41055/ 2636.5 | 41490/ 2680 |
| QPSK | 1/0 | 25.00 | 23.94 | 23.80 | 23.98 | 23.80 | 23.93 | QPSK | 1/0 | 25.00 | **24.05** | 23.91 | 24.00 | 23.90 | 23.95 |
| | 1/37 | 25.00 | 23.85 | 23.65 | 23.81 | 23.65 | 23.81 | | 1/50 | 25.00 | 23.76 | 23.73 | 23.84 | 23.73 | 23.78 |
| | 1/74 | 25.00 | 23.73 | 23.61 | 23.78 | 23.59 | 23.77 | | 1/99 | 25.00 | 23.68 | 23.70 | 23.77 | 23.67 | 23.73 |
| | 36/0 | 24.00 | 23.12 | 22.93 | 22.99 | 22.84 | 23.09 | | 50/0 | 24.00 | **23.14** | 23.08 | 23.08 | 22.95 | 23.12 |
| | 36/19 | 24.00 | 23.11 | 22.88 | 22.99 | 22.80 | 23.08 | | 50/25 | 24.00 | 23.10 | 23.03 | 22.99 | 22.93 | 23.09 |
| | 36/39 | 24.00 | 23.07 | 22.87 | 22.92 | 22.76 | 23.00 | | 50/50 | 24.00 | 22.96 | 22.91 | 22.91 | 22.89 | 23.03 |
| | 75/0 | 24.00 | 23.11 | 22.88 | 22.96 | 22.82 | 23.07 | | 100/0 | 24.00 | 23.11 | 23.02 | 22.99 | 22.95 | 23.06 |
| 16QAM | 1/0 | 24.00 | 23.51 | 23.40 | 23.52 | 23.19 | 23.49 | 16QAM | 1/0 | 24.00 | 23.56 | 23.35 | 23.34 | 23.39 | 23.55 |
| | 1/37 | 24.00 | 23.41 | 23.24 | 23.42 | 23.05 | 23.33 | | 1/50 | 24.00 | 23.34 | 23.19 | 23.16 | 23.23 | 23.35 |
| | 1/74 | 24.00 | 23.30 | 23.18 | 23.41 | 23.00 | 23.32 | | 1/99 | 24.00 | 23.27 | 23.13 | 23.13 | 23.17 | 23.42 |
| | 36/0 | 23.00 | 22.23 | 22.04 | 22.07 | 21.96 | 22.21 | | 50/0 | 23.00 | 22.18 | 22.09 | 22.12 | 22.09 | 22.21 |
| | 36/19 | 23.00 | 22.20 | 22.04 | 22.04 | 21.94 | 22.17 | | 50/25 | 23.00 | 22.19 | 22.07 | 22.06 | 22.04 | 22.15 |
| | 36/39 | 23.00 | 22.18 | 21.96 | 22.00 | 21.88 | 22.14 | | 50/50 | 23.00 | 22.01 | 21.98 | 22.01 | 21.95 | 22.08 |
| | 75/0 | 23.00 | 22.23 | 22.00 | 22.04 | 21.87 | 22.14 | | 100/0 | 23.00 | 22.15 | 22.08 | 22.05 | 22.04 | 22.11 |
| 64QAM | 1/0 | 23.00 | 21.83 | 21.70 | 22.42 | 22.11 | 21.95 | 64QAM | 1/0 | 23.00 | 22.54 | 22.25 | 22.05 | 22.26 | 22.42 |
| | 1/37 | 23.00 | 21.74 | 22.33 | 22.31 | 22.03 | 21.83 | | 1/50 | 23.00 | 22.34 | 22.09 | 21.95 | 22.02 | 22.27 |
| | 1/74 | 23.00 | 21.64 | 22.29 | 22.27 | 21.88 | 21.76 | | 1/99 | 23.00 | 22.33 | 21.99 | 21.88 | 22.08 | 22.22 |
| | 36/0 | 22.00 | 21.07 | 21.11 | 20.94 | 20.95 | 20.85 | | 50/0 | 22.00 | 20.98 | 21.18 | 20.89 | 21.10 | 20.94 |
| | 36/19 | 22.00 | 21.06 | 21.07 | 20.92 | 20.90 | 20.81 | | 50/25 | 22.00 | 21.00 | 21.13 | 20.88 | 21.04 | 20.88 |
| | 36/39 | 22.00 | 20.99 | 20.96 | 20.86 | 20.83 | 20.77 | | 50/50 | 22.00 | 20.82 | 21.04 | 20.81 | 20.96 | 20.79 |
| | 75/0 | 22.00 | 20.92 | 21.52 | 20.82 | 20.90 | 20.84 | | 100/0 | 22.00 | 20.92 | 21.08 | 20.87 | 21.03 | 20.83 |

2) Main antenna_Receiver off

| LTE B41/ BW=5M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=10M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39675/ 2498.5 | 40148/ 2545.8 | 40620/ 2593 | 41093/ 2640.3 | 41565/ 2687.5 | | | | 39700/ 2501 | 40160/ 2547 | 40620/ 2593 | 41080/ 2639 | 41540/ 2685 |
| QPSK | 1/0 | 23.00 | 22.50 | 22.25 | 22.55 | 22.23 | 22.42 | QPSK | 1/0 | 23.00 | 22.42 | 22.30 | 22.53 | 22.29 | 22.48 |
| | 1/12 | 23.00 | 22.55 | 22.20 | 22.64 | 22.19 | 22.46 | | 1/24 | 23.00 | 22.35 | 22.25 | 22.55 | 22.23 | 22.36 |
| | 1/24 | 23.00 | 22.43 | 22.19 | 22.52 | 22.17 | 22.37 | | 1/49 | 23.00 | 22.35 | 22.20 | 22.50 | 22.18 | 22.27 |
| | 12/0 | 23.00 | 22.52 | 22.31 | 22.59 | 22.22 | 22.47 | | 25/0 | 23.00 | 22.43 | 22.29 | 22.48 | 22.25 | 22.38 |
| | 12/6 | 23.00 | 22.55 | 22.33 | 22.59 | 22.20 | 22.42 | | 25/12 | 23.00 | 22.45 | 22.27 | 22.47 | 22.23 | 22.37 |
| | 12/13 | 23.00 | 22.53 | 22.26 | 22.60 | 22.18 | 22.44 | | 25/25 | 23.00 | 22.43 | 22.26 | 22.49 | 22.19 | 22.32 |
| | 25/0 | 23.00 | 22.55 | 22.25 | 22.58 | 22.16 | 22.43 | | 50/0 | 23.00 | 22.43 | 22.25 | 22.45 | 22.22 | 22.38 |
| 16QAM | 1/0 | 23.00 | 22.61 | 22.49 | 22.47 | 22.49 | 22.42 | 16QAM | 1/0 | 23.00 | 22.37 | 22.48 | 22.59 | 22.66 | 22.59 |
| | 1/12 | 23.00 | 22.69 | 22.52 | 22.56 | 22.46 | 22.45 | | 1/24 | 23.00 | 22.37 | 22.52 | 22.56 | 22.62 | 22.42 |
| | 1/24 | 23.00 | 22.61 | 22.42 | 22.48 | 22.40 | 22.38 | | 1/49 | 23.00 | 22.40 | 22.43 | 22.60 | 22.60 | 22.45 |
| | 12/0 | 22.00 | 21.45 | 21.40 | 21.45 | 21.23 | 21.29 | | 25/0 | 22.00 | 21.37 | 21.40 | 21.43 | 21.34 | 21.32 |
| | 12/6 | 22.00 | 21.51 | 21.45 | 21.48 | 21.26 | 21.29 | | 25/12 | 22.00 | 21.37 | 21.41 | 21.42 | 21.32 | 21.35 |
| | 12/13 | 22.00 | 21.47 | 21.38 | 21.44 | 21.25 | 21.24 | | 25/25 | 22.00 | 21.37 | 21.32 | 21.42 | 21.27 | 21.31 |
| | 25/0 | 22.00 | 21.38 | 21.34 | 21.38 | 21.22 | 21.27 | | 50/0 | 22.00 | 21.36 | 21.35 | 21.38 | 21.25 | 21.33 |
| 64QAM | 1/0 | 22.00 | 21.86 | 21.54 | 21.62 | 21.63 | 21.29 | 64QAM | 1/0 | 22.00 | 21.16 | 21.57 | 21.88 | 21.73 | 21.61 |
| | 1/12 | 22.00 | 21.93 | 21.57 | 21.69 | 21.55 | 21.35 | | 1/24 | 22.00 | 21.09 | 21.51 | 21.88 | 21.67 | 21.48 |
| | 1/24 | 22.00 | 21.81 | 21.46 | 21.59 | 21.54 | 21.24 | | 1/49 | 22.00 | 21.15 | 21.46 | 21.81 | 21.62 | 21.41 |
| | 12/0 | 21.00 | 20.43 | 20.31 | 20.33 | 20.28 | 20.23 | | 25/0 | 21.00 | 20.36 | 20.36 | 20.30 | 20.28 | 20.25 |
| | 12/6 | 21.00 | 20.51 | 20.37 | 20.32 | 20.32 | 20.23 | | 25/12 | 21.00 | 20.38 | 20.33 | 20.33 | 20.26 | 20.22 |
| | 12/13 | 21.00 | 20.45 | 20.35 | 20.32 | 20.25 | 20.22 | | 25/25 | 21.00 | 20.35 | 20.23 | 20.28 | 20.25 | 20.19 |
| | 25/0 | 21.00 | 20.30 | 20.37 | 20.25 | 20.18 | 20.28 | | 50/0 | 21.00 | 20.35 | 20.29 | 20.35 | 20.26 | 20.29 |

| LTE B41/ BW=15M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=20M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39725/ 2503.5 | 40173/ 2548.3 | 40620/ 2593 | 41068/ 2637.8 | 41515/ 2682.5 | | | | 39750/ 2506 | 40185/ 2549.5 | 40620/ 2593 | 41055/ 2636.5 | 41490/ 2680 |
| QPSK | 1/0 | 23.00 | 22.34 | 22.38 | 22.50 | 22.31 | 22.46 | QPSK | 1/0 | 23.00 | 22.59 | 22.41 | **22.69** | 22.36 | 22.66 |
| | 1/37 | 23.00 | 22.24 | 22.27 | 22.38 | 22.34 | 22.25 | | 1/50 | 23.00 | 22.44 | 22.23 | 22.59 | 22.20 | 22.51 |
| | 1/74 | 23.00 | 22.26 | 22.23 | 22.37 | 22.12 | 22.18 | | 1/99 | 23.00 | 22.40 | 22.18 | 22.55 | 22.15 | 22.35 |
| | 36/0 | 23.00 | 22.33 | 22.26 | 22.38 | 22.23 | 22.27 | | 50/0 | 23.00 | 22.35 | 22.36 | **22.46** | 22.28 | 22.42 |
| | 36/19 | 23.00 | 22.32 | 22.26 | 22.33 | 22.22 | 22.25 | | 50/25 | 23.00 | 22.31 | 22.30 | 22.36 | 22.24 | 22.26 |
| | 36/39 | 23.00 | 22.29 | 22.21 | 22.32 | 22.15 | 22.22 | | 50/50 | 23.00 | 22.24 | 22.22 | 22.34 | 22.17 | 22.24 |
| | 75/0 | 23.00 | 22.30 | 22.24 | 22.35 | 22.19 | 22.24 | | 100/0 | 23.00 | 22.31 | 22.27 | 22.33 | 22.23 | 22.27 |
| 16QAM | 1/0 | 23.00 | 22.44 | 22.57 | 22.66 | 22.57 | 22.57 | 16QAM | 1/0 | 23.00 | 22.49 | 22.68 | 22.51 | 22.61 | 22.38 |
| | 1/37 | 23.00 | 22.35 | 22.44 | 22.57 | 22.65 | 22.36 | | 1/50 | 23.00 | 22.42 | 22.56 | 22.40 | 22.54 | 22.27 |
| | 1/74 | 23.00 | 22.34 | 22.36 | 22.56 | 22.58 | 22.28 | | 1/99 | 23.00 | 22.36 | 22.50 | 22.40 | 22.47 | 22.15 |
| | 36/0 | 22.00 | 21.38 | 21.42 | 21.41 | 21.53 | 21.40 | | 50/0 | 22.00 | 21.38 | 21.40 | 21.39 | 21.34 | 21.45 |
| | 36/19 | 22.00 | 21.35 | 21.39 | 21.39 | 21.30 | 21.40 | | 50/25 | 22.00 | 21.36 | 21.35 | 21.37 | 21.28 | 21.32 |
| | 36/39 | 22.00 | 21.32 | 21.29 | 21.35 | 21.22 | 21.29 | | 50/50 | 22.00 | 21.30 | 21.29 | 21.33 | 21.22 | 21.27 |
| | 75/0 | 22.00 | 21.34 | 21.32 | 21.39 | 21.27 | 21.32 | | 100/0 | 22.00 | 21.36 | 21.34 | 21.38 | 21.29 | 21.32 |
| 64QAM | 1/0 | 22.00 | 21.19 | 21.52 | 21.93 | 21.78 | 21.56 | 64QAM | 1/0 | 22.00 | 21.89 | 21.82 | 21.55 | 21.54 | 21.83 |
| | 1/37 | 22.00 | 21.09 | 21.38 | 21.78 | 21.58 | 21.35 | | 1/50 | 22.00 | 21.82 | 21.66 | 21.41 | 21.34 | 21.67 |
| | 1/74 | 22.00 | 21.09 | 21.40 | 21.81 | 21.51 | 21.24 | | 1/99 | 22.00 | 21.75 | 21.60 | 21.37 | 21.32 | 21.56 |
| | 36/0 | 21.00 | 20.40 | 20.38 | 20.47 | 20.35 | 20.28 | | 50/0 | 21.00 | 20.38 | 20.37 | 20.43 | 20.39 | 20.50 |
| | 36/19 | 21.00 | 20.42 | 20.36 | 20.41 | 20.33 | 20.29 | | 50/25 | 21.00 | 20.34 | 20.30 | 20.39 | 20.31 | 20.32 |
| | 36/39 | 21.00 | 20.38 | 20.30 | 20.39 | 20.24 | 20.20 | | 50/50 | 21.00 | 20.32 | 20.26 | 20.35 | 20.26 | 20.29 |
| | 75/0 | 21.00 | 20.31 | 20.37 | 20.35 | 20.28 | 20.32 | | 100/0 | 21.00 | 20.30 | 20.37 | 20.34 | 20.34 | 20.33 |

3) Second antenna_Receiver on

| LTE B41/ BW=5M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=10M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39675/ 2498.5 | 40148/ 2545.8 | 40620/ 2593 | 41093/ 2640.3 | 41565/ 2687.5 | | | | 39700/ 2501 | 40160/ 2547 | 40620/ 2593 | 41080/ 2639 | 41540/ 2685 |
| QPSK | 1/0 | 17.00 | 16.72 | 16.49 | 16.57 | 16.48 | 16.63 | QPSK | 1/0 | 17.00 | 16.68 | 16.66 | 16.67 | 16.56 | 16.79 |
| | 1/12 | 17.00 | 16.78 | 16.44 | 16.58 | 16.40 | 16.66 | | 1/24 | 17.00 | 16.62 | 16.55 | 16.61 | 16.45 | 16.58 |
| | 1/24 | 17.00 | 16.70 | 16.46 | 16.48 | 16.42 | 16.56 | | 1/49 | 17.00 | 16.61 | 16.52 | 16.57 | 16.42 | 16.57 |
| | 12/0 | 17.00 | 16.72 | 16.58 | 16.58 | 16.50 | 16.66 | | 25/0 | 17.00 | 16.75 | 16.64 | 16.62 | 16.52 | 16.68 |
| | 12/6 | 17.00 | 16.78 | 16.61 | 16.61 | 16.47 | 16.65 | | 25/12 | 17.00 | 16.76 | 16.58 | 16.66 | 16.51 | 16.68 |
| | 12/13 | 17.00 | 16.73 | 16.60 | 16.56 | 16.46 | 16.60 | | 25/25 | 17.00 | 16.66 | 16.56 | 16.61 | 16.50 | 16.59 |
| | 25/0 | 17.00 | 16.73 | 16.57 | 16.63 | 16.48 | 16.60 | | 50/0 | 17.00 | 16.71 | 16.60 | 16.61 | 16.47 | 16.64 |
| 16QAM | 1/0 | 17.00 | 16.72 | 16.77 | 16.63 | 16.55 | 16.66 | 16QAM | 1/0 | 17.00 | 16.57 | 16.69 | 16.65 | 16.35 | 16.78 |
| | 1/12 | 17.00 | 16.80 | 16.54 | 16.64 | 16.51 | 16.70 | | 1/24 | 17.00 | 16.49 | 16.55 | 16.59 | 16.31 | 16.58 |
| | 1/24 | 17.00 | 16.70 | 16.71 | 16.56 | 16.49 | 16.59 | | 1/49 | 17.00 | 16.49 | 16.32 | 16.59 | 16.24 | 16.56 |
| | 12/0 | 17.00 | 16.68 | 16.64 | 16.64 | 16.56 | 16.64 | | 25/0 | 17.00 | 16.57 | 16.42 | 16.46 | 16.37 | 16.46 |
| | 12/6 | 17.00 | 16.68 | 16.63 | 16.66 | 16.54 | 16.64 | | 25/12 | 17.00 | 16.56 | 16.38 | 16.44 | 16.39 | 16.45 |
| | 12/13 | 17.00 | 16.62 | 16.61 | 16.68 | 16.51 | 16.58 | | 25/25 | 17.00 | 16.52 | 16.35 | 16.40 | 16.36 | 16.46 |
| | 25/0 | 17.00 | 16.55 | 16.55 | 16.60 | 16.46 | 16.63 | | 50/0 | 17.00 | 16.53 | 16.39 | 16.43 | 16.31 | 16.49 |
| 64QAM | 1/0 | 17.00 | 16.63 | 16.61 | 16.54 | 16.71 | 16.68 | 64QAM | 1/0 | 17.00 | 16.61 | 16.67 | 16.58 | 16.72 | 16.79 |
| | 1/12 | 17.00 | 16.68 | 16.60 | 16.55 | 16.66 | 16.74 | | 1/24 | 17.00 | 16.50 | 16.58 | 16.51 | 16.66 | 16.61 |
| | 1/24 | 17.00 | 16.58 | 16.58 | 16.48 | 16.61 | 16.82 | | 1/49 | 17.00 | 16.51 | 16.78 | 16.61 | 16.69 | 16.59 |
| | 12/0 | 17.00 | 16.59 | 16.39 | 16.52 | 16.50 | 16.57 | | 25/0 | 17.00 | 16.83 | 16.63 | 16.60 | 16.59 | 16.63 |
| | 12/6 | 17.00 | 16.58 | 16.37 | 16.52 | 16.48 | 16.56 | | 25/12 | 17.00 | 16.80 | 16.60 | 16.65 | 16.56 | 16.56 |
| | 12/13 | 17.00 | 16.53 | 16.42 | 16.56 | 16.48 | 16.57 | | 25/25 | 17.00 | 16.77 | 16.54 | 16.60 | 16.47 | 16.55 |
| | 25/0 | 17.00 | 16.56 | 16.34 | 16.42 | 16.53 | 16.54 | | 50/0 | 17.00 | 16.77 | 16.56 | 16.58 | 16.50 | 16.64 |

| LTE B41/ BW=15M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=20M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39725/ 2503.5 | 40173/ 2548.3 | 40620/ 2593 | 41068/ 2637.8 | 41515/ 2682.5 | | | | 39750/ 2506 | 40185/ 2549.5 | 40620/ 2593 | 41055/ 2636.5 | 41490/ 2680 |
| QPSK | 1/0 | 17.00 | 16.76 | 16.66 | 16.77 | 16.68 | 16.81 | QPSK | 1/0 | 17.00 | 16.84 | 16.66 | 16.75 | 16.63 | **16.85** |
| | 1/37 | 17.00 | 16.59 | 16.55 | 16.61 | 16.51 | 16.61 | | 1/50 | 17.00 | 16.67 | 16.49 | 16.52 | 16.48 | 16.66 |
| | 1/74 | 17.00 | 16.55 | 16.48 | 16.54 | 16.46 | 16.52 | | 1/99 | 17.00 | 16.61 | 16.44 | 16.50 | 16.43 | 16.53 |
| | 36/0 | 17.00 | 16.74 | 16.55 | 16.59 | 16.50 | 16.61 | | 50/0 | 17.00 | 16.73 | 16.62 | 16.56 | 16.57 | **16.76** |
| | 36/19 | 17.00 | 16.72 | 16.54 | 16.58 | 16.45 | 16.63 | | 50/25 | 17.00 | 16.68 | 16.59 | 16.54 | 16.58 | 16.59 |
| | 36/39 | 17.00 | 16.67 | 16.50 | 16.53 | 16.42 | 16.53 | | 50/50 | 17.00 | 16.57 | 16.54 | 16.45 | 16.47 | 16.48 |
| | 75/0 | 17.00 | 16.66 | 16.49 | 16.55 | 16.44 | 16.60 | | 100/0 | 17.00 | 16.66 | 16.58 | 16.51 | 16.54 | 16.58 |
| 16QAM | 1/0 | 17.00 | 16.64 | 16.71 | 16.72 | 16.78 | 16.73 | 16QAM | 1/0 | 17.00 | 16.80 | 16.62 | 16.60 | 16.64 | 16.73 |
| | 1/37 | 17.00 | 16.53 | 16.55 | 16.55 | 16.72 | 16.52 | | 1/50 | 17.00 | 16.83 | 16.63 | 16.65 | 16.72 | 16.82 |
| | 1/74 | 17.00 | 16.50 | 16.51 | 16.54 | 16.59 | 16.63 | | 1/99 | 17.00 | 16.76 | 16.57 | 16.60 | 16.66 | 16.81 |
| | 36/0 | 17.00 | 16.73 | 16.56 | 16.62 | 16.58 | 16.69 | | 50/0 | 17.00 | 16.70 | 16.52 | 16.61 | 16.54 | 16.74 |
| | 36/19 | 17.00 | 16.71 | 16.57 | 16.63 | 16.54 | 16.65 | | 50/25 | 17.00 | 16.65 | 16.48 | 16.56 | 16.48 | 16.57 |
| | 36/39 | 17.00 | 16.65 | 16.50 | 16.55 | 16.46 | 16.58 | | 50/50 | 17.00 | 16.58 | 16.47 | 16.53 | 16.39 | 16.55 |
| | 75/0 | 17.00 | 16.70 | 16.53 | 16.61 | 16.55 | 16.65 | | 100/0 | 17.00 | 16.62 | 16.42 | 16.56 | 16.44 | 16.53 |
| 64QAM | 1/0 | 17.00 | 16.64 | 16.68 | 16.75 | 16.67 | 16.65 | 64QAM | 1/0 | 17.00 | 16.77 | 16.71 | 16.78 | 16.73 | 16.75 |
| | 1/37 | 17.00 | 16.50 | 16.50 | 16.64 | 16.56 | 16.69 | | 1/50 | 17.00 | 16.68 | 16.51 | 16.57 | 16.54 | 16.67 |
| | 1/74 | 17.00 | 16.48 | 16.84 | 16.57 | 16.50 | 16.62 | | 1/99 | 17.00 | 16.66 | 16.44 | 16.53 | 16.47 | 16.76 |
| | 36/0 | 17.00 | 16.75 | 16.66 | 16.71 | 16.54 | 16.66 | | 50/0 | 17.00 | 16.74 | 16.55 | 16.64 | 16.51 | 16.78 |
| | 36/19 | 17.00 | 16.80 | 16.59 | 16.70 | 16.50 | 16.61 | | 50/25 | 17.00 | 16.75 | 16.58 | 16.54 | 16.44 | 16.61 |
| | 36/39 | 17.00 | 16.78 | 16.54 | 16.62 | 16.46 | 16.56 | | 50/50 | 17.00 | 16.63 | 16.47 | 16.52 | 16.42 | 16.56 |
| | 75/0 | 17.00 | 16.73 | 16.61 | 16.60 | 16.53 | 16.68 | | 100/0 | 17.00 | 16.70 | 16.51 | 16.58 | 16.42 | 16.62 |

4) Second antenna_Receiver off

| LTE B41/ BW=5M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=10M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39675/ 2498.5 | 40148/ 2545.8 | 40620/ 2593 | 41093/ 2640.3 | 41565/ 2687.5 | | | | 39700/ 2501 | 40160/ 2547 | 40620/ 2593 | 41080/ 2639 | 41540/ 2685 |
| QPSK | 1/0 | 21.00 | 20.26 | 20.07 | 20.33 | 20.01 | 20.24 | QPSK | 1/0 | 21.00 | 20.23 | 20.21 | 20.40 | 20.07 | 20.44 |
| | 1/12 | 21.00 | 20.30 | 20.05 | 20.38 | 19.99 | 20.29 | | 1/24 | 21.00 | 20.20 | 20.09 | 20.37 | 20.00 | 20.26 |
| | 1/24 | 21.00 | 20.27 | 20.01 | 20.31 | 19.94 | 20.19 | | 1/49 | 21.00 | 20.22 | 20.07 | 20.37 | 19.90 | 20.24 |
| | 12/0 | 21.00 | 20.28 | 20.13 | 20.36 | 20.04 | 20.29 | | 25/0 | 21.00 | 20.27 | 20.15 | 20.40 | 20.02 | 20.35 |
| | 12/6 | 21.00 | 20.36 | 20.14 | 20.40 | 20.02 | 20.28 | | 25/12 | 21.00 | 20.32 | 20.16 | 20.42 | 20.00 | 20.29 |
| | 12/13 | 21.00 | 20.28 | 20.12 | 20.39 | 19.99 | 20.24 | | 25/25 | 21.00 | 20.30 | 20.01 | 20.40 | 19.98 | 20.28 |
| | 25/0 | 21.00 | 20.29 | 20.11 | 20.43 | 20.02 | 20.24 | | 50/0 | 21.00 | 20.32 | 20.12 | 20.38 | 20.01 | 20.27 |
| 16QAM | 1/0 | 21.00 | 20.18 | 20.16 | 20.25 | 20.13 | 20.28 | 16QAM | 1/0 | 21.00 | 20.39 | 20.41 | 20.35 | 20.13 | 20.36 |
| | 1/12 | 21.00 | 20.27 | 20.15 | 20.34 | 20.06 | 20.33 | | 1/24 | 21.00 | 20.38 | 20.36 | 20.31 | 20.04 | 20.26 |
| | 1/24 | 21.00 | 20.20 | 20.11 | 20.26 | 20.04 | 20.26 | | 1/49 | 21.00 | 20.36 | 20.34 | 20.33 | 20.00 | 20.27 |
| | 12/0 | 21.00 | 20.13 | 20.10 | 20.17 | 19.99 | 20.15 | | 25/0 | 21.00 | 20.23 | 20.03 | 20.31 | 19.94 | 20.25 |
| | 12/6 | 21.00 | 20.18 | 20.12 | 20.23 | 19.96 | 20.16 | | 25/12 | 21.00 | 20.23 | 20.03 | 20.30 | 19.93 | 20.24 |
| | 12/13 | 21.00 | 20.15 | 20.11 | 20.20 | 19.96 | 20.16 | | 25/25 | 21.00 | 20.18 | 19.94 | 20.29 | 19.91 | 20.19 |
| | 25/0 | 21.00 | 20.12 | 20.09 | 20.26 | 19.98 | 20.10 | | 50/0 | 21.00 | 20.18 | 19.98 | 20.29 | 19.89 | 20.24 |
| 64QAM | 1/0 | 21.00 | 20.30 | 20.27 | 20.26 | 20.32 | 20.29 | 64QAM | 1/0 | 21.00 | 20.07 | 20.44 | 20.27 | 20.10 | 20.21 |
| | 1/12 | 21.00 | 20.36 | 20.26 | 20.33 | 20.30 | 20.36 | | 1/24 | 21.00 | 19.97 | 20.39 | 20.26 | 20.07 | 20.43 |
| | 1/24 | 21.00 | 20.28 | 20.20 | 20.25 | 20.22 | 20.27 | | 1/49 | 21.00 | 19.99 | 20.33 | 20.19 | 20.04 | 20.36 |
| | 12/0 | 21.00 | 20.08 | 20.07 | 20.22 | 19.96 | 20.20 | | 25/0 | 21.00 | 20.25 | 20.04 | 20.29 | 19.87 | 20.18 |
| | 12/6 | 21.00 | 20.13 | 20.10 | 20.24 | 20.02 | 20.23 | | 25/12 | 21.00 | 20.29 | 20.00 | 20.30 | 19.88 | 20.16 |
| | 12/13 | 21.00 | 20.10 | 20.08 | 20.20 | 19.99 | 20.20 | | 25/25 | 21.00 | 20.24 | 19.99 | 20.28 | 19.85 | 20.16 |
| | 25/0 | 21.00 | 20.04 | 20.12 | 20.28 | 19.88 | 20.07 | | 50/0 | 21.00 | 20.19 | 19.99 | 20.29 | 19.85 | 20.22 |

| LTE B41/ BW=15M | | Average Conducted Power(dBm) | | | | | | LTE B41/ BW=20M | | Average Conducted Power(dBm) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | | Modula -tion | RB Size/ Offset | Max. Tune up | Channel/Frequency(MHz) | | | | |
| | | | 39725/ 2503.5 | 40173/ 2548.3 | 40620/ 2593 | 41068/ 2637.8 | 41515/ 2682.5 | | | | 39750/ 2506 | 40185/ 2549.5 | 40620/ 2593 | 41055/ 2636.5 | 41490/ 2680 |
| QPSK | 1/0 | 21.00 | 20.27 | 20.31 | 20.46 | 20.12 | 20.49 | QPSK | 1/0 | 21.00 | 20.46 | 20.22 | 20.55 | 20.13 | **20.63** |
| | 1/37 | 21.00 | 20.13 | 20.11 | 20.36 | 19.95 | 20.27 | | 1/50 | 21.00 | 20.26 | 20.11 | 20.32 | 20.02 | 20.45 |
| | 1/74 | 21.00 | 20.16 | 20.06 | 20.38 | 19.90 | 20.19 | | 1/99 | 21.00 | 20.24 | 20.04 | 20.31 | 19.93 | 20.26 |
| | 36/0 | 21.00 | 20.28 | 20.15 | 20.43 | 20.04 | 20.30 | | 50/0 | 21.00 | 20.32 | 20.18 | 20.45 | 20.11 | **20.49** |
| | 36/19 | 21.00 | 20.26 | 20.10 | 20.38 | 19.99 | 20.30 | | 50/25 | 21.00 | 20.31 | 20.13 | 20.45 | 20.08 | 20.34 |
| | 36/39 | 21.00 | 20.27 | 20.06 | 20.37 | 19.96 | 20.26 | | 50/50 | 21.00 | 20.28 | 20.08 | 20.36 | 19.99 | 20.25 |
| | 75/0 | 21.00 | 20.27 | 20.12 | 20.38 | 20.00 | 20.32 | | 100/0 | 21.00 | 20.32 | 20.18 | 20.40 | 20.07 | 20.35 |
| 16QAM | 1/0 | 21.00 | 20.43 | 20.24 | 20.32 | 20.36 | 20.26 | 16QAM | 1/0 | 21.00 | 20.38 | 20.35 | 20.28 | 20.25 | 20.39 |
| | 1/37 | 21.00 | 20.34 | 20.15 | 20.20 | 20.21 | 20.04 | | 1/50 | 21.00 | 20.26 | 20.19 | 20.14 | 20.15 | 20.22 |
| | 1/74 | 21.00 | 20.34 | 20.04 | 20.21 | 20.25 | 19.95 | | 1/99 | 21.00 | 20.25 | 20.14 | 20.14 | 20.09 | 20.15 |
| | 36/0 | 21.00 | 20.22 | 20.02 | 20.33 | 19.94 | 20.29 | | 50/0 | 21.00 | 20.04 | 19.89 | 20.13 | 19.84 | 20.00 |
| | 36/19 | 21.00 | 20.23 | 20.00 | 20.29 | 19.91 | 20.27 | | 50/25 | 21.00 | 20.02 | 19.82 | 20.15 | 19.74 | 20.05 |
| | 36/39 | 21.00 | 20.19 | 19.94 | 20.28 | 19.88 | 20.24 | | 50/50 | 21.00 | 19.98 | 19.78 | 20.11 | 19.71 | 20.01 |
| | 75/0 | 21.00 | 20.21 | 19.95 | 20.29 | 19.95 | 20.21 | | 100/0 | 21.00 | 20.05 | 19.80 | 20.13 | 19.79 | 20.04 |
| 64QAM | 1/0 | 21.00 | 20.09 | 20.18 | 20.29 | 20.34 | 20.28 | 64QAM | 1/0 | 21.00 | 20.41 | 20.28 | 20.38 | 20.18 | 20.33 |
| | 1/37 | 21.00 | 19.93 | 20.02 | 20.36 | 20.25 | 20.08 | | 1/50 | 21.00 | 20.29 | 20.09 | 20.25 | 20.05 | 20.45 |
| | 1/74 | 21.00 | 19.99 | 19.98 | 20.38 | 20.17 | 20.19 | | 1/99 | 21.00 | 20.29 | 20.08 | 20.28 | 19.97 | 20.29 |
| | 36/0 | 21.00 | 20.32 | 20.01 | 20.43 | 19.98 | 20.23 | | 50/0 | 21.00 | 20.10 | 19.88 | 20.22 | 19.81 | 20.24 |
| | 36/19 | 21.00 | 20.32 | 20.03 | 20.42 | 19.95 | 20.28 | | 50/25 | 21.00 | 20.08 | 19.74 | 20.20 | 19.77 | 20.07 |
| | 36/39 | 21.00 | 20.32 | 19.95 | 20.38 | 19.85 | 20.16 | | 50/50 | 21.00 | 20.05 | 19.71 | 20.15 | 19.69 | 20.01 |
| | 75/0 | 21.00 | 20.25 | 20.00 | 20.34 | 19.93 | 20.28 | | 100/0 | 21.00 | 20.07 | 19.80 | 20.22 | 19.79 | 20.05 |

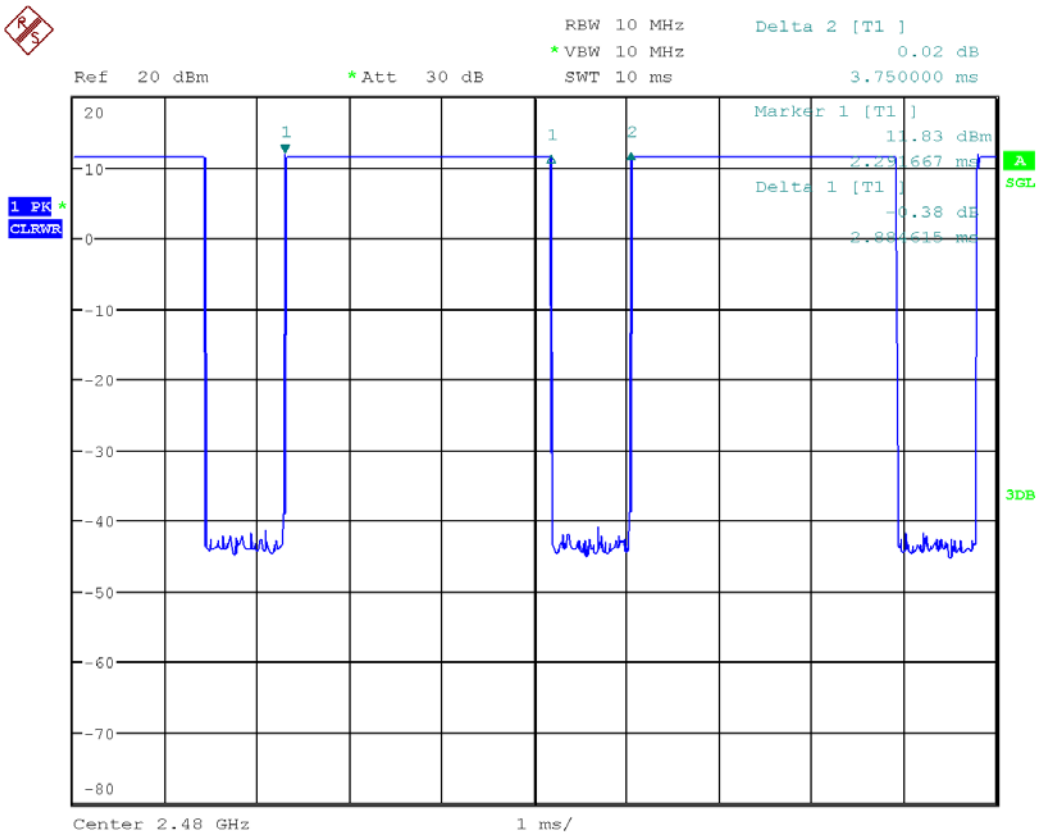
Note: The tested channels are marks in bold.

### 7.1.4 CONDUCTED POWER MEASUREMENTS OF BT

For BT SAR testing, BT engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power, and the CBT control the EUT operating with hoping off and data rate set for 2DH5. The SAR measurement takes full account of the BT duty cycle and is reflected in the report, and the duty factor of the device is as follow:

| BT | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|
| | Max. Tune up | CH0 2402MHz | CH39 2441MHz | CH78 2480MHz |
| DH5 | 12.00 | 11.02 | 11.17 | **11.22** |
| 2DH5 | 12.00 | 8.43 | 8.33 | 8.90 |
| 3DH5 | 12.00 | 8.41 | 8.34 | 8.88 |

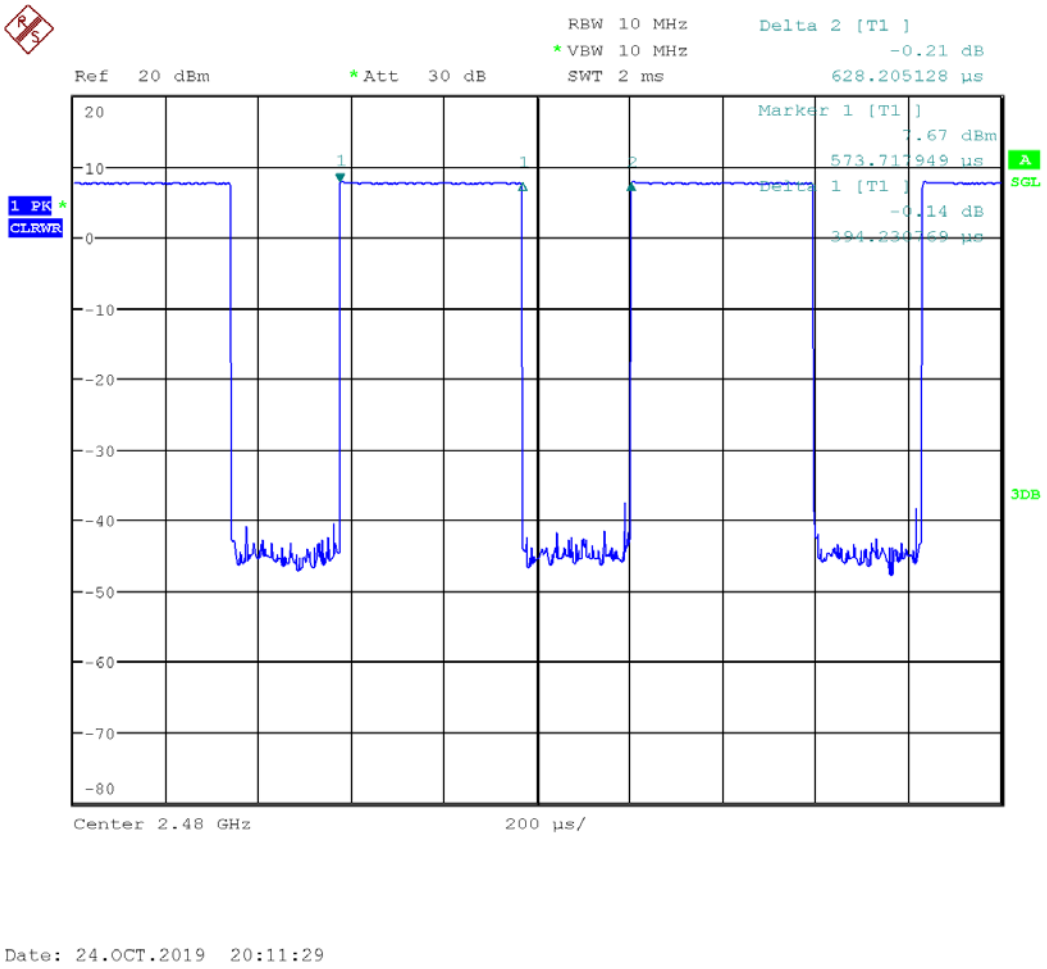
| MODE | ON Time (ms) | Total Time (ms) | Duty cycle |
|---|---|---|---|
| BT | 2.88 | 3.75 | 77% |




Date: 24.OCT.2019 20:09:16

| BT | Average Conducted Power(dBm) | | | |
|---|---|---|---|---|
| | Max. Tune up | CH0 2402MHz | CH19 2441MHz | CH39 2480MHz |
| BLE(1M) | 8.00 | 4.01 | 4.98 | 6.52 |
| BLE(2M) | 8.00 | 1.22 | 2.21 | 3.74 |

| MODE | ON Time (ms) | Total Time (ms) | Duty cycle |
|---|---|---|---|
| BLE | 0.39 | 0.63 | 63% |




Note:
1) The conducted power of BT is measured with RMS detector.
2) The tested channels are marks in bold.

### 7.1.5 CONDUCTED POWER MEASUREMENTS OF WIFI

1. Conducted power measurement results of WiFi 2.4G

| Mode | Channel | Frequency (MHz) | Data Rate (Mbps) | Max. Tune up | Average Power(dBm) |
|---|---|---|---|---|---|
| **802.11b** | 1 | 2412 | 1 | 19.00 | 18.78 |
| | 6 | 2437 | | 19.00 | 18.71 |
| | 11 | 2462 | | 19.00 | **18.97** |
| **802.11g** | 1 | 2412 | 6 | 17.00 | 16.85 |
| | 6 | 2437 | | 17.00 | 16.82 |
| | 11 | 2462 | | 17.00 | 16.74 |
| **802.11n HT20** | 1 | 2412 | 6.5 | 17.00 | 16.71 |
| | 6 | 2437 | | 17.00 | 16.64 |
| | 11 | 2462 | | 17.00 | 16.61 |

Note:

1) The Average conducted power of WiFi 2.4G is measured with RMS detector.

2) Per KDB248227 D01, for WiFi 2.4GHz, the highest measured maximum output power Channel for DSSS modes (802.11b) was selected for SAR measurement. SAR for OFDM modes (2.4GHz 802.11g/n) was not required When the highest reported SAR for DSSS is adjusted by the ratio of OFDM modes (802.11g/n) to DSSS modes (802.11b) specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

3) The tested channels are marks in bold.

2. Conducted power measurement results of WiFi 5.2G

| Band | Mode | Channel | Frequency (MHz) | Data Rate (Mbps) | Max. Tune-up | Average Power(dBm) |
|---|---|---|---|---|---|---|
| 5.2G | 802.11a | 36 | 5180 | 6 | 18.00 | 17.89 |
| | | 40 | 5200 | | 18.00 | 17.76 |
| | | 44 | 5220 | | 18.00 | 17.24 |
| | | 48 | 5240 | | 18.00 | 17.56 |
| | 802.11n HT20 | 36 | 5180 | MCS0 | 18.00 | 17.75 |
| | | 40 | 5200 | | 18.00 | 17.58 |
| | | 44 | 5220 | | 18.00 | 17.18 |
| | | 48 | 5240 | | 18.00 | 17.85 |
| | 802.11n HT40 | 38 | 5190 | MCS0 | 15.00 | 14.55 |
| | | 46 | 5230 | | 17.00 | 16.61 |
| | 802.11ac VHT20 | 36 | 5180 | MCS0 | 18.00 | 17.75 |
| | | 40 | 5200 | | 18.00 | 17.54 |
| | | 44 | 5220 | | 18.00 | 17.56 |
| | | 48 | 5240 | | 18.00 | 17.85 |
| | 802.11ac VHT40 | 38 | 5190 | MCS0 | 15.00 | 14.22 |
| | | 46 | 5230 | | 17.00 | 16.64 |
| | 802.11ac VHT80 | 42 | 5210 | MCS0 | 14.00 | 13.46 |

Note: The Average conducted power of WiFi 5.2G is measured with RMS detector.

3. Conducted power measurement results of WiFi 5.3G

| Band | Mode | Channel | Frequency (MHz) | Data Rate (Mbps) | Max. Tune-up | Average Power(dBm) |
|---|---|---|---|---|---|---|
| 5.3G | 802.11a | 52 | 5260 | 6 | 18.00 | 17.65 |
| | | 56 | 5280 | | 18.00 | 17.86 |
| | | 60 | 5300 | | 18.00 | **17.98** |
| | | 64 | 5320 | | 18.00 | 17.77 |
| | 802.11n HT20 | 52 | 5260 | MCS0 | 18.00 | 17.89 |
| | | 56 | 5280 | | 18.00 | 17.71 |
| | | 60 | 5300 | | 18.00 | 17.89 |
| | | 64 | 5320 | | 18.00 | 17.63 |
| | 802.11n HT40 | 54 | 5270 | MCS0 | 17.00 | 16.64 |
| | | 62 | 5310 | | 17.00 | 16.58 |
| | 802.11ac VHT20 | 52 | 5260 | MCS0 | 18.00 | 17.87 |
| | | 56 | 5280 | | 18.00 | 17.85 |
| | | 60 | 5300 | | 18.00 | 17.36 |
| | | 64 | 5320 | | 18.00 | 17.59 |
| | 802.11ac VHT40 | 54 | 5270 | MCS0 | 17.00 | 16.62 |
| | | 62 | 5310 | | 17.00 | 16.61 |
| | 802.11ac VHT80 | 58 | 5290 | MCS0 | 17.00 | 16.39 |

Note:
1) The Average conducted power of WiFi 5.3G is measured with RMS detector.
2) The tested channels are marks in bold.

4. Conducted power measurement results of WiFi 5.6G

| Band | Mode | Channel | Frequency (MHz) | Data Rate (Mbps) | Max. Tune-up | Average Power(dBm) |
|---|---|---|---|---|---|---|
| 5.6G | 802.11a | 100 | 5500 | 6 | 14.50 | **14.42** |
| | | 104 | 5520 | | 14.50 | 14.10 |
| | | 108 | 5540 | | 14.50 | 14.16 |
| | | 112 | 5560 | | 14.50 | 14.32 |
| | | 116 | 5580 | | 14.50 | 14.38 |
| | | 132 | 5660 | | 14.50 | 14.28 |
| | | 136 | 5680 | | 14.50 | 14.12 |
| | | 140 | 5700 | | 14.50 | 14.38 |
| | 802.11n HT20 | 100 | 5500 | MCS0 | 14.50 | 14.38 |
| | | 104 | 5520 | | 14.50 | 14.35 |
| | | 108 | 5540 | | 14.50 | 14.46 |
| | | 112 | 5560 | | 14.50 | 14.21 |
| | | 116 | 5580 | | 14.50 | 14.24 |
| | | 132 | 5660 | | 14.50 | 14.17 |
| | | 136 | 5680 | | 14.50 | 14.41 |
| | | 140 | 5700 | | 14.50 | 14.19 |
| | 802.11n HT40 | 102 | 5510 | MCS0 | 14.00 | 13.72 |
| | | 110 | 5550 | | 14.00 | 13.59 |
| | | 118 | 5590 | | 14.00 | 13.61 |
| | | 126 | 5630 | | 14.00 | 13.51 |
| | | 134 | 5670 | | 14.00 | 13.77 |
| | 802.11ac VHT20 | 100 | 5500 | MCS0 | 14.50 | 14.35 |
| | | 104 | 5520 | | 14.50 | 14.40 |
| | | 108 | 5540 | | 14.50 | 14.37 |
| | | 112 | 5560 | | 14.50 | 14.23 |
| | | 116 | 5580 | | 14.50 | 14.21 |
| | | 132 | 5660 | | 14.50 | 14.12 |
| | | 136 | 5680 | | 14.50 | 14.42 |
| | | 140 | 5700 | | 14.50 | 14.20 |
| | 802.11ac VHT40 | 102 | 5510 | MCS0 | 14.00 | 13.71 |
| | | 110 | 5550 | | 14.00 | 13.78 |
| | | 118 | 5590 | | 14.00 | 13.54 |
| | | 126 | 5630 | | 14.00 | 13.86 |
| | | 134 | 5670 | | 14.00 | 13.72 |
| | 802.11ac VHT80 | 106 | 5530 | MCS0 | 12.00 | 11.47 |
| | | 122 | 5610 | | 14.00 | 13.82 |

Note:
1) The Average conducted power of WiFi 5.6G is measured with RMS detector.
2) The tested channels are marks in bold.

5. Conducted power measurement results of WiFi 5.8G

| Band | Mode | Channel | Frequency (MHz) | Data Rate (Mbps) | Max. Tune-up | Average Power(dBm) |
|---|---|---|---|---|---|---|
| 5.8G | 802.11a | 149 | 5745 | 6 | 15.00 | **14.97** |
| | | 153 | 5765 | | 15.00 | 14.71 |
| | | 157 | 5785 | | 15.00 | 14.66 |
| | | 161 | 5805 | | 15.00 | 14.56 |
| | | 165 | 5825 | | 15.00 | 14.60 |
| | 802.11n HT20 | 149 | 5745 | MCS0 | 15.00 | 14.81 |
| | | 153 | 5765 | | 15.00 | 14.59 |
| | | 157 | 5785 | | 15.00 | 14.50 |
| | | 161 | 5805 | | 15.00 | 14.93 |
| | | 165 | 5825 | | 15.00 | 14.87 |
| | 802.11n HT40 | 151 | 5755 | MCS0 | 14.50 | 14.03 |
| | | 159 | 5795 | | 14.50 | 14.28 |
| | 802.11ac VHT20 | 149 | 5745 | MCS0 | 15.00 | 14.88 |
| | | 153 | 5765 | | 15.00 | 14.58 |
| | | 157 | 5785 | | 15.00 | 14.43 |
| | | 161 | 5805 | | 15.00 | 14.90 |
| | | 165 | 5825 | | 15.00 | 14.85 |
| | 802.11ac VHT40 | 151 | 5755 | MCS0 | 14.50 | 13.92 |
| | | 159 | 5795 | | 14.50 | 14.21 |
| | 802.11ac VHT80 | 155 | 5775 | MCS0 | 14.50 | 13.96 |

Note:
1) The Average conducted power of WiFi 5.8G is measured with RMS detector.
2) The tested channels are marks in bold.

## 7.2 SAR TEST RESULTS

**General Notes:**

1) Per KDB447498 D01, all measurement SAR results are scaled to the maximum tune-up tolerance limit to demonstrate compliant.
2) Per KDB447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is: ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz. When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used.
3) Per KDB865664 D01,for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8W/kg; if the deviation among the repeated measurement is ≤ 20%,and the measured SAR < 1.45W/kg, only one repeated measurement is required.
4) Per KDB941225 D06, the DUT Dimension is bigger than 9 cm x 5 cm, so 10mm is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
5) Per KDB648474 D04, SAR is evaluated without a headset connected to the device. When the standalone reported body-worn SAR is ≤1.2 W/kg, no additional SAR evaluations using a headset are required.
6) Per KDB865664 D02, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is > 1.5 W/kg, or > 7.0 W/kg for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing.

**GSM Notes:**

1) Per KDB648474 D04, body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
2) Per KDB941225 D01, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

**UMTS Notes:**

Per KDB941225 D01, When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

**LTE notes:**

1) The LTE test configurations are determined according to KDB941225 D05 SAR for LTE Devices. The general test procedures used for SAR testing can be found in Section 7.1.3.
2) A-MPR was disabled for all SAR test by setting NS_01 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames(maximum TTI)

**WLAN Notes:**

1. For exposure conditions with multiple test positions, such as handset operating next to the ear, devices with hotspot mode, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all positions in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions. Otherwise, SAR is evaluated at the subsequent highest peak SAR position until the reported SAR result is ≤ 0.8 W/kg or all test positions are measured.
2. Justification for test configurations for WLAN per KDB Publication 248227 for 2.4GHz WIFI single transmission chain operations, the highest measured maximum output power Channel for DSSS was selected for SAR measurement. SAR for OFDM modes (2.4GHz 802.11g/n) was not required due to the maximum allowed powers and the highest reported DSSS SAR. See Section 7.1.5 for more information.
3. Justification for test configurations for WLAN per KDB Publication 248227 for 5GHz WIFI single transmission chain operations, the initial test configuration was selected according to the transmission mode with the highest maximum allowed power. Other transmission modes were not investigated since the highest reported SAR for initial test configuration adjusted by the ratio of maximum output powers is less than 1.2W/kg. See Section 7.1.5 for more information.

### 7.2.1 SAR MEASUREMENT RESULT OF HEAD

1. Head SAR test results of GSM

| Test No. | Band | Mode | Channel | Test Position | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T01 | GSM 850 | GSM | 190 | Right Cheek | Main | 1 | 1 | 34 | 32.76 | -0.02 | 0.115 | 0.009 | 0.153 |
| T02 | GSM 850 | GSM | 190 | Right Tilted | Main | 1 | 1 | 34 | 32.76 | -0.05 | 0.058 | 0.046 | 0.077 |
| T03 | GSM 850 | GSM | 190 | Left Cheek | Main | 1 | 1 | 34 | 32.76 | 0.08 | 0.135 | 0.103 | 0.180 |
| T04 | GSM 850 | GSM | 190 | Left Tilted | Main | 1 | 1 | 34 | 32.76 | -0.09 | 0.062 | 0.049 | 0.083 |
| T05 | GSM 850 | GSM | 190 | Left Cheek | Main | 1 | 2 | 34 | 32.76 | 0.09 | 0.137 | 0.106 | 0.182 |
| T06 | GSM 850 | GSM | 190 | Left Cheek | Main | 1 | 3 | 34 | 32.76 | 0.1 | 0.136 | 0.105 | 0.181 |
| T07 | GSM 850 | GSM | 190 | Left Cheek | Main | 1 | 4 | 34 | 32.76 | 0.06 | 0.142 | 0.109 | 0.189 |
| T08 | GSM 850 | GSM | 190 | Left Cheek | Main | 1 | 5 | 34 | 32.76 | 0.16 | **0.154** | **0.118** | **0.205** |
| T10 | GSM 850 | GSM | 190 | Right Cheek | Second | 1 | 1 | 32.5 | 31.68 | 0.02 | 0.701 | 0.426 | 0.847 |
| T11 | GSM 850 | GSM | 190 | Right Tilted | Second | 1 | 1 | 32.5 | 31.68 | -0.01 | **0.817** | **0.398** | **0.987** |
| T12 | GSM 850 | GSM | 190 | Left Cheek | Second | 1 | 1 | 32.5 | 31.68 | -0.06 | 0.535 | 0.356 | 0.646 |
| T13 | GSM 850 | GSM | 190 | Left Tilted | Second | 1 | 1 | 32.5 | 31.68 | 0.1 | 0.491 | 0.303 | 0.593 |
| T14 | GSM 850 | GSM | 128 | Right Tilted | Second | 1 | 1 | 32.5 | 32.13 | 0.04 | 0.701 | 0.339 | 0.763 |
| T15 | GSM 850 | GSM | 251 | Right Tilted | Second | 1 | 1 | 32.5 | 31.93 | 0.02 | 0.794 | 0.392 | 0.905 |
| T1060 | GSM 850 | GSM | 128 | Right Cheek | Second | 1 | 1 | 32.5 | 32.13 | 0.09 | 0.654 | 0.372 | 0.712 |
| T1061 | GSM 850 | GSM | 251 | Right Cheek | Second | 1 | 1 | 32.5 | 31.93 | 0.07 | 0.682 | 0.388 | 0.778 |
| T16 | GSM 850 | GSM | 190 | Right Tilted | Second | 1 | 2 | 32.5 | 31.68 | 0.07 | 0.765 | 0.385 | 0.924 |
| T17 | GSM 850 | GSM | 190 | Right Tilted | Second | 1 | 3 | 32.5 | 31.68 | 0.04 | 0.652 | 0.334 | 0.787 |
| T18 | GSM 850 | GSM | 190 | Right Tilted | Second | 1 | 4 | 32.5 | 31.68 | 0.03 | 0.651 | 0.335 | 0.786 |
| T19 | GSM 850 | GSM | 190 | Right Tilted | Second | 1 | 5 | 32.5 | 31.68 | 0.04 | 0.745 | 0.380 | 0.900 |
| T20 | GSM 850 | GSM | 190 | Right Tilted | Second | 1 | 1 | 32.5 | 31.68 | -0.01 | 0.811 | 0.394 | 0.980 |
| T29 | GSM 850 | GSM | 190 | Right Tilted (Repeated) | Second | 1 | 1 | 32.5 | 31.68 | 0.05 | 0.802 | 0.394 | 0.969 |
| T21 | GSM 1900 | GSM | 661 | Right Cheek | Main | 1 | 1 | 31 | 30.14 | 0.02 | 0.068 | 0.044 | 0.083 |
| T22 | GSM 1900 | GSM | 661 | Right Tilted | Main | 1 | 1 | 31 | 30.14 | 0.18 | 0.058 | 0.036 | 0.071 |
| T23 | GSM 1900 | GSM | 661 | Left Cheek | Main | 1 | 1 | 31 | 30.14 | -0.09 | **0.097** | **0.057** | **0.119** |
| T24 | GSM 1900 | GSM | 661 | Left Tilted | Main | 1 | 1 | 31 | 30.14 | -0.07 | 0.054 | 0.032 | 0.066 |
| T25 | GSM 1900 | GSM | 661 | Left Cheek | Main | 1 | 2 | 31 | 30.14 | 0.07 | 0.084 | 0.049 | 0.102 |
| T26 | GSM 1900 | GSM | 661 | Left Cheek | Main | 1 | 3 | 31 | 30.14 | 0.02 | 0.091 | 0.053 | 0.111 |
| T27 | GSM 1900 | GSM | 661 | Left Cheek | Main | 1 | 4 | 31 | 30.14 | 0.09 | 0.072 | 0.042 | 0.088 |
| T28 | GSM 1900 | GSM | 661 | Left Cheek | Main | 1 | 5 | 31 | 30.14 | 0.01 | 0.088 | 0.050 | 0.107 |
| T30 | GSM 1900 | GSM | 661 | Right Cheek | Second | 1 | 1 | 26 | 25.74 | 0.08 | 0.501 | 0.247 | 0.532 |
| T31 | GSM 1900 | GSM | 661 | Right Tilted | Second | 1 | 1 | 26 | 25.74 | 0.01 | 0.599 | 0.271 | 0.636 |
| T32 | GSM 1900 | GSM | 661 | Left Cheek | Second | 1 | 1 | 26 | 25.74 | 0.05 | 0.331 | 0.181 | 0.351 |
| T33 | GSM 1900 | GSM | 661 | Left Tilted | Second | 1 | 1 | 26 | 25.74 | -0.02 | 0.412 | 0.217 | 0.437 |
| T34 | GSM 1900 | GSM | 661 | Right Tilted | Second | 1 | 2 | 26 | 25.74 | 0.03 | 0.675 | 0.302 | 0.717 |
| T35 | GSM 1900 | GSM | 661 | Right Tilted | Second | 1 | 3 | 26 | 25.74 | 0.06 | **0.725** | **0.325** | **0.770** |
| T36 | GSM 1900 | GSM | 661 | Right Tilted | Second | 1 | 4 | 26 | 25.74 | -0.02 | 0.659 | 0.322 | 0.700 |
| T37 | GSM 1900 | GSM | 661 | Right Tilted | Second | 1 | 5 | 26 | 25.74 | -0.08 | 0.687 | 0.324 | 0.729 |

Note: The value with boldface is the maximum SAR Value of each test band.

2. Head SAR test results of UMTS

| Test No. | Band | Mode | Channel | Test Position | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T39 | UMTS B2 | RMC12.2K | 9400 | Right Cheek | Main | 1 | 1 | 23 | 21.49 | 0.04 | 0.068 | 0.043 | 0.096 |
| T40 | UMTS B2 | RMC12.2K | 9400 | Right Tilted | Main | 1 | 1 | 23 | 21.49 | 0.08 | 0.058 | 0.037 | 0.082 |
| T41 | UMTS B2 | RMC12.2K | 9400 | Left Cheek | Main | 1 | 1 | 23 | 21.49 | 0.05 | 0.097 | 0.058 | 0.137 |
| T42 | UMTS B2 | RMC12.2K | 9400 | Left Tilted | Main | 1 | 1 | 23 | 21.49 | -0.01 | 0.048 | 0.028 | 0.068 |
| T43 | UMTS B2 | RMC12.2K | 9400 | Left Cheek | Main | 1 | 2 | 23 | 21.49 | 0.09 | 0.087 | 0.054 | 0.123 |
| T44 | UMTS B2 | RMC12.2K | 9400 | Left Cheek | Main | 1 | 3 | 23 | 21.49 | -0.15 | **0.113** | **0.070** | **0.160** |
| T45 | UMTS B2 | RMC12.2K | 9400 | Left Cheek | Main | 1 | 4 | 23 | 21.49 | 0.1 | 0.107 | 0.068 | 0.151 |
| T46 | UMTS B2 | RMC12.2K | 9400 | Left Cheek | Main | 1 | 5 | 23 | 21.49 | 0.17 | 0.108 | 0.067 | 0.153 |
| T48 | UMTS B2 | RMC12.2K | 9400 | Right Cheek | Second | 1 | 1 | 17.5 | 17.1 | 0.02 | 0.757 | 0.375 | 0.830 |
| T49 | UMTS B2 | RMC12.2K | 9400 | Right Tilted | Second | 1 | 1 | 17.5 | 17.1 | 0.05 | 0.927 | 0.421 | 1.016 |
| T50 | UMTS B2 | RMC12.2K | 9400 | Left Cheek | Second | 1 | 1 | 17.5 | 17.1 | 0.08 | 0.493 | 0.268 | 0.541 |
| T51 | UMTS B2 | RMC12.2K | 9400 | Left Tilted | Second | 1 | 1 | 17.5 | 17.1 | -0.01 | 0.629 | 0.330 | 0.690 |
| T52 | UMTS B2 | RMC12.2K | 9262 | Right Tilted | Second | 1 | 1 | 17.5 | 17.08 | 0.05 | 0.822 | 0.374 | 0.905 |
| T53 | UMTS B2 | RMC12.2K | 9538 | Right Tilted | Second | 1 | 1 | 17.5 | 17.09 | 0.17 | 0.960 | 0.433 | 1.055 |
| T1062 | UMTS B2 | RMC12.2K | 9262 | Right Cheek | Second | 1 | 1 | 17.5 | 17.08 | 0.02 | 0.618 | 0.374 | 0.681 |
| T1063 | UMTS B2 | RMC12.2K | 9538 | Right Cheek | Second | 1 | 1 | 17.5 | 17.09 | 0.07 | 0.772 | 0.383 | 0.848 |
| T54 | UMTS B2 | RMC12.2K | 9538 | Right Tilted | Second | 1 | 2 | 17.5 | 17.09 | 0.08 | 0.899 | 0.404 | 0.988 |
| T55 | UMTS B2 | RMC12.2K | 9538 | Right Tilted | Second | 1 | 3 | 17.5 | 17.09 | 0.08 | **0.970** | **0.440** | **1.066** |
| T56 | UMTS B2 | RMC12.2K | 9538 | Right Tilted | Second | 1 | 4 | 17.5 | 17.09 | 0.01 | 0.957 | 0.451 | 1.052 |
| T57 | UMTS B2 | RMC12.2K | 9538 | Right Tilted | Second | 1 | 5 | 17.5 | 17.09 | -0.07 | 0.936 | 0.449 | 1.029 |
| T58 | UMTS B2 | RMC12.2K | 9538 | Right Tilted (Repeated) | Second | 1 | 3 | 17.5 | 17.09 | 0.08 | 0.953 | 0.429 | 1.047 |
| T59 | UMTS B4 | RMC12.2K | 1413 | Right Cheek | Main | 1 | 1 | 25 | 24.43 | 0.03 | 0.109 | 0.070 | 0.124 |
| T60 | UMTS B4 | RMC12.2K | 1413 | Right Tilted | Main | 1 | 1 | 25 | 24.43 | 0.04 | 0.076 | 0.044 | 0.087 |
| T61 | UMTS B4 | RMC12.2K | 1413 | Left Cheek | Main | 1 | 1 | 25 | 24.43 | -0.19 | 0.192 | 0.119 | 0.219 |
| T62 | UMTS B4 | RMC12.2K | 1413 | Left Tilted | Main | 1 | 1 | 25 | 24.43 | -0.17 | 0.063 | 0.036 | 0.071 |
| T63 | UMTS B4 | RMC12.2K | 1413 | Left Cheek | Main | 1 | 2 | 25 | 24.43 | -0.09 | 0.144 | 0.091 | 0.164 |
| T64 | UMTS B4 | RMC12.2K | 1413 | Left Cheek | Main | 1 | 3 | 25 | 24.43 | 0.19 | **0.212** | **0.134** | **0.242** |
| T65 | UMTS B4 | RMC12.2K | 1413 | Left Cheek | Main | 1 | 4 | 25 | 24.43 | -0.06 | 0.192 | 0.122 | 0.219 |
| T66 | UMTS B4 | RMC12.2K | 1413 | Left Cheek | Main | 1 | 5 | 25 | 24.43 | -0.04 | 0.149 | 0.095 | 0.170 |
| T68 | UMTS B4 | RMC12.2K | 1413 | Right Cheek | Second | 1 | 1 | 19.5 | 19.19 | -0.16 | 0.877 | 0.454 | 0.942 |
| T69 | UMTS B4 | RMC12.2K | 1413 | Right Tilted | Second | 1 | 1 | 19.5 | 19.19 | 0.03 | 0.975 | 0.462 | 1.047 |
| T70 | UMTS B4 | RMC12.2K | 1413 | Left Cheek | Second | 1 | 1 | 19.5 | 19.19 | 0.02 | 0.578 | 0.337 | 0.621 |
| T71 | UMTS B4 | RMC12.2K | 1413 | Left Tilted | Second | 1 | 1 | 19.5 | 19.19 | 0.08 | 0.697 | 0.389 | 0.749 |
| T72 | UMTS B4 | RMC12.2K | 1312 | Right Tilted | Second | 1 | 1 | 19.5 | 19 | 0.03 | 0.921 | 0.450 | 1.033 |
| T73 | UMTS B4 | RMC12.2K | 1513 | Right Tilted | Second | 1 | 1 | 19.5 | 18.99 | 0.01 | 0.930 | 0.445 | 1.046 |
| T1064 | UMTS B4 | RMC12.2K | 1312 | Right Cheek | Second | 1 | 1 | 19.5 | 19 | 0.01 | 0.823 | 0.412 | 0.923 |
| T1065 | UMTS B4 | RMC12.2K | 1513 | Right Cheek | Second | 1 | 1 | 19.5 | 18.99 | 0.13 | 0.855 | 0.438 | 0.962 |
| T74 | UMTS B4 | RMC12.2K | 1413 | Right Tilted | Second | 1 | 2 | 19.5 | 19.19 | 0.08 | **0.999** | **0.469** | **1.073** |
| T75 | UMTS B4 | RMC12.2K | 1413 | Right Tilted | Second | 1 | 3 | 19.5 | 19.19 | 0.02 | 0.970 | 0.474 | 1.042 |
| T76 | UMTS B4 | RMC12.2K | 1413 | Right Tilted | Second | 1 | 4 | 19.5 | 19.19 | 0.02 | 0.977 | 0.459 | 1.049 |
| T77 | UMTS B4 | RMC12.2K | 1413 | Right Tilted | Second | 1 | 5 | 19.5 | 19.19 | 0.04 | 0.980 | 0.461 | 1.053 |
| T78 | UMTS B4 | RMC12.2K | 1413 | Right Tilted (Repeated) | Second | 1 | 2 | 19.5 | 19.19 | 0.03 | 0.982 | 0.460 | 1.055 |

| Test No. | Band | Mode | Channel | Test Position | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T79 | UMTS B5 | RMC12.2K | 4182 | Right Cheek | Main | 1 | 1 | 23 | 21.37 | -0.02 | 0.096 | 0.075 | 0.140 |
| T80 | UMTS B5 | RMC12.2K | 4182 | Right Tilted | Main | 1 | 1 | 23 | 21.37 | -0.01 | 0.049 | 0.039 | 0.072 |
| T81 | UMTS B5 | RMC12.2K | 4182 | Left Cheek | Main | 1 | 1 | 23 | 21.37 | 0.09 | 0.102 | 0.080 | 0.148 |
| T82 | UMTS B5 | RMC12.2K | 4182 | Left Tilted | Main | 1 | 1 | 23 | 21.37 | -0.01 | 0.050 | 0.040 | 0.073 |
| T83 | UMTS B5 | RMC12.2K | 4182 | Left Cheek | Main | 1 | 2 | 23 | 21.37 | -0.05 | 0.108 | 0.084 | 0.157 |
| T84 | UMTS B5 | RMC12.2K | 4182 | Left Cheek | Main | 1 | 3 | 23 | 21.37 | -0.03 | 0.108 | 0.085 | 0.157 |
| T85 | UMTS B5 | RMC12.2K | 4182 | Left Cheek | Main | 1 | 4 | 23 | 21.37 | 0.09 | **0.110** | **0.082** | **0.160** |
| T86 | UMTS B5 | RMC12.2K | 4182 | Left Cheek | Main | 1 | 5 | 23 | 21.37 | -0.11 | 0.109 | 0.085 | 0.159 |
| T88 | UMTS B5 | RMC12.2K | 4182 | Right Cheek | Second | 1 | 1 | 22 | 21.54 | 0.07 | 0.240 | 0.147 | 0.267 |
| T89 | UMTS B5 | RMC12.2K | 4182 | Right Tilted | Second | 1 | 1 | 22 | 21.54 | -0.01 | 0.257 | 0.138 | 0.286 |
| T90 | UMTS B5 | RMC12.2K | 4182 | Left Cheek | Second | 1 | 1 | 22 | 21.54 | -0.03 | 0.158 | 0.108 | 0.176 |
| T91 | UMTS B5 | RMC12.2K | 4182 | Left Tilted | Second | 1 | 1 | 22 | 21.54 | 0.05 | 0.218 | 0.135 | 0.242 |
| T92 | UMTS B5 | RMC12.2K | 4182 | Right Tilted | Second | 1 | 2 | 22 | 21.54 | 0.01 | 0.255 | 0.134 | 0.283 |
| T93 | UMTS B5 | RMC12.2K | 4182 | Right Tilted | Second | 1 | 3 | 22 | 21.54 | 0.04 | 0.262 | 0.137 | 0.291 |
| T94 | UMTS B5 | RMC12.2K | 4182 | Right Tilted | Second | 1 | 4 | 22 | 21.54 | 0.06 | **0.275** | **0.143** | **0.306** |
| T95 | UMTS B5 | RMC12.2K | 4182 | Right Tilted | Second | 1 | 5 | 22 | 21.54 | 0.01 | 0.230 | 0.123 | 0.256 |

Note: The value with boldface is the maximum SAR Value of each test band.

3. Head SAR test results of LTE

| Test No. | Band | Mode | Channel | RB | offset | Test Position | ANT | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T96 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Cheek | Main | 1 | 1 | 25 | 24.08 | 0.01 | 0.154 | 0.099 | 0.190 |
| T97 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Tilted | Main | 1 | 1 | 25 | 24.08 | 0.14 | 0.122 | 0.078 | 0.151 |
| T98 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Left Cheek | Main | 1 | 1 | 25 | 24.08 | -0.05 | 0.172 | 0.105 | 0.213 |
| T99 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Left Tilted | Main | 1 | 1 | 25 | 24.08 | -0.01 | 0.112 | 0.066 | 0.138 |
| T100 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Right Cheek | Main | 1 | 1 | 24 | 23.25 | 0.01 | 0.126 | 0.081 | 0.150 |
| T101 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Right Tilted | Main | 1 | 1 | 24 | 23.25 | 0.07 | 0.101 | 0.064 | 0.120 |
| T102 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Left Cheek | Main | 1 | 1 | 24 | 23.25 | 0.16 | 0.193 | 0.118 | 0.229 |
| T103 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Left Tilted | Main | 1 | 1 | 24 | 23.25 | -0.08 | 0.095 | 0.056 | 0.113 |
| T104 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Left Cheek | Main | 1 | 2 | 24 | 23.25 | 0.07 | **0.193** | **0.120** | **0.229** |
| T105 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Left Cheek | Main | 1 | 3 | 24 | 23.25 | 0.05 | 0.163 | 0.100 | 0.194 |
| T106 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Left Cheek | Main | 1 | 4 | 24 | 23.25 | 0.01 | 0.184 | 0.101 | 0.219 |
| T107 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Left Cheek | Main | 1 | 5 | 24 | 23.25 | 0.05 | 0.188 | 0.117 | 0.223 |
| T109 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Right Cheek | Second | 1 | 1 | 17.5 | 17.02 | 0.02 | 0.576 | 0.283 | 0.643 |
| T110 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.02 | 0 | 0.717 | 0.324 | 0.801 |
| T111 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Left Cheek | Second | 1 | 1 | 17.5 | 17.02 | 0.06 | 0.363 | 0.202 | 0.405 |
| T112 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Left Tilted | Second | 1 | 1 | 17.5 | 17.02 | 0.01 | 0.462 | 0.245 | 0.516 |
| T113 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Right Cheek | Second | 1 | 1 | 17.5 | 17 | -0.01 | 0.589 | 0.288 | 0.661 |
| T114 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17 | 0.14 | 0.734 | 0.331 | 0.824 |
| T115 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Left Cheek | Second | 1 | 1 | 17.5 | 17 | -0.02 | 0.368 | 0.205 | 0.413 |
| T116 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Left Tilted | Second | 1 | 1 | 17.5 | 17 | 0.04 | 0.470 | 0.248 | 0.527 |
| T119 | LTE B2 | QPSK20M | 18700 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 16.95 | 0.03 | 0.638 | 0.291 | 0.724 |
| T120 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 16.9 | 0.06 | 0.769 | 0.345 | 0.883 |
| T121 | LTE B2 | QPSK20M | 18700 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 16.92 | 0.02 | 0.731 | 0.327 | 0.835 |
| T122 | LTE B2 | QPSK20M | 19100 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 16.85 | 0.02 | 0.760 | 0.339 | 0.883 |
| T123 | LTE B2 | QPSK20M | 18900 | 100 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 16.93 | 0.04 | 0.712 | 0.346 | 0.812 |
| T124 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Tilted | Second | 1 | 2 | 17.5 | 16.9 | 0.01 | 0.800 | 0.359 | 0.919 |
| T125 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Tilted | Second | 1 | 3 | 17.5 | 16.9 | 0.07 | **0.856** | **0.378** | **0.983** |
| T126 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Tilted | Second | 1 | 4 | 17.5 | 16.9 | -0.05 | 0.788 | 0.365 | 0.905 |
| T127 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Tilted | Second | 1 | 5 | 17.5 | 16.9 | -0.1 | 0.790 | 0.368 | 0.907 |
| T128 | LTE B2 | QPSK20M | 19100 | 1 | 0 | Right Tilted (Repeated) | Second | 1 | 3 | 17.5 | 16.9 | 0.02 | 0.842 | 0.366 | 0.967 |
| T129 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Right Cheek | Main | 1 | 1 | 25 | 24.09 | 0.07 | 0.092 | 0.060 | 0.113 |
| T130 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Right Tilted | Main | 1 | 1 | 25 | 24.09 | 0.02 | 0.068 | 0.040 | 0.084 |
| T131 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Left Cheek | Main | 1 | 1 | 25 | 24.09 | 0.01 | 0.177 | 0.111 | 0.218 |
| T132 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Left Tilted | Main | 1 | 1 | 25 | 24.09 | -0.08 | 0.061 | 0.035 | 0.075 |
| T133 | LTE B4 | QPSK20M | 20175 | 50 | 0 | Right Cheek | Main | 1 | 1 | 24 | 23.3 | 0.06 | 0.073 | 0.048 | 0.086 |
| T134 | LTE B4 | QPSK20M | 20175 | 50 | 0 | Right Tilted | Main | 1 | 1 | 24 | 23.3 | 0.01 | 0.060 | 0.034 | 0.070 |
| T135 | LTE B4 | QPSK20M | 20175 | 50 | 0 | Left Cheek | Main | 1 | 1 | 24 | 23.3 | -0.05 | 0.137 | 0.086 | 0.161 |
| T136 | LTE B4 | QPSK20M | 20175 | 50 | 0 | Left Tilted | Main | 1 | 1 | 24 | 23.3 | -0.14 | 0.052 | 0.030 | 0.061 |
| T137 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Left Cheek | Main | 1 | 2 | 25 | 24.09 | 0.12 | 0.128 | 0.082 | 0.158 |
| T138 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Left Cheek | Main | 1 | 3 | 25 | 24.09 | 0.09 | **0.182** | **0.115** | **0.224** |
| T139 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Left Cheek | Main | 1 | 4 | 25 | 24.09 | 0.04 | 0.163 | 0.104 | 0.201 |
| T140 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Left Cheek | Main | 1 | 5 | 25 | 24.09 | 0.05 | 0.158 | 0.101 | 0.195 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | ANT | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T142 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Right Cheek | Second | 1 | 1 | 19.5 | 19.36 | 0 | 0.678 | 0.356 | 0.700 |
| T143 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Right Tilted | Second | 1 | 1 | 19.5 | 19.36 | 0.02 | 0.929 | 0.430 | 0.959 |
| T144 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Left Cheek | Second | 1 | 1 | 19.5 | 19.36 | 0.03 | 0.456 | 0.273 | 0.471 |
| T145 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Left Tilted | Second | 1 | 1 | 19.5 | 19.36 | -0.02 | 0.596 | 0.327 | 0.616 |
| T146 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Cheek | Second | 1 | 1 | 19.5 | 19.25 | 0.01 | 0.780 | 0.401 | 0.826 |
| T147 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Tilted | Second | 1 | 1 | 19.5 | 19.25 | -0.01 | 0.947 | 0.437 | 1.003 |
| T148 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Left Cheek | Second | 1 | 1 | 19.5 | 19.25 | 0.2 | 0.480 | 0.281 | 0.508 |
| T149 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Left Tilted | Second | 1 | 1 | 19.5 | 19.25 | 0.02 | 0.610 | 0.335 | 0.646 |
| T152 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Right Tilted | Second | 1 | 1 | 19.5 | 19.34 | -0.01 | 0.820 | 0.392 | 0.851 |
| T153 | LTE B4 | QPSK20M | 20300 | 1 | 0 | Right Tilted | Second | 1 | 1 | 19.5 | 19.31 | 0 | 0.821 | 0.390 | 0.858 |
| T154 | LTE B4 | QPSK20M | 20175 | 50 | 0 | Right Tilted | Second | 1 | 1 | 19.5 | 19.21 | 0.08 | 0.825 | 0.391 | 0.882 |
| T155 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Right Tilted | Second | 1 | 1 | 19.5 | 19.17 | -0.01 | 0.817 | 0.387 | 0.881 |
| T156 | LTE B4 | QPSK20M | 20175 | 100 | 0 | Right Tilted | Second | 1 | 1 | 19.5 | 19.18 | 0.05 | 0.793 | 0.374 | 0.854 |
| T157 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Tilted | Second | 1 | 2 | 19.5 | 19.25 | 0.05 | 0.873 | 0.409 | 0.925 |
| T158 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Tilted | Second | 1 | 3 | 19.5 | 19.25 | 0 | **1.000** | **0.465** | **1.059** |
| T159 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Tilted | Second | 1 | 4 | 19.5 | 19.25 | 0.06 | 0.861 | 0.401 | 0.912 |
| T160 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Tilted | Second | 1 | 5 | 19.5 | 19.25 | 0.14 | 0.896 | 0.423 | 0.949 |
| T161 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Tilted (Repeated) | Second | 1 | 3 | 19.5 | 19.25 | 0.06 | 0.989 | 0.452 | 1.048 |
| T162 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Right Cheek | Main | 1 | 1 | 25 | 24.36 | -0.09 | 0.120 | 0.095 | 0.139 |
| T163 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Right Tilted | Main | 1 | 1 | 25 | 24.36 | 0.08 | 0.060 | 0.047 | 0.069 |
| T164 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Left Cheek | Main | 1 | 1 | 25 | 24.36 | -0.01 | 0.145 | 0.114 | 0.168 |
| T165 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Left Tilted | Main | 1 | 1 | 25 | 24.36 | 0.03 | 0.064 | 0.051 | 0.075 |
| T166 | LTE B5 | QPSK10M | 20450 | 25 | 0 | Right Cheek | Main | 1 | 1 | 24 | 23.44 | 0.03 | 0.104 | 0.082 | 0.118 |
| T167 | LTE B5 | QPSK10M | 20450 | 25 | 0 | Right Tilted | Main | 1 | 1 | 24 | 23.44 | 0.1 | 0.051 | 0.040 | 0.058 |
| T168 | LTE B5 | QPSK10M | 20450 | 25 | 0 | Left Cheek | Main | 1 | 1 | 24 | 23.44 | -0.03 | 0.125 | 0.098 | 0.142 |
| T169 | LTE B5 | QPSK10M | 20450 | 25 | 0 | Left Tilted | Main | 1 | 1 | 24 | 23.44 | 0.01 | 0.055 | 0.044 | 0.063 |
| T170 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Left Cheek | Main | 1 | 2 | 25 | 24.36 | 0.08 | 0.157 | 0.120 | 0.182 |
| T171 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Left Cheek | Main | 1 | 3 | 25 | 24.36 | 0.07 | **0.166** | **0.128** | **0.192** |
| T172 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Left Cheek | Main | 1 | 4 | 25 | 24.36 | 0.09 | 0.164 | 0.127 | 0.190 |
| T173 | LTE B5 | QPSK10M | 20450 | 1 | 0 | Left Cheek | Main | 1 | 5 | 25 | 24.36 | 0.03 | 0.160 | 0.124 | 0.185 |
| T175 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Right Cheek | Second | 1 | 1 | 24.5 | 23.77 | 0.01 | 0.396 | 0.250 | 0.468 |
| T176 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Right Tilted | Second | 1 | 1 | 24.5 | 23.77 | 0.02 | 0.363 | 0.210 | 0.429 |
| T177 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Left Cheek | Second | 1 | 1 | 24.5 | 23.77 | -0.06 | 0.303 | 0.207 | 0.358 |
| T178 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Left Tilted | Second | 1 | 1 | 24.5 | 23.77 | 0.01 | 0.265 | 0.171 | 0.314 |
| T179 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Right Cheek | Second | 1 | 1 | 23.5 | 23.29 | 0.02 | 0.406 | 0.253 | 0.426 |
| T180 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Right Tilted | Second | 1 | 1 | 23.5 | 23.29 | 0 | 0.368 | 0.213 | 0.386 |
| T181 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Left Cheek | Second | 1 | 1 | 23.5 | 23.29 | 0.01 | 0.307 | 0.209 | 0.322 |
| T182 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Left Tilted | Second | 1 | 1 | 23.5 | 23.29 | 0.01 | 0.262 | 0.169 | 0.275 |
| T183 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Right Cheek | Second | 1 | 2 | 24.5 | 23.77 | -0.01 | 0.381 | 0.235 | 0.451 |
| T184 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Right Cheek | Second | 1 | 3 | 24.5 | 23.77 | 0.02 | 0.565 | 0.323 | 0.668 |
| T185 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Right Cheek | Second | 1 | 4 | 24.5 | 23.77 | -0.06 | **0.588** | **0.335** | **0.696** |
| T186 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Right Cheek | Second | 1 | 5 | 24.5 | 23.77 | 0.04 | 0.496 | 0.287 | 0.587 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | ANT | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T188 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Cheek | Main | 1 | 1 | 25 | 24.18 | 0.05 | 0.221 | 0.113 | 0.267 |
| T189 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Tilted | Main | 1 | 1 | 25 | 24.18 | -0.02 | 0.291 | 0.154 | 0.351 |
| T190 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Left Cheek | Main | 1 | 1 | 25 | 24.18 | -0.09 | 0.270 | 0.149 | 0.326 |
| T191 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Left Tilted | Main | 1 | 1 | 25 | 24.18 | 0.02 | 0.152 | 0.084 | 0.184 |
| T192 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Right Cheek | Main | 1 | 1 | 24 | 23.26 | 0.03 | 0.198 | 0.110 | 0.235 |
| T193 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Right Tilted | Main | 1 | 1 | 24 | 23.26 | 0.06 | 0.242 | 0.128 | 0.287 |
| T194 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Left Cheek | Main | 1 | 1 | 24 | 23.26 | 0.02 | 0.227 | 0.125 | 0.269 |
| T195 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Left Tilted | Main | 1 | 1 | 24 | 23.26 | 0.07 | 0.133 | 0.072 | 0.158 |
| T196 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Tilted | Main | 1 | 2 | 25 | 24.18 | 0.02 | **0.363** | **0.189** | **0.438** |
| T197 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Tilted | Main | 1 | 3 | 25 | 24.18 | 0.02 | 0.289 | 0.149 | 0.349 |
| T198 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Tilted | Main | 1 | 4 | 25 | 24.18 | 0.13 | 0.314 | 0.164 | 0.379 |
| T199 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Tilted | Main | 1 | 5 | 25 | 24.18 | 0.09 | 0.349 | 0.181 | 0.422 |
| T201 | LTE B7 | QPSK20M | 20850 | 1 | 0 | Right Cheek | Second | 1 | 1 | 15.5 | 15.46 | 0.03 | 0.641 | 0.264 | 0.647 |
| T202 | LTE B7 | QPSK20M | 20850 | 1 | 0 | Right Tilted | Second | 1 | 1 | 15.5 | 15.46 | 0.03 | 0.900 | 0.342 | 0.908 |
| T203 | LTE B7 | QPSK20M | 20850 | 1 | 0 | Left Cheek | Second | 1 | 1 | 15.5 | 15.46 | 0.08 | 0.293 | 0.128 | 0.296 |
| T204 | LTE B7 | QPSK20M | 20850 | 1 | 0 | Left Tilted | Second | 1 | 1 | 15.5 | 15.46 | 0.09 | 0.401 | 0.172 | 0.405 |
| T205 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Right Cheek | Second | 1 | 1 | 15.5 | 15.34 | 0.04 | 0.645 | 0.266 | 0.669 |
| T206 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Right Tilted | Second | 1 | 1 | 15.5 | 15.34 | 0.01 | **0.924** | **0.352** | **0.959** |
| T207 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Left Cheek | Second | 1 | 1 | 15.5 | 15.34 | 0.04 | 0.300 | 0.131 | 0.311 |
| T208 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Left Tilted | Second | 1 | 1 | 15.5 | 15.34 | 0.05 | 0.412 | 0.177 | 0.427 |
| T211 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Tilted | Second | 1 | 1 | 15.5 | 15.39 | 0.09 | 0.861 | 0.334 | 0.883 |
| T212 | LTE B7 | QPSK20M | 21350 | 1 | 0 | Right Tilted | Second | 1 | 1 | 15.5 | 15.43 | 0.04 | 0.802 | 0.311 | 0.815 |
| T213 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Right Tilted | Second | 1 | 1 | 15.5 | 15.33 | 0.05 | 0.875 | 0.340 | 0.910 |
| T214 | LTE B7 | QPSK20M | 21350 | 50 | 0 | Right Tilted | Second | 1 | 1 | 15.5 | 15.28 | 0.03 | 0.794 | 0.308 | 0.835 |
| T215 | LTE B7 | QPSK20M | 21100 | 100 | 0 | Right Tilted | Second | 1 | 1 | 15.5 | 15.29 | 0.02 | 0.856 | 0.332 | 0.898 |
| T216 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Right Tilted | Second | 1 | 2 | 15.5 | 15.34 | 0.04 | 0.879 | 0.333 | 0.912 |
| T217 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Right Tilted | Second | 1 | 3 | 15.5 | 15.34 | 0.09 | 0.893 | 0.346 | 0.927 |
| T218 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Right Tilted | Second | 1 | 4 | 15.5 | 15.34 | 0.07 | 0.872 | 0.326 | 0.905 |
| T219 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Right Tilted | Second | 1 | 5 | 15.5 | 15.34 | 0.03 | 0.869 | 0.329 | 0.902 |
| T220 | LTE B7 | QPSK20M | 20850 | 50 | 0 | Right Tilted (Repeated) | Second | 1 | 1 | 15.5 | 15.34 | 0.04 | 0.908 | 0.343 | 0.942 |
| T221 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Right Cheek | Main | 1 | 1 | 25 | 24.08 | 0.06 | 0.096 | 0.068 | 0.119 |
| T222 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Right Tilted | Main | 1 | 1 | 25 | 24.08 | 0.02 | 0.058 | 0.041 | 0.072 |
| T223 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Left Cheek | Main | 1 | 1 | 25 | 24.08 | -0.04 | 0.113 | 0.095 | 0.140 |
| T224 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Left Tilted | Main | 1 | 1 | 25 | 24.08 | 0.03 | 0.068 | 0.051 | 0.084 |
| T225 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Right Cheek | Main | 1 | 1 | 24 | 23.12 | 0.07 | 0.088 | 0.062 | 0.108 |
| T226 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Right Tilted | Main | 1 | 1 | 24 | 23.12 | 0.09 | 0.053 | 0.038 | 0.065 |
| T227 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Cheek | Main | 1 | 1 | 24 | 23.12 | 0.14 | 0.117 | 0.089 | 0.143 |
| T228 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Tilted | Main | 1 | 1 | 24 | 23.12 | 0.03 | 0.063 | 0.047 | 0.077 |
| T229 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Cheek | Main | 1 | 2 | 24 | 23.12 | 0.01 | 0.118 | 0.087 | 0.145 |
| T230 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Cheek | Main | 1 | 3 | 24 | 23.12 | -0.12 | **0.125** | **0.094** | **0.153** |
| T231 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Cheek | Main | 1 | 4 | 24 | 23.12 | 0 | 0.112 | 0.083 | 0.137 |
| T232 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Cheek | Main | 1 | 5 | 24 | 23.12 | 0.06 | 0.120 | 0.090 | 0.147 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | ANT | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T234 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Right Cheek | Second | 1 | 1 | 25 | 24.39 | 0.07 | 0.260 | 0.171 | 0.299 |
| T235 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Right Tilted | Second | 1 | 1 | 25 | 24.39 | 0.02 | 0.234 | 0.147 | 0.269 |
| T236 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Left Cheek | Second | 1 | 1 | 25 | 24.39 | 0.11 | 0.207 | 0.139 | 0.238 |
| T237 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Left Tilted | Second | 1 | 1 | 25 | 24.39 | 0.06 | 0.209 | 0.134 | 0.241 |
| T238 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Right Cheek | Second | 1 | 1 | 24 | 23.65 | -0.04 | 0.198 | 0.130 | 0.215 |
| T239 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Right Tilted | Second | 1 | 1 | 24 | 23.65 | -0.01 | 0.178 | 0.112 | 0.193 |
| T240 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Cheek | Second | 1 | 1 | 24 | 23.65 | 0.06 | 0.161 | 0.108 | 0.175 |
| T241 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Tilted | Second | 1 | 1 | 24 | 23.65 | 0.19 | 0.162 | 0.104 | 0.176 |
| T242 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Right Cheek | Second | 1 | 2 | 25 | 24.39 | 0.04 | 0.273 | 0.182 | 0.314 |
| T243 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Right Cheek | Second | 1 | 3 | 25 | 24.39 | 0.04 | **0.357** | **0.220** | **0.411** |
| T244 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Right Cheek | Second | 1 | 4 | 25 | 24.39 | 0.05 | 0.284 | 0.188 | 0.327 |
| T245 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Right Cheek | Second | 1 | 5 | 25 | 24.39 | -0.07 | 0.279 | 0.184 | 0.321 |
| T247 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Cheek | Main | 1 | 1 | 25 | 23.92 | 0.01 | 0.109 | 0.057 | 0.140 |
| T248 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Tilted | Main | 1 | 1 | 25 | 23.92 | 0.05 | 0.094 | 0.049 | 0.120 |
| T249 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Left Cheek | Main | 1 | 1 | 25 | 23.92 | 0.04 | 0.100 | 0.051 | 0.128 |
| T250 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Left Tilted | Main | 1 | 1 | 25 | 23.92 | 0.04 | 0.056 | 0.029 | 0.072 |
| T251 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Right Cheek | Main | 1 | 1 | 24 | 23.11 | 0.05 | 0.087 | 0.045 | 0.107 |
| T252 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Right Tilted | Main | 1 | 1 | 24 | 23.11 | 0.07 | 0.072 | 0.037 | 0.088 |
| T253 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Left Cheek | Main | 1 | 1 | 24 | 23.11 | -0.01 | 0.084 | 0.042 | 0.103 |
| T254 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Left Tilted | Main | 1 | 1 | 24 | 23.11 | 0.07 | 0.043 | 0.022 | 0.053 |
| T255 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Cheek | Main | 1 | 2 | 25 | 23.92 | 0.06 | 0.133 | 0.068 | 0.171 |
| T256 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Cheek | Main | 1 | 3 | 25 | 23.92 | 0.08 | **0.217** | **0.112** | **0.278** |
| T257 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Cheek | Main | 1 | 4 | 25 | 23.92 | 0.17 | 0.143 | 0.076 | 0.183 |
| T258 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Cheek | Main | 1 | 5 | 25 | 23.92 | 0.06 | 0.211 | 0.109 | 0.271 |
| T260 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Cheek | Second | 1 | 1 | 17.5 | 17.22 | 0.03 | 0.593 | 0.254 | 0.632 |
| T261 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.22 | 0.17 | **0.835** | **0.320** | **0.891** |
| T262 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Left Cheek | Second | 1 | 1 | 17.5 | 17.22 | 0.08 | 0.236 | 0.104 | 0.252 |
| T263 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Left Tilted | Second | 1 | 1 | 17.5 | 17.22 | 0.03 | 0.349 | 0.149 | 0.372 |
| T264 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Right Cheek | Second | 1 | 1 | 17.5 | 17.12 | 0.03 | 0.579 | 0.249 | 0.632 |
| T265 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.12 | 0.02 | 0.808 | 0.311 | 0.882 |
| T266 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Left Cheek | Second | 1 | 1 | 17.5 | 17.12 | 0.04 | 0.231 | 0.102 | 0.252 |
| T267 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Left Tilted | Second | 1 | 1 | 17.5 | 17.12 | 0.17 | 0.336 | 0.143 | 0.367 |
| T270 | LTE B38 | QPSK20M | 38000 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.2 | 0.04 | 0.790 | 0.302 | 0.847 |
| T271 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.19 | 0.06 | 0.729 | 0.283 | 0.783 |
| T272 | LTE B38 | QPSK20M | 38000 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.1 | 0.09 | 0.773 | 0.295 | 0.848 |
| T273 | LTE B38 | QPSK20M | 38150 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.09 | 0.08 | 0.702 | 0.271 | 0.772 |
| T274 | LTE B38 | QPSK20M | 37850 | 100 | 0 | Right Tilted | Second | 1 | 1 | 17.5 | 17.16 | 0.07 | 0.799 | 0.306 | 0.864 |
| T275 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Tilted | Second | 1 | 2 | 17.5 | 17.22 | 0.09 | 0.825 | 0.317 | 0.880 |
| T276 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Tilted | Second | 1 | 3 | 17.5 | 17.22 | 0.13 | 0.822 | 0.317 | 0.877 |
| T277 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Tilted | Second | 1 | 4 | 17.5 | 17.22 | 0.02 | 0.825 | 0.319 | 0.880 |
| T278 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Tilted | Second | 1 | 5 | 17.5 | 17.22 | 0.04 | 0.802 | 0.307 | 0.855 |
| T279 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Tilted (Repeated) | Second | 1 | 1 | 17.5 | 17.22 | 0.17 | 0.823 | 0.312 | 0.878 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | ANT | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T280 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Right Cheek | Main | 1 | 1 | 25 | 24.05 | -0.07 | 0.102 | 0.053 | 0.127 |
| T281 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Right Tilted | Main | 1 | 1 | 25 | 24.05 | 0.07 | 0.086 | 0.044 | 0.107 |
| T282 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Left Cheek | Main | 1 | 1 | 25 | 24.05 | -0.01 | 0.083 | 0.039 | 0.103 |
| T283 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Left Tilted | Main | 1 | 1 | 25 | 24.05 | 0.02 | 0.066 | 0.035 | 0.082 |
| T284 | LTE B41 | QPSK20M | 39750 | 50 | 0 | Right Cheek | Main | 1 | 1 | 24 | 23.14 | 0.01 | 0.082 | 0.042 | 0.100 |
| T285 | LTE B41 | QPSK20M | 39750 | 50 | 0 | Right Tilted | Main | 1 | 1 | 24 | 23.14 | 0.07 | 0.065 | 0.034 | 0.079 |
| T286 | LTE B41 | QPSK20M | 39750 | 50 | 0 | Left Cheek | Main | 1 | 1 | 24 | 23.14 | 0.09 | 0.061 | 0.029 | 0.074 |
| T287 | LTE B41 | QPSK20M | 39750 | 50 | 0 | Left Tilted | Main | 1 | 1 | 24 | 23.14 | 0.03 | 0.048 | 0.025 | 0.059 |
| T288 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Right Cheek | Main | 1 | 2 | 25 | 24.05 | 0.01 | 0.161 | 0.087 | 0.200 |
| T289 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Right Cheek | Main | 1 | 3 | 25 | 24.05 | 0.05 | **0.177** | **0.092** | **0.220** |
| T290 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Right Cheek | Main | 1 | 4 | 25 | 24.05 | -0.07 | 0.174 | 0.093 | 0.217 |
| T291 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Right Cheek | Main | 1 | 5 | 25 | 24.05 | -0.1 | 0.165 | 0.085 | 0.205 |
| T293 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Right Cheek | Second | 1 | 1 | 17 | 16.85 | -0.05 | 0.547 | 0.261 | 0.566 |
| T294 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.85 | 0.03 | 0.591 | 0.257 | 0.612 |
| T295 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Left Cheek | Second | 1 | 1 | 17 | 16.85 | -0.03 | 0.157 | 0.093 | 0.163 |
| T296 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Left Tilted | Second | 1 | 1 | 17 | 16.85 | 0.08 | 0.185 | 0.109 | 0.192 |
| T297 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Right Cheek | Second | 1 | 1 | 17 | 16.76 | 0.1 | 0.542 | 0.257 | 0.573 |
| T298 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.76 | 0.06 | 0.578 | 0.252 | 0.611 |
| T299 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Left Cheek | Second | 1 | 1 | 17 | 16.76 | 0.1 | 0.142 | 0.091 | 0.150 |
| T300 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Left Tilted | Second | 1 | 1 | 17 | 16.76 | 0.04 | 0.180 | 0.107 | 0.190 |
| T1066 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.84 | 0.02 | 0.691 | 0.266 | 0.717 |
| T1067 | LTE B41 | QPSK20M | 40185 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.66 | 0.07 | 0.685 | 0.280 | 0.741 |
| T1068 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.75 | 0.16 | 0.666 | 0.261 | 0.705 |
| T1069 | LTE B41 | QPSK20M | 41055 | 1 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.63 | 0.09 | 0.542 | 0.217 | 0.590 |
| T1070 | LTE B41 | QPSK20M | 39750 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.73 | 0.04 | 0.689 | 0.265 | 0.733 |
| T1071 | LTE B41 | QPSK20M | 40185 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.62 | 0.02 | 0.636 | 0.278 | 0.694 |
| T1072 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Right Tilted | Second | 1 | 1 | 17 | 16.56 | 0.08 | 0.640 | 0.252 | 0.708 |
| T1073 | LTE B41 | QPSK20M | 41055 | 50 | 25 | Right Tilted | Second | 1 | 1 | 17 | 16.58 | 0.01 | 0.599 | 0.223 | 0.660 |
| T303 | LTE B41 | QPSK20M | 40185 | 1 | 0 | Right Tilted | Second | 1 | 2 | 17 | 16.66 | 0.06 | 0.736 | 0.278 | 0.796 |
| T304 | LTE B41 | QPSK20M | 40185 | 1 | 0 | Right Tilted | Second | 1 | 3 | 17 | 16.66 | 0.09 | **0.758** | **0.286** | **0.820** |
| T305 | LTE B41 | QPSK20M | 40185 | 1 | 0 | Right Tilted | Second | 1 | 4 | 17 | 16.66 | 0.07 | 0.708 | 0.272 | 0.766 |
| T306 | LTE B41 | QPSK20M | 40185 | 1 | 0 | Right Tilted | Second | 1 | 5 | 17 | 16.66 | 0.02 | 0.659 | 0.266 | 0.713 |

Note: The value with boldface is the maximum SAR Value of each test band.

4. Head SAR test results of CA

| Test No. | PCC | | | | | SCC | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power | Test Position | Ant | Battery | Power Drift | SAR 1g | SAR 10g | Reported 10g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band | Band width [MHZ] | Modulation | Chan Nel (UL) | RB Size/ Offset | Band | Band width [MHZ] | Modulation | Chan Nel (UL) | RB Size/ Offset | | | | | | | | | |
| T953 | LTE B7 | 20 | QPSK | 21100 | 1/0 | LTE B7 | 20 | QPSK | 20902 | 1/99 | 25 | 24.02 | Right Tilted | Main | 1 | 0.03 | 0.275 | 0.141 | 0.345 |
| T954 | LTE B7 | 20 | QPSK | 21100 | 1/0 | LTE B7 | 20 | QPSK | 20902 | 1/99 | 25 | 24.02 | Right Tilted | Main | 2 | 0.09 | 0.252 | 0.129 | 0.316 |
| T955 | LTE B7 | 20 | QPSK | 21100 | 1/0 | LTE B7 | 20 | QPSK | 20902 | 1/99 | 25 | 24.02 | Right Tilted | Main | 3 | 0.02 | **0.296** | **0.152** | **0.371** |
| T956 | LTE B7 | 20 | QPSK | 21100 | 1/0 | LTE B7 | 20 | QPSK | 20902 | 1/99 | 25 | 24.02 | Right Tilted | Main | 4 | 0.01 | 0.262 | 0.136 | 0.328 |
| T957 | LTE B7 | 20 | QPSK | 21100 | 1/0 | LTE B7 | 20 | QPSK | 20902 | 1/99 | 25 | 24.02 | Right Tilted | Main | 5 | 0.13 | 0.282 | 0.144 | 0.353 |
| T959 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 15.5 | 15.19 | Right Tilted | Second | 1 | -0.05 | 0.777 | 0.282 | 0.834 |
| T960 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 15.5 | 15.19 | Right Tilted | Second | 2 | 0.07 | 0.770 | 0.292 | 0.827 |
| T961 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 15.5 | 15.19 | Right Tilted | Second | 3 | 0.05 | **0.816** | **0.313** | **0.876** |
| T962 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 15.5 | 15.19 | Right Tilted | Second | 4 | 0.06 | 0.787 | 0.308 | 0.845 |
| T963 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 15.5 | 15.19 | Right Tilted | Second | 5 | 0.1 | 0.800 | 0.310 | 0.859 |
| T964 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 15.5 | 15.19 | Right Tilted (Repeated) | Second | 3 | 0.03 | 0.810 | 0.308 | 0.870 |
| T965 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 25 | 23.95 | Right Tilted | Main | 1 | 0.09 | 0.144 | 0.073 | 0.183 |
| T966 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 25 | 23.95 | Right Tilted | Main | 2 | 0.04 | 0.136 | 0.071 | 0.173 |
| T967 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 25 | 23.95 | Right Tilted | Main | 3 | 0.05 | **0.149** | **0.077** | **0.190** |
| T968 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 25 | 23.95 | Right Tilted | Main | 4 | 0.06 | 0.132 | 0.065 | 0.168 |
| T969 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 25 | 23.95 | Right Tilted | Main | 5 | -0.02 | 0.128 | 0.059 | 0.163 |
| T971 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 17.5 | 17.25 | Right Tilted | Second | 1 | 0.04 | 0.573 | 0.223 | 0.607 |
| T972 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 17.5 | 17.25 | Right Tilted | Second | 2 | 0.01 | 0.582 | 0.242 | 0.616 |
| T973 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 17.5 | 17.25 | Right Tilted | Second | 3 | 0.06 | **0.613** | **0.239** | **0.649** |
| T974 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 17.5 | 17.25 | Right Tilted | Second | 4 | 0.07 | 0.607 | 0.226 | 0.643 |
| T975 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 17.5 | 17.25 | Right Tilted | Second | 5 | 0.02 | 0.591 | 0.213 | 0.626 |
| T977 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 25 | 23.54 | Right Cheek | Main | 1 | 0.08 | 0.153 | 0.073 | 0.214 |
| T978 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 25 | 23.54 | Right Cheek | Main | 2 | 0.01 | 0.143 | 0.069 | 0.200 |
| T979 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 25 | 23.54 | Right Cheek | Main | 3 | 0.03 | **0.233** | **0.115** | **0.326** |
| T980 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 25 | 23.54 | Right Cheek | Main | 4 | 0.13 | 0.184 | 0.089 | 0.258 |
| T981 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 25 | 23.54 | Right Cheek | Main | 5 | 0.04 | 0.202 | 0.097 | 0.283 |
| T983 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 17 | 16.67 | Right Tilted | Second | 1 | 0.07 | 0.342 | 0.135 | 0.369 |
| T984 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 17 | 16.67 | Right Tilted | Second | 2 | 0.11 | 0.350 | 0.150 | 0.378 |
| T985 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 17 | 16.67 | Right Tilted | Second | 3 | 0.08 | **0.373** | **0.149** | **0.402** |
| T986 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 17 | 16.67 | Right Tilted | Second | 4 | 0.02 | 0.334 | 0.126 | 0.360 |
| T987 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 17 | 16.67 | Right Tilted | Second | 5 | -0.06 | 0.347 | 0.137 | 0.374 |

Note: The value with boldface is the maximum SAR Value of each test band.

5. Head SAR test results of BT

| Test No. | Band | Channel | Test Position | Battery | Data Rate | Maximum Tune-up (dBm) | Conducted Power (dBm) | Duty cycle | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T316 | BT DH5 | 78 | Right Cheek | 1 | 1 | 12 | 11.22 | 77% | -0.11 | 0.067 | 0.036 | 0.105 |
| T317 | BT DH5 | 78 | Right Tilted | 1 | 1 | 12 | 11.22 | 77% | -0.06 | 0.086 | 0.039 | 0.133 |
| T318 | BT DH5 | 78 | Left Cheek | 1 | 1 | 12 | 11.22 | 77% | -0.02 | **0.154** | **0.071** | **0.240** |
| T319 | BT DH5 | 78 | Left Tilted | 1 | 1 | 12 | 11.22 | 77% | 0.01 | 0.124 | 0.055 | 0.193 |
| T320 | BT DH5 | 78 | Left Cheek | 2 | 1 | 12 | 11.22 | 77% | 0.07 | 0.132 | 0.062 | 0.206 |
| T321 | BT DH5 | 78 | Left Cheek | 3 | 1 | 12 | 11.22 | 77% | 0.03 | 0.146 | 0.068 | 0.228 |
| T322 | BT DH5 | 78 | Left Cheek | 4 | 1 | 12 | 11.22 | 77% | -0.05 | 0.139 | 0.065 | 0.217 |
| T323 | BT DH5 | 78 | Left Cheek | 5 | 1 | 12 | 11.22 | 77% | 0.08 | 0.118 | 0.058 | 0.184 |

Note: The value with boldface is the maximum SAR Value of each test band.

6. Head SAR test results of WIFI

| Test No. | Band | Channel | Test Position | Battery | Data Rate | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T307 | 802.11b | 11 | Right Cheek | 1 | 1 | 19 | 18.97 | 0.12 | 0.330 | 0.170 | 0.332 |
| T308 | 802.11b | 11 | Right Tilted | 1 | 1 | 19 | 18.97 | 0.08 | 0.372 | 0.175 | 0.375 |
| T309 | 802.11b | 11 | Left Cheek | 1 | 1 | 19 | 18.97 | -0.07 | **0.766** | **0.351** | **0.771** |
| T310 | 802.11b | 11 | Left Tilted | 1 | 1 | 19 | 18.97 | 0.09 | 0.577 | 0.256 | 0.581 |
| T311 | 802.11b | 11 | Left Cheek | 2 | 1 | 19 | 18.97 | 0.03 | 0.723 | 0.332 | 0.728 |
| T312 | 802.11b | 11 | Left Cheek | 3 | 1 | 19 | 18.97 | 0.07 | 0.714 | 0.324 | 0.719 |
| T313 | 802.11b | 11 | Left Cheek | 4 | 1 | 19 | 18.97 | 0.15 | 0.741 | 0.342 | 0.746 |
| T314 | 802.11b | 11 | Left Cheek | 5 | 1 | 19 | 18.97 | 0.02 | 0.728 | 0.336 | 0.733 |
| T325 | 802.11a | 60 | Right Cheek | 1 | 6 | 18 | 17.98 | 0.07 | 0.136 | 0.043 | 0.137 |
| T326 | 802.11a | 60 | Right Tilted | 1 | 6 | 18 | 17.98 | -0.04 | 0.156 | 0.051 | 0.157 |
| T327 | 802.11a | 60 | Left Cheek | 1 | 6 | 18 | 17.98 | 0.01 | 0.383 | 0.118 | 0.385 |
| T328 | 802.11a | 60 | Left Tilted | 1 | 6 | 18 | 17.98 | 0.09 | 0.476 | 0.135 | 0.478 |
| T329 | 802.11a | 60 | Left Tilted | 2 | 6 | 18 | 17.98 | 0.02 | 0.391 | 0.127 | 0.393 |
| T330 | 802.11a | 60 | Left Tilted | 3 | 6 | 18 | 17.98 | -0.05 | 0.387 | 0.131 | 0.389 |
| T331 | 802.11a | 60 | Left Tilted | 4 | 6 | 18 | 17.98 | 0.03 | **0.634** | **0.173** | **0.637** |
| T332 | 802.11a | 60 | Left Tilted | 5 | 6 | 18 | 17.98 | 0.02 | 0.519 | 0.120 | 0.521 |
| T334 | 802.11a | 100 | Right Cheek | 1 | 6 | 14.5 | 14.42 | -0.07 | 0.203 | 0.063 | 0.207 |
| T335 | 802.11a | 100 | Right Tilted | 1 | 6 | 14.5 | 14.42 | 0.05 | 0.207 | 0.064 | 0.211 |
| T336 | 802.11a | 100 | Left Cheek | 1 | 6 | 14.5 | 14.42 | 0.02 | **0.626** | **0.177** | **0.638** |
| T337 | 802.11a | 100 | Left Tilted | 1 | 6 | 14.5 | 14.42 | 0.03 | 0.608 | 0.170 | 0.619 |
| T1074 | 802.11a | 116 | Left Cheek | 1 | 14.5 | 14.38 | - | 0.01 | 0.597 | 0.165 | 0.614 |
| T1075 | 802.11a | 140 | Left Cheek | 1 | 14.5 | 14.38 | - | 0.08 | 0.552 | 0.143 | 0.567 |
| T1076 | 802.11a | 116 | Left Tilted | 1 | 14.5 | 14.38 | - | 0.16 | 0.574 | 0.156 | 0.590 |
| T1077 | 802.11a | 140 | Left Tilted | 1 | 14.5 | 14.38 | - | 0.09 | 0.537 | 0.137 | 0.552 |
| T338 | 802.11a | 100 | Left Cheek | 2 | 6 | 14.5 | 14.42 | -0.12 | 0.601 | 0.164 | 0.612 |
| T339 | 802.11a | 100 | Left Cheek | 3 | 6 | 14.5 | 14.42 | -0.09 | 0.597 | 0.151 | 0.608 |
| T340 | 802.11a | 100 | Left Cheek | 4 | 6 | 14.5 | 14.42 | 0.09 | 0.506 | 0.135 | 0.515 |
| T341 | 802.11a | 100 | Left Cheek | 5 | 6 | 14.5 | 14.42 | 0.09 | 0.551 | 0.146 | 0.561 |
| T343 | 802.11a | 149 | Right Cheek | 1 | 6 | 15 | 14.97 | -0.03 | 0.181 | 0.055 | 0.182 |
| T344 | 802.11a | 149 | Right Tilted | 1 | 6 | 15 | 14.97 | 0.08 | 0.182 | 0.055 | 0.183 |
| T345 | 802.11a | 149 | Left Cheek | 1 | 6 | 15 | 14.97 | 0.09 | **0.573** | **0.148** | **0.577** |
| T346 | 802.11a | 149 | Left Tilted | 1 | 6 | 15 | 14.97 | 0.19 | 0.498 | 0.131 | 0.501 |
| T347 | 802.11a | 149 | Left Cheek | 2 | 6 | 15 | 14.97 | -0.01 | 0.512 | 0.138 | 0.516 |
| T348 | 802.11a | 149 | Left Cheek | 3 | 6 | 15 | 14.97 | 0 | 0.526 | 0.143 | 0.530 |
| T349 | 802.11a | 149 | Left Cheek | 4 | 6 | 15 | 14.97 | 0 | 0.324 | 0.088 | 0.326 |
| T350 | 802.11a | 149 | Left Cheek | 5 | 6 | 15 | 14.97 | 0 | 0.500 | 0.131 | 0.503 |

Note: The value with boldface is the maximum SAR Value of each test band.

### 7.2.2 SAR MEASUREMENT RESULT OF BODY-WORN

1. Body-worn SAR test results of GSM

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T351 | GSM 850 | GSM | 190 | Front Face | 1.5 | Main | 1 | 1 | 32 | 31.31 | -0.1 | 0.074 | 0.057 | 0.087 |
| T352 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Main | 1 | 1 | 32 | 31.31 | 0.06 | 0.092 | 0.070 | 0.107 |
| T353 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Main | 1 | 2 | 32 | 31.31 | -0.06 | 0.095 | 0.072 | 0.111 |
| T354 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Main | 1 | 3 | 32 | 31.31 | -0.04 | **0.102** | **0.077** | **0.120** |
| T355 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Main | 1 | 4 | 32 | 31.31 | 0.04 | 0.098 | 0.075 | 0.115 |
| T356 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Main | 1 | 5 | 32 | 31.31 | 0.06 | 0.095 | 0.073 | 0.111 |
| T368 | GSM 850 | GSM | 190 | Front Face | 1.5 | Second | 1 | 1 | 33 | 32.77 | 0.03 | 0.096 | 0.074 | 0.102 |
| T369 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Second | 1 | 1 | 33 | 32.77 | 0.07 | 0.108 | 0.083 | 0.114 |
| T370 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Second | 1 | 2 | 33 | 32.77 | 0.11 | **0.118** | **0.090** | **0.124** |
| T371 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Second | 1 | 3 | 33 | 32.77 | 0.04 | 0.111 | 0.085 | 0.117 |
| T372 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Second | 1 | 4 | 33 | 32.77 | 0.05 | 0.106 | 0.081 | 0.112 |
| T373 | GSM 850 | GSM | 190 | Rear Face | 1.5 | Second | 1 | 5 | 33 | 32.77 | 0.06 | 0.108 | 0.082 | 0.114 |
| T384 | GSM 1900 | GSM | 661 | Front Face | 1.5 | Main | 1 | 1 | 28 | 27.57 | 0.15 | 0.111 | 0.069 | 0.123 |
| T385 | GSM 1900 | GSM | 661 | Rear Face | 1.5 | Main | 1 | 1 | 28 | 27.57 | 0.03 | **0.190** | **0.118** | **0.210** |
| T386 | GSM 1900 | GSM | 661 | Rear Face | 1.5 | Main | 1 | 2 | 28 | 27.57 | 0.04 | 0.184 | 0.115 | 0.203 |
| T387 | GSM 1900 | GSM | 661 | Rear Face | 1.5 | Main | 1 | 3 | 28 | 27.57 | 0.03 | 0.172 | 0.105 | 0.190 |
| T388 | GSM 1900 | GSM | 661 | Rear Face | 1.5 | Main | 1 | 4 | 28 | 27.57 | 0.15 | 0.157 | 0.097 | 0.173 |
| T389 | GSM 1900 | GSM | 661 | Rear Face | 1.5 | Main | 1 | 5 | 28 | 27.57 | 0.14 | 0.185 | 0.115 | 0.204 |
| T401 | GSM 1900 | GSM | 661 | Front Face | 1.5 | Second | 1 | 1 | 29 | 28.82 | 0.08 | 0.136 | 0.080 | 0.142 |
| T402 | GSM 1900 | GSM | 661 | Rear Face | 1.5 | Second | 1 | 1 | 29 | 28.82 | 0.16 | 0.120 | 0.075 | 0.125 |
| T403 | GSM 1900 | GSM | 661 | Front Face | 1.5 | Second | 1 | 2 | 29 | 28.82 | 0.14 | 0.115 | 0.069 | 0.120 |
| T404 | GSM 1900 | GSM | 661 | Front Face | 1.5 | Second | 1 | 3 | 29 | 28.82 | 0.04 | 0.134 | 0.078 | 0.140 |
| T405 | GSM 1900 | GSM | 661 | Front Face | 1.5 | Second | 1 | 4 | 29 | 28.82 | 0.08 | 0.134 | 0.080 | 0.140 |
| T406 | GSM 1900 | GSM | 661 | Front Face | 1.5 | Second | 1 | 5 | 29 | 28.82 | 0.02 | **0.138** | **0.082** | **0.144** |

Note: The value with boldface is the maximum SAR Value of each test band.

2. Body-worn SAR test results of UMTS

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T417 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1.5 | Main | 1 | 1 | 21 | 20.54 | 0.12 | 0.163 | 0.103 | 0.181 |
| T418 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1.5 | Main | 1 | 1 | 21 | 20.54 | 0.03 | 0.276 | 0.172 | 0.307 |
| T419 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1.5 | Main | 1 | 2 | 21 | 20.54 | -0.02 | 0.258 | 0.159 | 0.287 |
| T420 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1.5 | Main | 1 | 3 | 21 | 20.54 | 0 | **0.282** | **0.173** | **0.314** |
| T421 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1.5 | Main | 1 | 4 | 21 | 20.54 | -0.04 | 0.268 | 0.164 | 0.298 |
| T422 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1.5 | Main | 1 | 5 | 21 | 20.54 | -0.1 | 0.276 | 0.171 | 0.307 |
| T436 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1.5 | Second | 1 | 1 | 21 | 20.93 | 0.04 | **0.233** | **0.138** | **0.237** |
| T437 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1.5 | Second | 1 | 1 | 21 | 20.93 | -0.04 | 0.210 | 0.131 | 0.213 |
| T438 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1.5 | Second | 1 | 2 | 21 | 20.93 | 0.03 | 0.212 | 0.126 | 0.215 |
| T439 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1.5 | Second | 1 | 3 | 21 | 20.93 | 0.14 | 0.203 | 0.122 | 0.206 |
| T440 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1.5 | Second | 1 | 4 | 21 | 20.93 | -0.01 | 0.204 | 0.122 | 0.207 |
| T441 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1.5 | Second | 1 | 5 | 21 | 20.93 | 0.05 | 0.212 | 0.127 | 0.215 |
| T452 | UMTS B4 | RMC12.2K | 1413 | Front Face | 1.5 | Main | 1 | 1 | 21.5 | 21.28 | 0.09 | 0.167 | 0.106 | 0.176 |
| T453 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Main | 1 | 1 | 21.5 | 21.28 | -0.01 | **0.291** | **0.183** | **0.306** |
| T454 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Main | 1 | 2 | 21.5 | 21.28 | 0.06 | 0.278 | 0.169 | 0.292 |
| T455 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Main | 1 | 3 | 21.5 | 21.28 | 0.02 | 0.284 | 0.173 | 0.299 |
| T456 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Main | 1 | 4 | 21.5 | 21.28 | 0.14 | 0.251 | 0.161 | 0.264 |
| T457 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Main | 1 | 5 | 21.5 | 21.28 | 0.02 | 0.266 | 0.167 | 0.280 |
| T471 | UMTS B4 | RMC12.2K | 1413 | Front Face | 1.5 | Second | 1 | 1 | 22 | 21.59 | 0.06 | 0.162 | 0.100 | 0.178 |
| T472 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Second | 1 | 1 | 22 | 21.59 | 0.06 | **0.179** | **0.109** | **0.197** |
| T473 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Second | 1 | 2 | 22 | 21.59 | 0.02 | 0.152 | 0.092 | 0.167 |
| T474 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Second | 1 | 3 | 22 | 21.59 | 0.07 | 0.165 | 0.100 | 0.181 |
| T475 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Second | 1 | 4 | 22 | 21.59 | 0.01 | 0.173 | 0.105 | 0.190 |
| T476 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1.5 | Second | 1 | 5 | 22 | 21.59 | 0.05 | 0.168 | 0.102 | 0.185 |
| T487 | UMTS B5 | RMC12.2K | 4182 | Front Face | 1.5 | Main | 1 | 1 | 23 | 21.37 | 0.01 | 0.071 | 0.055 | 0.103 |
| T488 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Main | 1 | 1 | 23 | 21.37 | -0.02 | 0.087 | 0.066 | 0.127 |
| T489 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Main | 1 | 2 | 23 | 21.37 | 0 | 0.096 | 0.072 | 0.139 |
| T490 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Main | 1 | 3 | 23 | 21.37 | 0.03 | **0.100** | **0.075** | **0.146** |
| T491 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Main | 1 | 4 | 23 | 21.37 | 0.02 | 0.094 | 0.071 | 0.137 |
| T492 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Main | 1 | 5 | 23 | 21.37 | -0.01 | 0.098 | 0.074 | 0.142 |
| T504 | UMTS B5 | RMC12.2K | 4182 | Front Face | 1.5 | Second | 1 | 1 | 22 | 21.54 | 0.03 | 0.025 | 0.019 | 0.027 |
| T505 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Second | 1 | 1 | 22 | 21.54 | -0.05 | 0.029 | 0.021 | 0.032 |
| T506 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Second | 1 | 2 | 22 | 21.54 | -0.03 | 0.027 | 0.020 | 0.030 |
| T507 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Second | 1 | 3 | 22 | 21.54 | -0.05 | 0.030 | 0.023 | 0.033 |
| T508 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Second | 1 | 4 | 22 | 21.54 | 0.15 | **0.032** | **0.023** | **0.036** |
| T509 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1.5 | Second | 1 | 5 | 22 | 21.54 | 0.02 | 0.030 | 0.022 | 0.034 |

Note: The value with boldface is the maximum SAR Value of each test band.

3. Body-worn SAR test results of LTE

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T520 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Front Face | 1.5 | Main | 1 | 1 | 20.5 | 20.21 | -0.05 | 0.173 | 0.110 | 0.185 |
| T521 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 20.5 | 20.21 | -0.16 | 0.293 | 0.184 | 0.313 |
| T522 | LTE B2 | QPSK20M | 18900 | 50 | 25 | Front Face | 1.5 | Main | 1 | 1 | 20.5 | 20.13 | 0.05 | 0.169 | 0.108 | 0.184 |
| T523 | LTE B2 | QPSK20M | 18900 | 50 | 25 | Rear Face | 1.5 | Main | 1 | 1 | 20.5 | 20.13 | 0.03 | **0.297** | **0.186** | **0.323** |
| T526 | LTE B2 | QPSK20M | 18900 | 50 | 25 | Rear Face | 1.5 | Main | 1 | 2 | 20.5 | 20.13 | 0.03 | 0.242 | 0.150 | 0.264 |
| T527 | LTE B2 | QPSK20M | 18900 | 50 | 25 | Rear Face | 1.5 | Main | 1 | 3 | 20.5 | 20.13 | 0.02 | 0.249 | 0.155 | 0.271 |
| T528 | LTE B2 | QPSK20M | 18900 | 50 | 25 | Rear Face | 1.5 | Main | 1 | 4 | 20.5 | 20.13 | 0.04 | 0.245 | 0.151 | 0.267 |
| T529 | LTE B2 | QPSK20M | 18900 | 50 | 25 | Rear Face | 1.5 | Main | 1 | 5 | 20.5 | 20.13 | 0 | 0.261 | 0.162 | 0.284 |
| T548 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Front Face | 1.5 | Second | 1 | 1 | 21 | 20.67 | 0.06 | 0.184 | 0.112 | 0.199 |
| T549 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 21 | 20.67 | 0.08 | 0.179 | 0.110 | 0.193 |
| T550 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1.5 | Second | 1 | 1 | 21 | 20.63 | 0.09 | 0.197 | 0.119 | 0.215 |
| T551 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 21 | 20.63 | 0.08 | 0.179 | 0.111 | 0.195 |
| T554 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1.5 | Second | 1 | 2 | 21 | 20.63 | 0.11 | 0.209 | 0.126 | 0.228 |
| T555 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1.5 | Second | 1 | 3 | 21 | 20.63 | 0.14 | 0.228 | 0.136 | 0.248 |
| T556 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1.5 | Second | 1 | 4 | 21 | 20.63 | 0.1 | 0.229 | 0.137 | 0.249 |
| T557 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1.5 | Second | 1 | 5 | 21 | 20.63 | 0.12 | **0.234** | **0.141** | **0.255** |
| T574 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Front Face | 1.5 | Main | 1 | 1 | 21.5 | 21.25 | 0.09 | 0.186 | 0.119 | 0.197 |
| T575 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 21.5 | 21.25 | 0.14 | 0.321 | 0.202 | 0.340 |
| T576 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Front Face | 1.5 | Main | 1 | 1 | 21.5 | 21.15 | 0.1 | 0.185 | 0.117 | 0.201 |
| T577 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 21.5 | 21.15 | 0.11 | 0.319 | 0.201 | 0.346 |
| T580 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 2 | 21.5 | 21.15 | 0.03 | 0.322 | 0.208 | 0.349 |
| T581 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 3 | 21.5 | 21.15 | 0.13 | **0.333** | **0.216** | **0.361** |
| T582 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 4 | 21.5 | 21.15 | 0.09 | 0.312 | 0.201 | 0.338 |
| T583 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 5 | 21.5 | 21.15 | 0.12 | 0.308 | 0.203 | 0.334 |
| T607 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Front Face | 1.5 | Second | 1 | 1 | 22.5 | 22.48 | 0.02 | 0.216 | 0.132 | 0.217 |
| T608 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 22.5 | 22.48 | 0.04 | 0.243 | 0.147 | 0.244 |
| T609 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Front Face | 1.5 | Second | 1 | 1 | 22.5 | 22.35 | 0.06 | 0.215 | 0.132 | 0.223 |
| T610 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 22.5 | 22.35 | 0.05 | 0.243 | 0.147 | 0.252 |
| T613 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 2 | 22.5 | 22.35 | 0.01 | 0.243 | 0.146 | 0.252 |
| T614 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 3 | 22.5 | 22.35 | 0.07 | **0.251** | **0.153** | **0.260** |
| T615 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 4 | 22.5 | 22.35 | 0.09 | 0.237 | 0.140 | 0.245 |
| T616 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 5 | 22.5 | 22.35 | 0.03 | 0.221 | 0.136 | 0.229 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T633 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Front Face | 1.5 | Main | 1 | 1 | 24.5 | 23.41 | -0.04 | 0.131 | 0.101 | 0.168 |
| T634 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1.5 | Main | 1 | 1 | 24.5 | 23.41 | 0.01 | 0.161 | 0.123 | 0.207 |
| T635 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Front Face | 1.5 | Main | 1 | 1 | 23.5 | 22.98 | 0.05 | 0.106 | 0.082 | 0.119 |
| T636 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 23.5 | 22.98 | 0.02 | 0.132 | 0.101 | 0.149 |
| T637 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1.5 | Main | 1 | 2 | 24.5 | 23.41 | 0 | 0.168 | 0.129 | 0.216 |
| T638 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1.5 | Main | 1 | 3 | 24.5 | 23.41 | -0.04 | **0.191** | **0.146** | **0.245** |
| T639 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1.5 | Main | 1 | 4 | 24.5 | 23.41 | 0.03 | 0.172 | 0.134 | 0.221 |
| T640 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1.5 | Main | 1 | 5 | 24.5 | 23.41 | 0.01 | 0.184 | 0.139 | 0.236 |
| T657 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Front Face | 1.5 | Second | 1 | 1 | 25 | 24.16 | -0.01 | 0.048 | 0.033 | 0.058 |
| T658 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 25 | 24.16 | 0.07 | 0.050 | 0.035 | 0.061 |
| T659 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Front Face | 1.5 | Second | 1 | 1 | 24 | 23.31 | 0.03 | 0.044 | 0.031 | 0.051 |
| T660 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Rear Face | 1.5 | Second | 1 | 1 | 24 | 23.31 | 0.03 | 0.045 | 0.033 | 0.053 |
| T661 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 2 | 25 | 24.16 | 0.01 | 0.043 | 0.032 | 0.053 |
| T662 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 3 | 25 | 24.16 | 0.01 | 0.053 | 0.037 | 0.064 |
| T663 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 4 | 25 | 24.16 | 0.04 | **0.056** | **0.039** | **0.068** |
| T664 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 5 | 25 | 24.16 | 0.07 | 0.053 | 0.037 | 0.065 |
| T679 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Front Face | 1.5 | Main | 1 | 1 | 21.5 | 20.99 | 0.13 | 0.195 | 0.111 | 0.219 |
| T680 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 21.5 | 20.99 | 0.07 | 0.219 | 0.121 | 0.246 |
| T681 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Front Face | 1.5 | Main | 1 | 1 | 21.5 | 20.91 | 0.17 | 0.199 | 0.113 | 0.228 |
| T682 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 21.5 | 20.91 | 0.16 | 0.223 | 0.123 | 0.255 |
| T685 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 2 | 21.5 | 20.91 | 0.04 | 0.213 | 0.117 | 0.244 |
| T686 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 3 | 21.5 | 20.91 | 0.03 | 0.247 | 0.135 | 0.283 |
| T687 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 4 | 21.5 | 20.91 | 0.04 | 0.247 | 0.133 | 0.283 |
| T688 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 5 | 21.5 | 20.91 | 0.09 | **0.264** | **0.142** | **0.302** |
| T707 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Front Face | 1.5 | Second | 1 | 1 | 17 | 16.95 | 0.17 | 0.141 | 0.070 | 0.143 |
| T708 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 17 | 16.95 | -0.1 | 0.180 | 0.086 | 0.182 |
| T709 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Front Face | 1.5 | Second | 1 | 1 | 17 | 16.94 | 0.09 | 0.151 | 0.075 | 0.153 |
| T710 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 17 | 16.94 | -0.03 | 0.190 | 0.091 | 0.193 |
| T713 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 2 | 17 | 16.94 | -0.07 | 0.270 | 0.134 | 0.274 |
| T714 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 3 | 17 | 16.94 | 0.07 | **0.297** | **0.148** | **0.301** |
| T715 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 4 | 17 | 16.94 | -0.18 | 0.248 | 0.125 | 0.251 |
| T716 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 5 | 17 | 16.94 | -0.01 | 0.269 | 0.131 | 0.273 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T733 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Front Face | 1.5 | Main | 1 | 1 | 25 | 24.08 | -0.04 | 0.093 | 0.071 | 0.115 |
| T734 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 25 | 24.08 | 0.03 | 0.117 | 0.082 | 0.145 |
| T735 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Front Face | 1.5 | Main | 1 | 1 | 24 | 23.12 | 0.09 | 0.092 | 0.070 | 0.113 |
| T736 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 24 | 23.12 | -0.02 | 0.115 | 0.082 | 0.141 |
| T737 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1.5 | Main | 1 | 2 | 24 | 23.12 | 0.16 | 0.122 | 0.088 | 0.149 |
| T738 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1.5 | Main | 1 | 3 | 24 | 23.12 | -0.01 | **0.135** | **0.102** | **0.165** |
| T739 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1.5 | Main | 1 | 4 | 24 | 23.12 | 0.04 | 0.102 | 0.073 | 0.125 |
| T740 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1.5 | Main | 1 | 5 | 24 | 23.12 | 0.07 | 0.125 | 0.088 | 0.153 |
| T757 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Front Face | 1.5 | Second | 1 | 1 | 25 | 24.39 | 0 | 0.032 | 0.024 | 0.037 |
| T758 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Rear Face | 1.5 | Second | 1 | 1 | 25 | 24.39 | 0.05 | **0.037** | **0.026** | **0.042** |
| T759 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Front Face | 1.5 | Second | 1 | 1 | 24 | 23.65 | 0.01 | 0.024 | 0.017 | 0.026 |
| T760 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 24 | 23.65 | 0.07 | 0.027 | 0.019 | 0.029 |
| T761 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Rear Face | 1.5 | Second | 1 | 2 | 25 | 24.39 | -0.12 | 0.031 | 0.023 | 0.036 |
| T762 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Rear Face | 1.5 | Second | 1 | 3 | 25 | 24.39 | -0.03 | 0.034 | 0.025 | 0.039 |
| T763 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Rear Face | 1.5 | Second | 1 | 4 | 25 | 24.39 | 0.1 | 0.029 | 0.020 | 0.033 |
| T764 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Rear Face | 1.5 | Second | 1 | 5 | 25 | 24.39 | -0.09 | 0.035 | 0.025 | 0.040 |
| T779 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Front Face | 1.5 | Main | 1 | 1 | 23 | 22.66 | -0.11 | 0.150 | 0.084 | 0.162 |
| T780 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 23 | 22.66 | 0.03 | 0.209 | 0.112 | 0.226 |
| T781 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Front Face | 1.5 | Main | 1 | 1 | 23 | 22.47 | 0.03 | 0.145 | 0.082 | 0.164 |
| T782 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 23 | 22.47 | 0.09 | 0.200 | 0.109 | 0.226 |
| T783 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 2 | 23 | 22.66 | 0.09 | 0.199 | 0.105 | 0.215 |
| T784 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 3 | 23 | 22.66 | -0.09 | **0.264** | **0.127** | **0.285** |
| T785 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 4 | 23 | 22.66 | 0.05 | 0.202 | 0.109 | 0.218 |
| T786 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 5 | 23 | 22.66 | 0.19 | 0.232 | 0.125 | 0.251 |
| T803 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Front Face | 1.5 | Second | 1 | 1 | 19.5 | 19.21 | 0.19 | 0.109 | 0.055 | 0.117 |
| T804 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 19.5 | 19.21 | -0.11 | 0.153 | 0.075 | 0.164 |
| T805 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Front Face | 1.5 | Second | 1 | 1 | 19.5 | 18.93 | 0.16 | 0.074 | 0.037 | 0.084 |
| T806 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Rear Face | 1.5 | Second | 1 | 1 | 19.5 | 18.93 | -0.01 | 0.149 | 0.073 | 0.170 |
| T807 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Rear Face | 1.5 | Second | 1 | 2 | 19.5 | 18.93 | 0.14 | 0.153 | 0.074 | 0.174 |
| T808 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Rear Face | 1.5 | Second | 1 | 3 | 19.5 | 18.93 | 0.16 | **0.171** | **0.083** | **0.195** |
| T809 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Rear Face | 1.5 | Second | 1 | 4 | 19.5 | 18.93 | -0.03 | 0.135 | 0.065 | 0.154 |
| T810 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Rear Face | 1.5 | Second | 1 | 5 | 19.5 | 18.93 | -0.17 | 0.133 | 0.063 | 0.151 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T825 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Front Face | 1.5 | Main | 1 | 1 | 23 | 22.69 | 0.12 | 0.152 | 0.082 | 0.163 |
| T826 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 23 | 22.69 | 0.01 | **0.231** | **0.122** | **0.248** |
| T827 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Front Face | 1.5 | Main | 1 | 1 | 23 | 22.46 | 0.05 | 0.145 | 0.087 | 0.164 |
| T828 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Rear Face | 1.5 | Main | 1 | 1 | 23 | 22.46 | 0.07 | 0.218 | 0.119 | 0.247 |
| T829 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 2 | 23 | 22.69 | -0.05 | 0.224 | 0.120 | 0.241 |
| T830 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 3 | 23 | 22.69 | 0.08 | 0.221 | 0.117 | 0.237 |
| T831 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 4 | 23 | 22.69 | -0.01 | 0.223 | 0.120 | 0.239 |
| T832 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1.5 | Main | 1 | 5 | 23 | 22.69 | 0.04 | 0.217 | 0.119 | 0.233 |
| T849 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Front Face | 1.5 | Second | 1 | 1 | 21 | 20.63 | 0.05 | 0.140 | 0.075 | 0.152 |
| T850 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 21 | 20.63 | 0.01 | 0.188 | 0.090 | 0.205 |
| T851 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Front Face | 1.5 | Second | 1 | 1 | 21 | 20.49 | 0.07 | 0.135 | 0.083 | 0.152 |
| T852 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Rear Face | 1.5 | Second | 1 | 1 | 21 | 20.49 | 0.02 | 0.181 | 0.087 | 0.204 |
| T855 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 2 | 21 | 20.63 | 0.01 | 0.205 | 0.094 | 0.223 |
| T856 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 3 | 21 | 20.63 | 0.08 | 0.208 | 0.097 | 0.226 |
| T857 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 4 | 21 | 20.63 | 0.14 | **0.211** | **0.100** | **0.230** |
| T858 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Rear Face | 1.5 | Second | 1 | 5 | 21 | 20.63 | -0.05 | 0.210 | 0.102 | 0.229 |

Note: The value with boldface is the maximum SAR Value of each test band.

4. Body-worn SAR test results of CA

| Test No. | PCC | | | | | SCC | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power | Test Position | Separation Distance (cm) | Ant | Battery | Power Drift | SAR 1g | SAR 10g | Reported 10g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band | Bandwidth [MHZ] | Modulation | Channel (UL) | RB Size/ Offset | Band | Bandwidth [MHZ] | Modulation | Channel (UL) | RB Size/ Offset | | | | | | | | | | |
| T988 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1.5 | Main | 1 | 0.02 | 0.181 | 0.100 | 0.181 |
| T989 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1.5 | Main | 2 | 0.09 | 0.188 | 0.103 | 0.188 |
| T990 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1.5 | Main | 3 | 0.17 | **0.197** | **0.105** | **0.197** |
| T991 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1.5 | Main | 4 | -0.05 | 0.176 | 0.096 | 0.176 |
| T992 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1.5 | Main | 5 | 0.02 | 0.192 | 0.102 | 0.192 |
| T1000 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Rear Face | 1.5 | Second | 1 | 0.06 | **0.160** | **0.078** | **0.173** |
| T1001 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Rear Face | 1.5 | Second | 2 | 0.07 | 0.151 | 0.074 | 0.163 |
| T1002 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Rear Face | 1.5 | Second | 3 | 0.01 | 0.110 | 0.055 | 0.119 |
| T1003 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Rear Face | 1.5 | Second | 4 | -0.12 | 0.144 | 0.082 | 0.156 |
| T1004 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Rear Face | 1.5 | Second | 5 | 0.05 | 0.127 | 0.067 | 0.137 |
| T1012 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1.5 | Main | 1 | 0.06 | 0.152 | 0.078 | 0.167 |
| T1013 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1.5 | Main | 2 | 0.09 | **0.179** | **0.093** | **0.197** |
| T1014 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1.5 | Main | 3 | 0.05 | 0.139 | 0.071 | 0.153 |
| T1015 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1.5 | Main | 4 | -0.03 | 0.126 | 0.060 | 0.138 |
| T1016 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1.5 | Main | 5 | 0.1 | 0.160 | 0.081 | 0.176 |
| T1024 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Rear Face | 1.5 | Second | 1 | 0.02 | **0.128** | **0.061** | **0.136** |
| T1025 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Rear Face | 1.5 | Second | 2 | 0.07 | 0.113 | 0.058 | 0.120 |
| T1026 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Rear Face | 1.5 | Second | 3 | -0.06 | 0.119 | 0.060 | 0.126 |
| T1027 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Rear Face | 1.5 | Second | 4 | 0.03 | 0.101 | 0.052 | 0.107 |
| T1028 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Rear Face | 1.5 | Second | 5 | 0.01 | 0.107 | 0.057 | 0.113 |
| T1036 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1.5 | Main | 1 | 0.09 | **0.154** | **0.082** | **0.172** |
| T1037 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1.5 | Main | 2 | 0.03 | 0.145 | 0.079 | 0.162 |
| T1038 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1.5 | Main | 3 | 0.04 | 0.138 | 0.075 | 0.154 |
| T1039 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1.5 | Main | 4 | 0.16 | 0.148 | 0.077 | 0.166 |
| T1040 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1.5 | Main | 5 | 0.07 | 0.115 | 0.064 | 0.129 |
| T1048 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Rear Face | 1.5 | Second | 1 | 0.03 | 0.101 | 0.052 | 0.110 |
| T1049 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Rear Face | 1.5 | Second | 2 | 0.11 | 0.085 | 0.045 | 0.093 |
| T1050 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Rear Face | 1.5 | Second | 3 | 0.08 | **0.107** | **0.051** | **0.117** |
| T1051 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Rear Face | 1.5 | Second | 4 | 0.03 | 0.091 | 0.049 | 0.099 |
| T1052 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Rear Face | 1.5 | Second | 5 | 0.05 | 0.097 | 0.052 | 0.106 |

Note: The value with boldface is the maximum SAR Value of each test band.

5. Body-worn SAR test results of BT

| Test No. | Band | Channel | Test Position | Separation Distance (cm) | Battery | Data Rate | Maximum Tune-up (dBm) | Conducted Power (dBm) | Duty cycle | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T890 | BT DH5 | 78 | Front Face | 1.5 | 1 | 1 | 12 | 11.22 | 77% | 0.02 | 0.020 | 0.010 | 0.031 |
| T891 | BT DH5 | 78 | Rear Face | 1.5 | 1 | 1 | 12 | 11.22 | 77% | 0.03 | **0.022** | **0.010** | **0.034** |
| T892 | BT DH5 | 78 | Rear Face | 1.5 | 2 | 1 | 12 | 11.22 | 77% | 0.15 | 0.019 | 0.009 | 0.029 |
| T893 | BT DH5 | 78 | Rear Face | 1.5 | 3 | 1 | 12 | 11.22 | 77% | 0.03 | 0.019 | 0.010 | 0.030 |
| T894 | BT DH5 | 78 | Rear Face | 1.5 | 4 | 1 | 12 | 11.22 | 77% | 0.07 | 0.021 | 0.010 | 0.032 |
| T895 | BT DH5 | 78 | Rear Face | 1.5 | 5 | 1 | 12 | 11.22 | 77% | -0.01 | 0.018 | 0.009 | 0.029 |

Note: The value with boldface is the maximum SAR Value of each test band.

6. Body-worn SAR test results of WIFI

| Test No. | Band | Channel | Test Position | Separation Distance (cm) | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Duty cycle | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T874 | 802.11b | 11 | Front Face | 1.5 | 1 | 19 | 18.97 | - | 0.02 | 0.090 | 0.047 | 0.090 |
| T875 | 802.11b | 11 | Rear Face | 1.5 | 1 | 19 | 18.97 | - | 0.08 | **0.097** | **0.047** | **0.098** |
| T876 | 802.11b | 11 | Rear Face | 1.5 | 2 | 19 | 18.97 | - | 0.03 | 0.087 | 0.043 | 0.088 |
| T877 | 802.11b | 11 | Rear Face | 1.5 | 3 | 19 | 18.97 | - | 0.07 | 0.091 | 0.045 | 0.092 |
| T878 | 802.11b | 11 | Rear Face | 1.5 | 4 | 19 | 18.97 | - | -0.09 | 0.093 | 0.046 | 0.094 |
| T879 | 802.11b | 11 | Rear Face | 1.5 | 5 | 19 | 18.97 | - | 0.1 | 0.082 | 0.040 | 0.083 |
| T906 | 802.11a | 60 | Front Face | 1.5 | 1 | 18 | 17.98 | - | 0.04 | 0.092 | 0.036 | 0.092 |
| T907 | 802.11a | 60 | Rear Face | 1.5 | 1 | 18 | 17.98 | - | 0.01 | 0.103 | 0.040 | 0.103 |
| T908 | 802.11a | 60 | Rear Face | 1.5 | 2 | 18 | 17.98 | - | -0.02 | 0.128 | 0.049 | 0.129 |
| T909 | 802.11a | 60 | Rear Face | 1.5 | 3 | 18 | 17.98 | - | 0.03 | **0.136** | **0.053** | **0.137** |
| T910 | 802.11a | 60 | Rear Face | 1.5 | 4 | 18 | 17.98 | - | -0.05 | 0.124 | 0.046 | 0.125 |
| T911 | 802.11a | 60 | Rear Face | 1.5 | 5 | 18 | 17.98 | - | 0.12 | 0.117 | 0.043 | 0.118 |
| T922 | 802.11a | 100 | Front Face | 1.5 | 1 | 14.5 | 14.42 | - | 0.06 | 0.057 | 0.022 | 0.058 |
| T923 | 802.11a | 100 | Rear Face | 1.5 | 1 | 14.5 | 14.42 | - | 0.09 | 0.112 | 0.042 | 0.114 |
| T924 | 802.11a | 100 | Rear Face | 1.5 | 2 | 14.5 | 14.42 | - | -0.04 | 0.124 | 0.047 | 0.126 |
| T925 | 802.11a | 100 | Rear Face | 1.5 | 3 | 14.5 | 14.42 | - | 0.09 | 0.139 | 0.053 | 0.142 |
| T926 | 802.11a | 100 | Rear Face | 1.5 | 4 | 14.5 | 14.42 | - | -0.04 | 0.151 | 0.054 | 0.154 |
| T927 | 802.11a | 100 | Rear Face | 1.5 | 5 | 14.5 | 14.42 | - | -0.05 | **0.161** | **0.061** | **0.164** |
| T938 | 802.11a | 149 | Front Face | 1.5 | 1 | 15 | 14.97 | - | 0.06 | 0.064 | 0.026 | 0.064 |
| T939 | 802.11a | 149 | Rear Face | 1.5 | 1 | 15 | 14.97 | - | 0.13 | 0.189 | 0.071 | 0.190 |
| T940 | 802.11a | 149 | Rear Face | 1.5 | 2 | 15 | 14.97 | - | -0.04 | 0.132 | 0.050 | 0.133 |
| T941 | 802.11a | 149 | Rear Face | 1.5 | 3 | 15 | 14.97 | - | 0.09 | 0.183 | 0.067 | 0.184 |
| T942 | 802.11a | 149 | Rear Face | 1.5 | 4 | 15 | 14.97 | - | -0.08 | 0.171 | 0.066 | 0.172 |
| T943 | 802.11a | 149 | Rear Face | 1.5 | 5 | 15 | 14.97 | - | -0.08 | **0.197** | **0.074** | **0.198** |

Note: The value with boldface is the maximum SAR Value of each test band.

### 7.2.3 SAR MEASUREMENT RESULT OF HOTSPOT

1. Hotspot SAR test results of GSM

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T358 | GSM 850 | GPRS3TX | 190 | Front Face | 1 | Main | 1 | 1 | 28 | 26.62 | 0.11 | 0.075 | 0.058 | 0.103 |
| T359 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 1 | 28 | 26.62 | 0.18 | 0.150 | 0.088 | 0.206 |
| T360 | GSM 850 | GPRS3TX | 190 | Left Side | 1 | Main | 1 | 1 | 28 | 26.62 | 0.03 | 0.113 | 0.079 | 0.155 |
| T361 | GSM 850 | GPRS3TX | 190 | Right Side | 1 | Main | 1 | 1 | 28 | 26.62 | -0.02 | 0.072 | 0.047 | 0.099 |
| T362 | GSM 850 | GPRS3TX | 190 | Bottom Side | 1 | Main | 1 | 1 | 28 | 26.62 | -0.14 | 0.086 | 0.049 | 0.118 |
| T363 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 2 | 28 | 26.62 | 0.13 | 0.163 | 0.095 | 0.224 |
| T364 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 3 | 28 | 26.62 | 0.18 | **0.175** | **0.101** | **0.240** |
| T365 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 4 | 28 | 26.62 | -0.02 | 0.155 | 0.092 | 0.213 |
| T366 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 5 | 28 | 26.62 | -0.01 | 0.168 | 0.099 | 0.231 |
| T375 | GSM 850 | GPRS2TX | 190 | Front Face | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.01 | 0.186 | 0.125 | 0.229 |
| T376 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.02 | 0.192 | 0.129 | 0.236 |
| T377 | GSM 850 | GPRS2TX | 190 | Left Side | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.03 | 0.119 | 0.080 | 0.146 |
| T378 | GSM 850 | GPRS2TX | 190 | Top Side | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.03 | 0.191 | 0.119 | 0.235 |
| T379 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 2 | 30.5 | 29.6 | -0.17 | 0.197 | 0.133 | 0.242 |
| T380 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 3 | 30.5 | 29.6 | -0.03 | **0.209** | **0.139** | **0.257** |
| T381 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 4 | 30.5 | 29.6 | -0.1 | 0.208 | 0.139 | 0.256 |
| T382 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 5 | 30.5 | 29.6 | -0.12 | 0.206 | 0.137 | 0.253 |
| T391 | GSM 1900 | GPRS3TX | 661 | Front Face | 1 | Main | 1 | 1 | 24 | 23.39 | -0.05 | 0.215 | 0.132 | 0.247 |
| T392 | GSM 1900 | GPRS3TX | 661 | Rear Face | 1 | Main | 1 | 1 | 24 | 23.39 | 0.01 | 0.402 | 0.240 | 0.463 |
| T393 | GSM 1900 | GPRS3TX | 661 | Left Side | 1 | Main | 1 | 1 | 24 | 23.39 | 0.02 | 0.056 | 0.034 | 0.065 |
| T394 | GSM 1900 | GPRS3TX | 661 | Right Side | 1 | Main | 1 | 1 | 24 | 23.39 | 0.16 | 0.103 | 0.057 | 0.119 |
| T395 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 1 | 24 | 23.39 | 0.02 | **0.542** | **0.311** | **0.624** |
| T396 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 2 | 24 | 23.39 | -0.17 | 0.471 | 0.272 | 0.542 |
| T397 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 3 | 24 | 23.39 | 0.06 | 0.461 | 0.265 | 0.531 |
| T398 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 4 | 24 | 23.39 | -0.16 | 0.459 | 0.249 | 0.528 |
| T399 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 5 | 24 | 23.39 | 0.07 | 0.510 | 0.295 | 0.587 |
| T408 | GSM 1900 | GPRS3TX | 661 | Front Face | 1 | Second | 1 | 1 | 25 | 24.5 | 0.08 | 0.279 | 0.147 | 0.313 |
| T409 | GSM 1900 | GPRS3TX | 661 | Rear Face | 1 | Second | 1 | 1 | 25 | 24.5 | 0.01 | 0.237 | 0.143 | 0.266 |
| T410 | GSM 1900 | GPRS3TX | 661 | Left Side | 1 | Second | 1 | 1 | 25 | 24.5 | 0.01 | 0.074 | 0.043 | 0.083 |
| T411 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 1 | 25 | 24.5 | 0.09 | 0.462 | 0.236 | 0.518 |
| T412 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 2 | 25 | 24.5 | 0.01 | 0.424 | 0.217 | 0.476 |
| T413 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 3 | 25 | 24.5 | -0.08 | 0.455 | 0.210 | 0.511 |
| T414 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 4 | 25 | 24.5 | 0.01 | 0.485 | 0.250 | 0.544 |
| T415 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 5 | 25 | 24.5 | -0.01 | **0.489** | **0.248** | **0.549** |

Note: The value with boldface is the maximum SAR Value of each test band.

2. Hotspot SAR test results of UMTS

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T424 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1 | Main | 1 | 1 | 21 | 20.54 | 0.1 | 0.283 | 0.175 | 0.315 |
| T425 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1 | Main | 1 | 1 | 21 | 20.54 | 0.02 | 0.535 | 0.322 | 0.595 |
| T426 | UMTS B2 | RMC12.2K | 9400 | Left Side | 1 | Main | 1 | 1 | 21 | 20.54 | 0.16 | 0.079 | 0.049 | 0.088 |
| T427 | UMTS B2 | RMC12.2K | 9400 | Right Side | 1 | Main | 1 | 1 | 21 | 20.54 | -0.04 | 0.128 | 0.072 | 0.142 |
| T428 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.54 | 0.07 | **0.722** | **0.415** | **0.803** |
| T429 | UMTS B2 | RMC12.2K | 9262 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.44 | 0.04 | 0.616 | 0.359 | 0.701 |
| T430 | UMTS B2 | RMC12.2K | 9538 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.49 | 0.06 | 0.549 | 0.317 | 0.617 |
| T431 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 2 | 21 | 20.54 | 0.04 | 0.627 | 0.364 | 0.697 |
| T432 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 3 | 21 | 20.54 | 0.07 | 0.681 | 0.394 | 0.757 |
| T433 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 4 | 21 | 20.54 | 0.02 | 0.637 | 0.368 | 0.708 |
| T434 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 5 | 21 | 20.54 | 0.04 | 0.699 | 0.403 | 0.777 |
| T443 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1 | Second | 1 | 1 | 21 | 20.93 | 0.01 | 0.428 | 0.239 | 0.435 |
| T444 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.93 | -0.07 | 0.360 | 0.210 | 0.366 |
| T445 | UMTS B2 | RMC12.2K | 9400 | Left Side | 1 | Second | 1 | 1 | 21 | 20.93 | -0.02 | 0.105 | 0.061 | 0.107 |
| T446 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 1 | 21 | 20.93 | -0.06 | **0.714** | **0.363** | **0.726** |
| T447 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 2 | 21 | 20.93 | 0.12 | 0.610 | 0.314 | 0.620 |
| T448 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 3 | 21 | 20.93 | 0 | 0.657 | 0.338 | 0.668 |
| T449 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 4 | 21 | 20.93 | -0.16 | 0.683 | 0.351 | 0.694 |
| T450 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 5 | 21 | 20.93 | 0 | 0.691 | 0.355 | 0.702 |
| T459 | UMTS B4 | RMC12.2K | 1413 | Front Face | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0 | 0.298 | 0.185 | 0.313 |
| T460 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0.04 | 0.550 | 0.334 | 0.579 |
| T461 | UMTS B4 | RMC12.2K | 1413 | Left Side | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0.11 | 0.073 | 0.044 | 0.076 |
| T462 | UMTS B4 | RMC12.2K | 1413 | Right Side | 1 | Main | 1 | 1 | 21.5 | 21.28 | -0.04 | 0.141 | 0.080 | 0.148 |
| T463 | UMTS B4 | RMC12.2K | 1413 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0.01 | 0.811 | 0.460 | 0.853 |
| T464 | UMTS B4 | RMC12.2K | 1312 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.23 | 0.03 | 0.774 | 0.438 | 0.824 |
| T465 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.04 | 0.02 | **0.826** | **0.469** | **0.918** |
| T466 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 2 | 21.5 | 21.04 | 0.05 | 0.798 | 0.447 | 0.887 |
| T467 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 3 | 21.5 | 21.04 | 0.14 | 0.805 | 0.452 | 0.895 |
| T468 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 4 | 21.5 | 21.04 | -0.03 | 0.819 | 0.463 | 0.911 |
| T469 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 5 | 21.5 | 21.04 | 0.08 | 0.810 | 0.456 | 0.901 |
| T470 | UMTS B4 | RMC12.2K | 1513 | Bottom Side (Repeated) | 1 | Main | 1 | 1 | 21.5 | 21.04 | 0.09 | 0.816 | 0.563 | 0.907 |
| T478 | UMTS B4 | RMC12.2K | 1413 | Front Face | 1 | Second | 1 | 1 | 22 | 21.59 | 0.07 | 0.315 | 0.184 | 0.346 |
| T479 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1 | Second | 1 | 1 | 22 | 21.59 | 0.07 | 0.340 | 0.202 | 0.374 |
| T480 | UMTS B4 | RMC12.2K | 1413 | Left Side | 1 | Second | 1 | 1 | 22 | 21.59 | 0.14 | 0.141 | 0.085 | 0.155 |
| T481 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 1 | 22 | 21.59 | -0.03 | **0.552** | **0.300** | **0.607** |
| T482 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 2 | 22 | 21.59 | 0.09 | 0.529 | 0.276 | 0.581 |
| T483 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 3 | 22 | 21.59 | 0.05 | 0.536 | 0.283 | 0.589 |
| T484 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 4 | 22 | 21.59 | -0.12 | 0.538 | 0.284 | 0.591 |
| T485 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 5 | 22 | 21.59 | 0.03 | 0.527 | 0.273 | 0.579 |

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T494 | UMTS B5 | RMC12.2K | 4182 | Front Face | 1 | Main | 1 | 1 | 23 | 21.37 | 0 | 0.080 | 0.061 | 0.116 |
| T495 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 1 | 23 | 21.37 | 0.02 | 0.141 | 0.082 | 0.205 |
| T496 | UMTS B5 | RMC12.2K | 4182 | Left Side | 1 | Main | 1 | 1 | 23 | 21.37 | -0.04 | 0.114 | 0.078 | 0.166 |
| T497 | UMTS B5 | RMC12.2K | 4182 | Right Side | 1 | Main | 1 | 1 | 23 | 21.37 | -0.02 | 0.074 | 0.050 | 0.108 |
| T498 | UMTS B5 | RMC12.2K | 4182 | Bottom Side | 1 | Main | 1 | 1 | 23 | 21.37 | -0.02 | 0.086 | 0.049 | 0.125 |
| T499 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 2 | 23 | 21.37 | 0.01 | 0.150 | 0.087 | 0.218 |
| T500 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 3 | 23 | 21.37 | -0.01 | **0.165** | **0.094** | **0.240** |
| T501 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 4 | 23 | 21.37 | 0.02 | 0.144 | 0.085 | 0.210 |
| T502 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 5 | 23 | 21.37 | 0 | 0.154 | 0.090 | 0.224 |
| T511 | UMTS B5 | RMC12.2K | 4182 | Front Face | 1 | Second | 1 | 1 | 22 | 21.54 | 0 | 0.037 | 0.024 | 0.041 |
| T512 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Second | 1 | 1 | 22 | 21.54 | 0 | 0.040 | 0.026 | 0.044 |
| T513 | UMTS B5 | RMC12.2K | 4182 | Left Side | 1 | Second | 1 | 1 | 22 | 21.54 | 0.02 | 0.019 | 0.013 | 0.021 |
| T514 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 1 | 22 | 21.54 | 0.03 | 0.057 | 0.033 | 0.064 |
| T515 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 2 | 22 | 21.54 | -0.04 | 0.049 | 0.029 | 0.054 |
| T516 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 3 | 22 | 21.54 | -0.06 | 0.059 | 0.034 | 0.065 |
| T517 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 4 | 22 | 21.54 | 0.01 | **0.066** | **0.038** | **0.073** |
| T518 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 5 | 22 | 21.54 | -0.03 | 0.057 | 0.033 | 0.063 |

Note: The value with boldface is the maximum SAR Value of each test band.

3. Hotspot SAR test results of LTE

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T531 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.05 | 0.282 | 0.177 | 0.301 |
| T532 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 20.5 | 20.21 | -0.04 | 0.449 | 0.275 | 0.480 |
| T533 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.12 | 0.074 | 0.045 | 0.079 |
| T534 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.02 | 0.139 | 0.078 | 0.149 |
| T535 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.06 | 0.699 | 0.405 | 0.747 |
| T536 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 20.5 | 20.13 | 0.13 | 0.283 | 0.177 | 0.308 |
| T537 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 20.5 | 20.13 | -0.04 | 0.456 | 0.279 | 0.497 |
| T538 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 20.5 | 20.13 | -0.01 | 0.076 | 0.047 | 0.083 |
| T539 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 20.5 | 20.13 | -0.01 | 0.140 | 0.079 | 0.152 |
| T540 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 20.5 | 20.13 | 0.12 | 0.703 | 0.407 | 0.766 |
| T543 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Bottom Side | 1 | Main | 1 | 2 | 20.5 | 20.13 | 0.02 | 0.726 | 0.420 | 0.791 |
| T544 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Bottom Side | 1 | Main | 1 | 3 | 20.5 | 20.13 | -0.12 | **0.759** | **0.441** | **0.826** |
| T545 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Bottom Side | 1 | Main | 1 | 4 | 20.5 | 20.13 | 0.07 | 0.693 | 0.403 | 0.755 |
| T546 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Bottom Side | 1 | Main | 1 | 5 | 20.5 | 20.13 | 0.07 | 0.698 | 0.406 | 0.760 |
| T559 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.67 | 0.01 | 0.354 | 0.200 | 0.382 |
| T560 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.67 | 0.04 | 0.344 | 0.202 | 0.371 |
| T561 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.67 | 0.02 | 0.108 | 0.065 | 0.117 |
| T562 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.67 | -0.04 | 0.667 | 0.341 | 0.720 |
| T563 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.11 | 0.364 | 0.205 | 0.396 |
| T564 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.05 | 0.341 | 0.202 | 0.371 |
| T565 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.63 | 0.02 | 0.109 | 0.066 | 0.119 |
| T566 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.63 | -0.08 | 0.683 | 0.347 | 0.744 |
| T569 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Top Side | 1 | Second | 1 | 2 | 21 | 20.63 | -0.06 | 0.655 | 0.337 | 0.713 |
| T570 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Top Side | 1 | Second | 1 | 3 | 21 | 20.63 | -0.03 | 0.750 | 0.386 | 0.817 |
| T571 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Top Side | 1 | Second | 1 | 4 | 21 | 20.63 | -0.1 | 0.731 | 0.377 | 0.796 |
| T572 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Top Side | 1 | Second | 1 | 5 | 21 | 20.63 | 0.03 | **0.777** | **0.400** | **0.846** |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T585 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.1 | 0.317 | 0.195 | 0.336 |
| T586 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.1 | 0.578 | 0.350 | 0.612 |
| T587 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.05 | 0.090 | 0.055 | 0.095 |
| T588 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.15 | 0.133 | 0.077 | 0.141 |
| T589 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.19 | 0.741 | 0.420 | 0.785 |
| T590 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.16 | 0.315 | 0.194 | 0.341 |
| T591 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.04 | 0.574 | 0.347 | 0.622 |
| T592 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.17 | 0.090 | 0.055 | 0.097 |
| T593 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.11 | 0.135 | 0.078 | 0.146 |
| T594 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.03 | 0.735 | 0.416 | 0.797 |
| T597 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.23 | 0.04 | 0.785 | 0.443 | 0.835 |
| T598 | LTE B4 | QPSK20M | 20300 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.04 | 0.801 | 0.453 | 0.868 |
| T599 | LTE B4 | QPSK20M | 20175 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.1 | 0.05 | 0.789 | 0.445 | 0.865 |
| T600 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.04 | 0.02 | 0.798 | 0.450 | 0.887 |
| T601 | LTE B4 | QPSK20M | 20050 | 100 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.78 | 0.07 | 0.762 | 0.427 | 0.714 |
| T602 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 2 | 21.5 | 21.04 | 0.01 | 0.806 | 0.456 | 0.896 |
| T603 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 3 | 21.5 | 21.04 | 0.02 | 0.810 | 0.459 | 0.901 |
| T604 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 4 | 21.5 | 21.04 | 0.03 | 0.815 | 0.466 | 0.906 |
| T605 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 5 | 21.5 | 21.04 | 0.07 | **0.825** | **0.467** | **0.917** |
| T606 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side (repeated) | 1 | Main | 1 | 5 | 21.5 | 21.04 | 0.02 | 0.806 | 0.458 | 0.896 |
| T618 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 22.5 | 22.48 | 0.02 | 0.403 | 0.236 | 0.405 |
| T619 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 22.5 | 22.48 | 0.07 | 0.454 | 0.267 | 0.456 |
| T620 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 22.5 | 22.48 | 0.13 | 0.183 | 0.110 | 0.184 |
| T621 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 22.5 | 22.48 | -0.15 | 0.671 | 0.366 | 0.674 |
| T622 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 22.5 | 22.35 | 0.07 | 0.403 | 0.235 | 0.417 |
| T623 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 22.5 | 22.35 | 0.04 | 0.454 | 0.267 | 0.470 |
| T624 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 22.5 | 22.35 | 0.08 | 0.183 | 0.110 | 0.189 |
| T625 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 22.5 | 22.35 | -0.13 | 0.687 | 0.372 | 0.711 |
| T628 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Top Side | 1 | Second | 1 | 2 | 22.5 | 22.35 | 0.07 | 0.684 | 0.369 | 0.708 |
| T629 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Top Side | 1 | Second | 1 | 3 | 22.5 | 22.35 | 0.09 | 0.699 | 0.376 | 0.724 |
| T630 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Top Side | 1 | Second | 1 | 4 | 22.5 | 22.35 | -0.04 | **0.704** | **0.380** | **0.729** |
| T631 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Top Side | 1 | Second | 1 | 5 | 22.5 | 22.35 | -0.04 | 0.688 | 0.372 | 0.712 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T642 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Front Face | 1 | Main | 1 | 1 | 24.5 | 23.41 | -0.01 | 0.151 | 0.096 | 0.194 |
| T643 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 1 | 24.5 | 23.41 | 0.05 | 0.317 | 0.186 | 0.407 |
| T644 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Left Side | 1 | Main | 1 | 1 | 24.5 | 23.41 | -0.06 | 0.214 | 0.149 | 0.275 |
| T645 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Right Side | 1 | Main | 1 | 1 | 24.5 | 23.41 | 0.01 | 0.129 | 0.089 | 0.166 |
| T646 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Bottom Side | 1 | Main | 1 | 1 | 24.5 | 23.41 | -0.01 | 0.197 | 0.112 | 0.253 |
| T647 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Front Face | 1 | Main | 1 | 1 | 23.5 | 22.98 | 0.03 | 0.114 | 0.073 | 0.129 |
| T648 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Rear Face | 1 | Main | 1 | 1 | 23.5 | 22.98 | -0.02 | 0.231 | 0.137 | 0.260 |
| T649 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Left Side | 1 | Main | 1 | 1 | 23.5 | 22.98 | -0.06 | 0.175 | 0.122 | 0.197 |
| T650 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Right Side | 1 | Main | 1 | 1 | 23.5 | 22.98 | -0.03 | 0.105 | 0.073 | 0.118 |
| T651 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23.5 | 22.98 | 0.05 | 0.135 | 0.077 | 0.152 |
| T652 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 2 | 24.5 | 23.41 | -0.03 | 0.341 | 0.199 | 0.438 |
| T653 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 3 | 24.5 | 23.41 | 0.02 | **0.373** | **0.217** | **0.479** |
| T654 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 4 | 24.5 | 23.41 | 0.07 | 0.338 | 0.193 | 0.434 |
| T655 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 5 | 24.5 | 23.41 | 0.02 | 0.357 | 0.206 | 0.459 |
| T666 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 25 | 24.16 | 0.02 | 0.086 | 0.057 | 0.104 |
| T667 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 25 | 24.16 | 0.06 | 0.093 | 0.061 | 0.112 |
| T668 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 25 | 24.16 | 0.05 | 0.033 | 0.023 | 0.041 |
| T669 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 25 | 24.16 | -0.07 | 0.096 | 0.060 | 0.117 |
| T670 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Front Face | 1 | Second | 1 | 1 | 24 | 23.31 | 0.08 | 0.080 | 0.054 | 0.093 |
| T671 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Rear Face | 1 | Second | 1 | 1 | 24 | 23.31 | 0.07 | 0.085 | 0.057 | 0.100 |
| T672 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Left Side | 1 | Second | 1 | 1 | 24 | 23.31 | 0.06 | 0.027 | 0.020 | 0.031 |
| T673 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Top Side | 1 | Second | 1 | 1 | 24 | 23.31 | 0.04 | 0.088 | 0.057 | 0.104 |
| T674 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 25 | 24.16 | -0.07 | 0.091 | 0.057 | 0.111 |
| T675 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 25 | 24.16 | 0.03 | 0.134 | 0.080 | 0.163 |
| T676 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 25 | 24.16 | -0.03 | **0.140** | **0.082** | **0.170** |
| T677 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 25 | 24.16 | 0.05 | 0.114 | 0.066 | 0.138 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T690 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.07 | 0.320 | 0.185 | 0.360 |
| T691 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.15 | 0.443 | 0.240 | 0.498 |
| T692 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.05 | 0.071 | 0.037 | 0.080 |
| T693 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 20.99 | -0.03 | 0.236 | 0.127 | 0.265 |
| T694 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.02 | 0.266 | 0.135 | 0.299 |
| T695 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 20.91 | 0.02 | 0.327 | 0.190 | 0.375 |
| T696 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 20.91 | 0.16 | 0.455 | 0.245 | 0.521 |
| T697 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 20.91 | -0.09 | 0.072 | 0.037 | 0.082 |
| T698 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 20.91 | -0.03 | 0.240 | 0.129 | 0.275 |
| T699 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 20.91 | -0.01 | 0.277 | 0.142 | 0.317 |
| T702 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Main | 1 | 2 | 21.5 | 20.91 | 0.01 | 0.422 | 0.225 | 0.483 |
| T703 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Main | 1 | 3 | 21.5 | 20.91 | 0.13 | 0.506 | 0.270 | 0.580 |
| T704 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Main | 1 | 4 | 21.5 | 20.91 | 0.07 | 0.423 | 0.226 | 0.485 |
| T705 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Main | 1 | 5 | 21.5 | 20.91 | 0.07 | **0.555** | **0.293** | **0.636** |
| T718 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 17 | 16.95 | 0.06 | 0.209 | 0.095 | 0.211 |
| T719 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 17 | 16.95 | 0.02 | 0.263 | 0.115 | 0.266 |
| T720 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 17 | 16.95 | 0.17 | 0.115 | 0.058 | 0.116 |
| T721 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 17 | 16.95 | -0.1 | 0.582 | 0.231 | 0.589 |
| T722 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 17 | 16.94 | 0.04 | 0.218 | 0.099 | 0.221 |
| T723 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 17 | 16.94 | -0.02 | 0.280 | 0.123 | 0.284 |
| T724 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 17 | 16.94 | 0.11 | 0.123 | 0.062 | 0.125 |
| T725 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 17 | 16.94 | -0.03 | 0.606 | 0.240 | 0.614 |
| T728 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Top Side | 1 | Second | 1 | 2 | 17 | 16.94 | -0.16 | 0.758 | 0.313 | 0.769 |
| T729 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Top Side | 1 | Second | 1 | 3 | 17 | 16.94 | 0.07 | **0.811** | **0.336** | **0.822** |
| T730 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Top Side | 1 | Second | 1 | 4 | 17 | 16.94 | -0.05 | 0.719 | 0.296 | 0.729 |
| T731 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Top Side | 1 | Second | 1 | 5 | 17 | 16.94 | 0.05 | 0.610 | 0.245 | 0.618 |
| T732 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Top Side (Repeated) | 1 | Second | 1 | 3 | 17 | 16.94 | 0.03 | 0.802 | 0.331 | 0.813 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T742 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 25 | 24.08 | 0 | 0.107 | 0.081 | 0.132 |
| T743 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 25 | 24.08 | 0.02 | 0.164 | 0.097 | 0.203 |
| T744 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 25 | 24.08 | 0.06 | 0.143 | 0.093 | 0.177 |
| T745 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 25 | 24.08 | 0.14 | 0.072 | 0.047 | 0.089 |
| T746 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 25 | 24.08 | 0.05 | 0.103 | 0.055 | 0.127 |
| T747 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Front Face | 1 | Main | 1 | 1 | 24 | 23.12 | 0.09 | 0.105 | 0.080 | 0.129 |
| T748 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 1 | 24 | 23.12 | 0.07 | 0.167 | 0.098 | 0.205 |
| T749 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Side | 1 | Main | 1 | 1 | 24 | 23.12 | -0.02 | 0.146 | 0.096 | 0.179 |
| T750 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Right Side | 1 | Main | 1 | 1 | 24 | 23.12 | 0.06 | 0.074 | 0.049 | 0.091 |
| T751 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Bottom Side | 1 | Main | 1 | 1 | 24 | 23.12 | -0.05 | 0.110 | 0.058 | 0.135 |
| T752 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 2 | 24 | 23.12 | 0.07 | 0.161 | 0.092 | 0.197 |
| T753 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 3 | 24 | 23.12 | 0.02 | **0.178** | **0.105** | **0.218** |
| T754 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 4 | 24 | 23.12 | 0.11 | 0.143 | 0.083 | 0.175 |
| T755 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 5 | 24 | 23.12 | 0.03 | 0.163 | 0.096 | 0.200 |
| T766 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Front Face | 1 | Second | 1 | 1 | 25 | 24.39 | 0.09 | 0.062 | 0.039 | 0.071 |
| T767 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Rear Face | 1 | Second | 1 | 1 | 25 | 24.39 | 0.04 | 0.065 | 0.043 | 0.075 |
| T768 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Left Side | 1 | Second | 1 | 1 | 25 | 24.39 | -0.11 | 0.027 | 0.018 | 0.030 |
| T769 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 1 | 25 | 24.39 | 0.07 | 0.067 | 0.041 | 0.077 |
| T770 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Front Face | 1 | Second | 1 | 1 | 24 | 23.65 | -0.02 | 0.046 | 0.030 | 0.050 |
| T771 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Second | 1 | 1 | 24 | 23.65 | 0.06 | 0.048 | 0.031 | 0.052 |
| T772 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Side | 1 | Second | 1 | 1 | 24 | 23.65 | 0.06 | 0.021 | 0.014 | 0.023 |
| T773 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Top Side | 1 | Second | 1 | 1 | 24 | 23.65 | 0.07 | 0.049 | 0.028 | 0.053 |
| T774 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 2 | 25 | 24.39 | -0.08 | 0.061 | 0.037 | 0.070 |
| T775 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 3 | 25 | 24.39 | 0.17 | 0.063 | 0.039 | 0.073 |
| T776 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 4 | 25 | 24.39 | 0.05 | 0.072 | 0.046 | 0.083 |
| T777 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 5 | 25 | 24.39 | -0.17 | **0.076** | **0.046** | **0.087** |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T788 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.66 | -0.05 | 0.250 | 0.135 | 0.270 |
| T789 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.66 | 0.02 | 0.422 | 0.222 | 0.456 |
| T790 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.66 | 0.02 | 0.055 | 0.028 | 0.059 |
| T791 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.66 | -0.09 | 0.212 | 0.111 | 0.229 |
| T792 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.66 | -0.12 | 0.229 | 0.118 | 0.248 |
| T793 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.47 | 0.03 | 0.247 | 0.133 | 0.279 |
| T794 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.47 | 0.03 | 0.402 | 0.216 | 0.454 |
| T795 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.47 | 0.07 | 0.050 | 0.025 | 0.057 |
| T796 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.47 | -0.02 | 0.207 | 0.109 | 0.234 |
| T797 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.47 | -0.13 | 0.224 | 0.116 | 0.253 |
| T798 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 2 | 23 | 22.66 | 0.17 | 0.391 | 0.205 | 0.423 |
| T799 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 3 | 23 | 22.66 | 0.06 | 0.418 | 0.220 | 0.452 |
| T800 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 4 | 23 | 22.66 | 0.01 | 0.413 | 0.216 | 0.447 |
| T801 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 5 | 23 | 22.66 | 0.17 | **0.482** | **0.252** | **0.521** |
| T812 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 19.5 | 19.21 | 0.11 | 0.241 | 0.120 | 0.258 |
| T813 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 19.5 | 19.21 | -0.04 | 0.380 | 0.178 | 0.406 |
| T814 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 19.5 | 19.21 | -0.07 | 0.182 | 0.096 | 0.195 |
| T815 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 19.5 | 19.21 | 0.09 | 0.627 | 0.256 | 0.670 |
| T816 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Front Face | 1 | Second | 1 | 1 | 19.5 | 18.93 | 0.1 | 0.162 | 0.079 | 0.185 |
| T817 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Rear Face | 1 | Second | 1 | 1 | 19.5 | 18.93 | -0.07 | 0.353 | 0.166 | 0.403 |
| T818 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Left Side | 1 | Second | 1 | 1 | 19.5 | 18.93 | -0.08 | 0.174 | 0.091 | 0.198 |
| T819 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Top Side | 1 | Second | 1 | 1 | 19.5 | 18.93 | 0.08 | 0.586 | 0.239 | 0.668 |
| T820 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 19.5 | 19.21 | 0.03 | 0.673 | 0.268 | 0.719 |
| T821 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 19.5 | 19.21 | -0.13 | 0.663 | 0.272 | 0.709 |
| T822 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 19.5 | 19.21 | 0.08 | **0.696** | **0.287** | **0.744** |
| T823 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 19.5 | 19.21 | -0.01 | 0.649 | 0.249 | 0.694 |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T834 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.69 | 0.11 | 0.288 | 0.152 | 0.309 |
| T835 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.69 | 0.11 | **0.411** | **0.214** | **0.441** |
| T836 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.69 | -0.05 | 0.053 | 0.028 | 0.056 |
| T837 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.69 | -0.01 | 0.206 | 0.108 | 0.221 |
| T838 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.69 | 0 | 0.236 | 0.119 | 0.253 |
| T839 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.46 | 0.14 | 0.287 | 0.152 | 0.325 |
| T840 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.46 | 0.09 | 0.388 | 0.210 | 0.439 |
| T841 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.46 | 0.01 | 0.051 | 0.027 | 0.057 |
| T842 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.46 | 0.09 | 0.199 | 0.104 | 0.225 |
| T843 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.46 | 0.03 | 0.230 | 0.116 | 0.260 |
| T844 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 2 | 23 | 22.69 | -0.05 | 0.404 | 0.211 | 0.434 |
| T845 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 3 | 23 | 22.69 | -0.08 | 0.392 | 0.201 | 0.421 |
| T846 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 4 | 23 | 22.69 | 0.01 | 0.402 | 0.208 | 0.432 |
| T847 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 5 | 23 | 22.69 | 0.06 | 0.383 | 0.206 | 0.411 |
| T860 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.01 | 0.263 | 0.138 | 0.286 |
| T861 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.11 | 0.468 | 0.206 | 0.510 |
| T862 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.63 | -0.14 | 0.335 | 0.168 | 0.365 |
| T863 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.63 | 0.08 | 0.581 | 0.225 | 0.633 |
| T864 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.49 | 0.19 | 0.256 | 0.134 | 0.288 |
| T865 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.49 | 0.04 | 0.454 | 0.200 | 0.511 |
| T866 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.49 | -0.15 | 0.327 | 0.164 | 0.368 |
| T867 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.49 | -0.06 | 0.543 | 0.211 | 0.611 |
| T1078 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.46 | 0.03 | 0.557 | 0.267 | 0.631 |
| T1079 | LTE B41 | QPSK20M | 40185 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.22 | 0.07 | 0.521 | 0.322 | 0.624 |
| T1080 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.55 | 0.05 | 0.568 | 0.277 | 0.630 |
| T1081 | LTE B41 | QPSK20M | 41055 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.13 | 0.03 | 0.506 | 0.214 | 0.618 |
| T1082 | LTE B41 | QPSK20M | 39750 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.32 | 0.14 | 0.502 | 0.278 | 0.587 |
| T1083 | LTE B41 | QPSK20M | 40185 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.18 | 0.06 | 0.513 | 0.331 | 0.620 |
| T1084 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.45 | 0.09 | 0.559 | 0.272 | 0.634 |
| T1085 | LTE B41 | QPSK20M | 41055 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.11 | -0.01 | 0.476 | 0.200 | 0.584 |
| T870 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Top Side | 1 | Second | 1 | 2 | 21 | 20.45 | 0.12 | 0.565 | 0.211 | 0.641 |
| T871 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Top Side | 1 | Second | 1 | 3 | 21 | 20.45 | 0.01 | 0.571 | 0.218 | 0.648 |
| T872 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Top Side | 1 | Second | 1 | 4 | 21 | 20.45 | -0.05 | 0.562 | 0.207 | 0.638 |
| T873 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Top Side | 1 | Second | 1 | 5 | 21 | 20.45 | -0.07 | **0.578** | **0.221** | **0.656** |

Note: The value with boldface is the maximum SAR Value of each test band.

4. Hotspot SAR test results of CA

| Test No. | PCC | | | | | SCC | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power | Test Position | Separation Distance (cm) | Ant | Battery | Power Drift | SAR 1g | SAR 10g | Reported 10g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band | Bandwidth [MHZ] | Modulation | Channel (UL) | RB Size/ Offset | Band | Bandwidth [MHZ] | Modulation | Channel (UL) | RB Size/ Offset | | | | | | | | | | |
| T994 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 1 | 0.06 | **0.392** | **0.210** | **0.393** |
| T995 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 2 | 0.09 | 0.364 | 0.189 | 0.365 |
| T996 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 3 | 0.03 | 0.381 | 0.203 | 0.382 |
| T997 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 4 | 0.04 | 0.354 | 0.192 | 0.355 |
| T998 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 5 | 0.02 | 0.375 | 0.202 | 0.376 |
| T1006 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 1 | 0.09 | **0.720** | **0.302** | **0.779** |
| T1007 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 2 | 0.03 | 0.669 | 0.284 | 0.723 |
| T1008 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 3 | 0.02 | 0.584 | 0.227 | 0.632 |
| T1009 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 4 | 0.15 | 0.621 | 0.255 | 0.672 |
| T1010 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 5 | 0.04 | 0.686 | 0.275 | 0.742 |
| T1018 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 1 | 0.07 | 0.317 | 0.172 | 0.348 |
| T1019 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 2 | 0.09 | **0.385** | **0.196** | **0.423** |
| T1020 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 3 | 0 | 0.308 | 0.168 | 0.338 |
| T1021 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 4 | 0.06 | 0.337 | 0.187 | 0.370 |
| T1022 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 5 | 0.01 | 0.353 | 0.194 | 0.388 |
| T1030 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 1 | 0.08 | **0.519** | **0.211** | **0.550** |
| T1031 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 2 | 0.12 | 0.471 | 0.189 | 0.499 |
| T1032 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 3 | 0.02 | 0.486 | 0.197 | 0.515 |
| T1033 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 4 | 0 | 0.483 | 0.196 | 0.512 |
| T1034 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 5 | 0.04 | 0.510 | 0.208 | 0.540 |
| T1042 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 1 | 0.09 | 0.296 | 0.168 | 0.331 |
| T1043 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 2 | -0.12 | 0.315 | 0.171 | 0.353 |
| T1044 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 3 | 0.08 | **0.329** | **0.172** | **0.368** |
| T1045 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 4 | 0.03 | 0.290 | 0.148 | 0.325 |
| T1046 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 5 | 0.04 | 0.269 | 0.133 | 0.301 |
| T1054 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 1 | 0.02 | **0.393** | **0.155** | **0.428** |
| T1055 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 2 | -0.06 | 0.236 | 0.105 | 0.257 |
| T1056 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 3 | 0.01 | 0.374 | 0.146 | 0.407 |
| T1057 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 4 | 0.09 | 0.347 | 0.133 | 0.378 |
| T1058 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 5 | 0.02 | 0.316 | 0.127 | 0.344 |

Note: The value with boldface is the maximum SAR Value of each test band.

5. Hotspot SAR test results of WIFI

| Test No. | Band | Channel | Test Position | Separation Distance (cm) | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Duty cycle | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T881 | 802.11b | 11 | Front Face | 1 | 1 | 19 | 18.97 | - | 0.03 | 0.154 | 0.079 | 0.155 |
| T882 | 802.11b | 11 | Rear Face | 1 | 1 | 19 | 18.97 | - | 0.01 | 0.202 | 0.094 | 0.203 |
| T883 | 802.11b | 11 | Right Side | 1 | 1 | 19 | 18.97 | - | 0.06 | 0.062 | 0.032 | 0.062 |
| T884 | 802.11b | 11 | Top Side | 1 | 1 | 19 | 18.97 | - | -0.06 | **0.260** | **0.125** | **0.262** |
| T885 | 802.11b | 11 | Top Side | 1 | 2 | 19 | 18.97 | - | 0.05 | 0.243 | 0.103 | 0.245 |
| T886 | 802.11b | 11 | Top Side | 1 | 3 | 19 | 18.97 | - | 0.01 | 0.250 | 0.110 | 0.252 |
| T887 | 802.11b | 11 | Top Side | 1 | 4 | 19 | 18.97 | - | 0.06 | 0.256 | 0.119 | 0.258 |
| T888 | 802.11b | 11 | Top Side | 1 | 5 | 19 | 18.97 | - | 0.02 | 0.233 | 0.096 | 0.235 |
| T896 | 802.11a | 36 | Front Face | 1 | 1 | 18 | 17.89 | - | 0.09 | 0.078 | 0.024 | 0.080 |
| T897 | 802.11a | 36 | Rear Face | 1 | 1 | 18 | 17.89 | - | 0.04 | 0.143 | 0.062 | 0.147 |
| T898 | 802.11a | 36 | Right Side | 1 | 1 | 18 | 17.89 | - | 0.02 | **0.172** | **0.063** | **0.176** |
| T899 | 802.11a | 36 | Top Side | 1 | 1 | 18 | 17.89 | - | 0.03 | 0.157 | 0.062 | 0.161 |
| T900 | 802.11a | 36 | Right Side | 1 | 2 | 18 | 17.89 | - | 0.01 | 0.153 | 0.060 | 0.157 |
| T901 | 802.11a | 36 | Right Side | 1 | 3 | 18 | 17.89 | - | 0.07 | 0.166 | 0.062 | 0.170 |
| T902 | 802.11a | 36 | Right Side | 1 | 4 | 18 | 17.89 | - | 0.03 | 0.169 | 0.063 | 0.173 |
| T903 | 802.11a | 36 | Right Side | 1 | 5 | 18 | 17.89 | - | 0.09 | 0.158 | 0.061 | 0.162 |
| T945 | 802.11a | 149 | Front Face | 1 | 1 | 15 | 14.97 | - | -0.08 | 0.100 | 0.037 | 0.100 |
| T946 | 802.11a | 149 | Rear Face | 1 | 1 | 15 | 14.97 | - | 0.03 | 0.215 | 0.076 | 0.216 |
| T947 | 802.11a | 149 | Right Side | 1 | 1 | 15 | 14.97 | - | -0.03 | **0.410** | **0.144** | **0.413** |
| T948 | 802.11a | 149 | Top Side | 1 | 1 | 15 | 14.97 | - | -0.17 | 0.149 | 0.059 | 0.150 |
| T949 | 802.11a | 149 | Right Side | 1 | 2 | 15 | 14.97 | - | 0.07 | 0.248 | 0.088 | 0.250 |
| T950 | 802.11a | 149 | Right Side | 1 | 3 | 15 | 14.97 | - | 0.01 | 0.259 | 0.093 | 0.261 |
| T951 | 802.11a | 149 | Right Side | 1 | 4 | 15 | 14.97 | - | 0.05 | 0.278 | 0.100 | 0.280 |
| T952 | 802.11a | 149 | Right Side | 1 | 5 | 15 | 14.97 | - | -0.07 | 0.321 | 0.114 | 0.323 |

Note: The value with boldface is the maximum SAR Value of each test band.

Note: Per KDB248227 D01, the highest SAR measured for the initial test position or initial test configuration should be used to determine SAR test exclusion according to the sum of 1-g SAR and SAR peak to location ratio provisions in KDB 447498. In addition, a test lab may also choose to perform standalone SAR measurements for test positions and 802.11 configurations that are not required by the initial test position or initial test configuration procedures and apply the results to determine simultaneous transmission SAR test exclusion, according to sum of 1-g and SAR peak to location ratio requirements to reduce the number of simultaneous transmission SAR measurements.

### 7.2.4 SAR MEASUREMENT RESULT OF PRODUCT SPECIFIC 10-G SAR

Per KDB648474D04, when hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold:

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T358 | GSM 850 | GPRS3TX | 190 | Front Face | 1 | Main | 1 | 1 | 28 | 26.62 | 0.11 | 0.075 | 0.058 | YES |
| T359 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 1 | 28 | 26.62 | 0.18 | 0.150 | 0.088 | YES |
| T360 | GSM 850 | GPRS3TX | 190 | Left Side | 1 | Main | 1 | 1 | 28 | 26.62 | 0.03 | 0.113 | 0.079 | YES |
| T361 | GSM 850 | GPRS3TX | 190 | Right Side | 1 | Main | 1 | 1 | 28 | 26.62 | -0.02 | 0.072 | 0.047 | YES |
| T362 | GSM 850 | GPRS3TX | 190 | Bottom Side | 1 | Main | 1 | 1 | 28 | 26.62 | -0.14 | 0.086 | 0.049 | YES |
| T363 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 2 | 28 | 26.62 | 0.13 | 0.163 | 0.095 | YES |
| T364 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 3 | 28 | 26.62 | 0.18 | **0.175** | **0.101** | YES |
| T365 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 4 | 28 | 26.62 | -0.02 | 0.155 | 0.092 | YES |
| T366 | GSM 850 | GPRS3TX | 190 | Rear Face | 1 | Main | 1 | 5 | 28 | 26.62 | -0.01 | 0.168 | 0.099 | YES |
| T375 | GSM 850 | GPRS2TX | 190 | Front Face | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.01 | 0.186 | 0.125 | YES |
| T376 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.02 | 0.192 | 0.129 | YES |
| T377 | GSM 850 | GPRS2TX | 190 | Left Side | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.03 | 0.119 | 0.080 | YES |
| T378 | GSM 850 | GPRS2TX | 190 | Top Side | 1 | Second | 1 | 1 | 30.5 | 29.6 | 0.03 | 0.191 | 0.119 | YES |
| T379 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 2 | 30.5 | 29.6 | -0.17 | 0.197 | 0.133 | YES |
| T380 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 3 | 30.5 | 29.6 | -0.03 | **0.209** | **0.139** | YES |
| T381 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 4 | 30.5 | 29.6 | -0.1 | 0.208 | 0.139 | YES |
| T382 | GSM 850 | GPRS2TX | 190 | Rear Face | 1 | Second | 1 | 5 | 30.5 | 29.6 | -0.12 | 0.206 | 0.137 | YES |
| T391 | GSM 1900 | GPRS3TX | 661 | Front Face | 1 | Main | 1 | 1 | 24 | 23.39 | -0.05 | 0.215 | 0.132 | YES |
| T392 | GSM 1900 | GPRS3TX | 661 | Rear Face | 1 | Main | 1 | 1 | 24 | 23.39 | 0.01 | 0.402 | 0.240 | YES |
| T393 | GSM 1900 | GPRS3TX | 661 | Left Side | 1 | Main | 1 | 1 | 24 | 23.39 | 0.02 | 0.056 | 0.034 | YES |
| T394 | GSM 1900 | GPRS3TX | 661 | Right Side | 1 | Main | 1 | 1 | 24 | 23.39 | 0.16 | 0.103 | 0.057 | YES |
| T395 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 1 | 24 | 23.39 | 0.02 | **0.542** | **0.311** | YES |
| T396 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 2 | 24 | 23.39 | -0.17 | 0.471 | 0.272 | YES |
| T397 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 3 | 24 | 23.39 | 0.06 | 0.461 | 0.265 | YES |
| T398 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 4 | 24 | 23.39 | -0.16 | 0.459 | 0.249 | YES |
| T399 | GSM 1900 | GPRS3TX | 661 | Bottom Side | 1 | Main | 1 | 5 | 24 | 23.39 | 0.07 | 0.510 | 0.295 | YES |
| T408 | GSM 1900 | GPRS3TX | 661 | Front Face | 1 | Second | 1 | 1 | 25 | 24.5 | 0.08 | 0.279 | 0.147 | YES |
| T409 | GSM 1900 | GPRS3TX | 661 | Rear Face | 1 | Second | 1 | 1 | 25 | 24.5 | 0.01 | 0.237 | 0.143 | YES |
| T410 | GSM 1900 | GPRS3TX | 661 | Left Side | 1 | Second | 1 | 1 | 25 | 24.5 | 0.01 | 0.074 | 0.043 | YES |
| T411 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 1 | 25 | 24.5 | 0.09 | 0.462 | 0.236 | YES |
| T412 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 2 | 25 | 24.5 | 0.01 | 0.424 | 0.217 | YES |
| T413 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 3 | 25 | 24.5 | -0.08 | 0.455 | 0.210 | YES |
| T414 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 4 | 25 | 24.5 | 0.01 | 0.485 | 0.250 | YES |
| T415 | GSM 1900 | GPRS3TX | 661 | Top Side | 1 | Second | 1 | 5 | 25 | 24.5 | -0.01 | **0.489** | **0.248** | YES |

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T424 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1 | Main | 1 | 1 | 21 | 20.54 | 0.1 | 0.283 | 0.175 | YES |
| T425 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1 | Main | 1 | 1 | 21 | 20.54 | 0.02 | 0.535 | 0.322 | YES |
| T426 | UMTS B2 | RMC12.2K | 9400 | Left Side | 1 | Main | 1 | 1 | 21 | 20.54 | 0.16 | 0.079 | 0.049 | YES |
| T427 | UMTS B2 | RMC12.2K | 9400 | Right Side | 1 | Main | 1 | 1 | 21 | 20.54 | -0.04 | 0.128 | 0.072 | YES |
| T428 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.54 | 0.07 | **0.722** | **0.415** | YES |
| T429 | UMTS B2 | RMC12.2K | 9262 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.44 | 0.04 | 0.616 | 0.359 | YES |
| T430 | UMTS B2 | RMC12.2K | 9538 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.49 | 0.06 | 0.549 | 0.317 | YES |
| T431 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 2 | 21 | 20.54 | 0.04 | 0.627 | 0.364 | YES |
| T432 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 3 | 21 | 20.54 | 0.07 | 0.681 | 0.394 | YES |
| T433 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 4 | 21 | 20.54 | 0.02 | 0.637 | 0.368 | YES |
| T434 | UMTS B2 | RMC12.2K | 9400 | Bottom Side | 1 | Main | 1 | 5 | 21 | 20.54 | 0.04 | 0.699 | 0.403 | YES |
| T443 | UMTS B2 | RMC12.2K | 9400 | Front Face | 1 | Second | 1 | 1 | 21 | 20.93 | 0.01 | 0.428 | 0.239 | YES |
| T444 | UMTS B2 | RMC12.2K | 9400 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.93 | -0.07 | 0.360 | 0.210 | YES |
| T445 | UMTS B2 | RMC12.2K | 9400 | Left Side | 1 | Second | 1 | 1 | 21 | 20.93 | -0.02 | 0.105 | 0.061 | YES |
| T446 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 1 | 21 | 20.93 | -0.06 | **0.714** | **0.363** | YES |
| T447 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 2 | 21 | 20.93 | 0.12 | 0.610 | 0.314 | YES |
| T448 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 3 | 21 | 20.93 | 0 | 0.657 | 0.338 | YES |
| T449 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 4 | 21 | 20.93 | -0.16 | 0.683 | 0.351 | YES |
| T450 | UMTS B2 | RMC12.2K | 9400 | Top Side | 1 | Second | 1 | 5 | 21 | 20.93 | 0 | 0.691 | 0.355 | YES |
| T459 | UMTS B4 | RMC12.2K | 1413 | Front Face | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0 | 0.298 | 0.185 | YES |
| T460 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0.04 | 0.550 | 0.334 | YES |
| T461 | UMTS B4 | RMC12.2K | 1413 | Left Side | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0.11 | 0.073 | 0.044 | YES |
| T462 | UMTS B4 | RMC12.2K | 1413 | Right Side | 1 | Main | 1 | 1 | 21.5 | 21.28 | -0.04 | 0.141 | 0.080 | YES |
| T463 | UMTS B4 | RMC12.2K | 1413 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.28 | 0.01 | 0.811 | 0.460 | YES |
| T464 | UMTS B4 | RMC12.2K | 1312 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.23 | 0.03 | 0.774 | 0.438 | YES |
| T465 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.04 | 0.02 | **0.826** | **0.469** | YES |
| T466 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 2 | 21.5 | 21.04 | 0.05 | 0.798 | 0.447 | YES |
| T467 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 3 | 21.5 | 21.04 | 0.14 | 0.805 | 0.452 | YES |
| T468 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 4 | 21.5 | 21.04 | -0.03 | 0.819 | 0.463 | YES |
| T469 | UMTS B4 | RMC12.2K | 1513 | Bottom Side | 1 | Main | 1 | 5 | 21.5 | 21.04 | 0.08 | 0.810 | 0.456 | YES |
| T470 | UMTS B4 | RMC12.2K | 1513 | Bottom Side (Repeated) | 1 | Main | 1 | 1 | 21.5 | 21.04 | 0.09 | 0.816 | 0.563 | YES |
| T478 | UMTS B4 | RMC12.2K | 1413 | Front Face | 1 | Second | 1 | 1 | 22 | 21.59 | 0.07 | 0.315 | 0.184 | YES |
| T479 | UMTS B4 | RMC12.2K | 1413 | Rear Face | 1 | Second | 1 | 1 | 22 | 21.59 | 0.07 | 0.340 | 0.202 | YES |
| T480 | UMTS B4 | RMC12.2K | 1413 | Left Side | 1 | Second | 1 | 1 | 22 | 21.59 | 0.14 | 0.141 | 0.085 | YES |
| T481 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 1 | 22 | 21.59 | -0.03 | **0.552** | **0.300** | YES |
| T482 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 2 | 22 | 21.59 | 0.09 | 0.529 | 0.276 | YES |
| T483 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 3 | 22 | 21.59 | 0.05 | 0.536 | 0.283 | YES |
| T484 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 4 | 22 | 21.59 | -0.12 | 0.538 | 0.284 | YES |
| T485 | UMTS B4 | RMC12.2K | 1413 | Top Side | 1 | Second | 1 | 5 | 22 | 21.59 | 0.03 | 0.527 | 0.273 | YES |

| Test No. | Band | Mode | Channel | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T494 | UMTS B5 | RMC12.2K | 4182 | Front Face | 1 | Main | 1 | 1 | 23 | 21.37 | 0 | 0.080 | 0.061 | YES |
| T495 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 1 | 23 | 21.37 | 0.02 | 0.141 | 0.082 | YES |
| T496 | UMTS B5 | RMC12.2K | 4182 | Left Side | 1 | Main | 1 | 1 | 23 | 21.37 | -0.04 | 0.114 | 0.078 | YES |
| T497 | UMTS B5 | RMC12.2K | 4182 | Right Side | 1 | Main | 1 | 1 | 23 | 21.37 | -0.02 | 0.074 | 0.050 | YES |
| T498 | UMTS B5 | RMC12.2K | 4182 | Bottom Side | 1 | Main | 1 | 1 | 23 | 21.37 | -0.02 | 0.086 | 0.049 | YES |
| T499 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 2 | 23 | 21.37 | 0.01 | 0.150 | 0.087 | YES |
| T500 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 3 | 23 | 21.37 | -0.01 | **0.165** | **0.094** | YES |
| T501 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 4 | 23 | 21.37 | 0.02 | 0.144 | 0.085 | YES |
| T502 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Main | 1 | 5 | 23 | 21.37 | 0 | 0.154 | 0.090 | YES |
| T511 | UMTS B5 | RMC12.2K | 4182 | Front Face | 1 | Second | 1 | 1 | 22 | 21.54 | 0 | 0.037 | 0.024 | YES |
| T512 | UMTS B5 | RMC12.2K | 4182 | Rear Face | 1 | Second | 1 | 1 | 22 | 21.54 | 0 | 0.040 | 0.026 | YES |
| T513 | UMTS B5 | RMC12.2K | 4182 | Left Side | 1 | Second | 1 | 1 | 22 | 21.54 | 0.02 | 0.019 | 0.013 | YES |
| T514 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 1 | 22 | 21.54 | 0.03 | 0.057 | 0.033 | YES |
| T515 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 2 | 22 | 21.54 | -0.04 | 0.049 | 0.029 | YES |
| T516 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 3 | 22 | 21.54 | -0.06 | 0.059 | 0.034 | YES |
| T517 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 4 | 22 | 21.54 | 0.01 | **0.066** | **0.038** | YES |
| T518 | UMTS B5 | RMC12.2K | 4182 | Top Side | 1 | Second | 1 | 5 | 22 | 21.54 | -0.03 | 0.057 | 0.033 | YES |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T531 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.05 | 0.282 | 0.177 | YES |
| T532 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 20.5 | 20.21 | -0.04 | 0.449 | 0.275 | YES |
| T533 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.12 | 0.074 | 0.045 | YES |
| T534 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.02 | 0.139 | 0.078 | YES |
| T535 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 20.5 | 20.21 | 0.06 | 0.699 | 0.405 | YES |
| T536 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 20.5 | 20.13 | 0.13 | 0.283 | 0.177 | YES |
| T537 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 20.5 | 20.13 | -0.04 | 0.456 | 0.279 | YES |
| T538 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 20.5 | 20.13 | -0.01 | 0.076 | 0.047 | YES |
| T539 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 20.5 | 20.13 | -0.01 | 0.140 | 0.079 | YES |
| T540 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 20.5 | 20.13 | 0.12 | 0.703 | 0.407 | YES |
| T541 | LTE B2 | 16QAM20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.74 | 0.1 | 0.735 | 0.427 | YES |
| T542 | LTE B2 | 64QAM20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21 | 20.69 | 0.15 | 0.722 | 0.419 | YES |
| T543 | LTE B2 | 16QAM20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 2 | 21 | 20.74 | 0.02 | 0.726 | 0.420 | YES |
| T544 | LTE B2 | 16QAM20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 3 | 21 | 20.74 | -0.12 | **0.759** | **0.441** | YES |
| T545 | LTE B2 | 16QAM20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 4 | 21 | 20.74 | 0.07 | 0.693 | 0.403 | YES |
| T546 | LTE B2 | 16QAM20M | 18900 | 1 | 0 | Bottom Side | 1 | Main | 1 | 5 | 21 | 20.74 | 0.07 | 0.698 | 0.406 | YES |
| T559 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.67 | 0.01 | 0.354 | 0.200 | YES |
| T560 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.67 | 0.04 | 0.344 | 0.202 | YES |
| T561 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.67 | 0.02 | 0.108 | 0.065 | YES |
| T562 | LTE B2 | QPSK20M | 18900 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.67 | -0.04 | 0.667 | 0.341 | YES |
| T563 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.11 | 0.364 | 0.205 | YES |
| T564 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.05 | 0.341 | 0.202 | YES |
| T565 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.63 | 0.02 | 0.109 | 0.066 | YES |
| T566 | LTE B2 | QPSK20M | 18900 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.63 | -0.08 | 0.683 | 0.347 | YES |
| T567 | LTE B2 | 16QAM20M | 18900 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21.5 | 21.25 | 0 | 0.725 | 0.371 | YES |
| T568 | LTE B2 | 64QAM20M | 19100 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21.5 | 21.23 | -0.03 | 0.760 | 0.386 | YES |
| T569 | LTE B2 | 64QAM20M | 19100 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 21.5 | 21.23 | -0.06 | 0.655 | 0.337 | YES |
| T570 | LTE B2 | 64QAM20M | 19100 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 21.5 | 21.23 | -0.03 | 0.750 | 0.386 | YES |
| T571 | LTE B2 | 64QAM20M | 19100 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 21.5 | 21.23 | -0.1 | 0.731 | 0.377 | YES |
| T572 | LTE B2 | 64QAM20M | 19100 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 21.5 | 21.23 | 0.03 | **0.777** | **0.400** | YES |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T585 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.1 | 0.317 | 0.195 | YES |
| T586 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.1 | 0.578 | 0.350 | YES |
| T587 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.05 | 0.090 | 0.055 | YES |
| T588 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.15 | 0.133 | 0.077 | YES |
| T589 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.25 | 0.19 | 0.741 | 0.420 | YES |
| T590 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.16 | 0.315 | 0.194 | YES |
| T591 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.04 | 0.574 | 0.347 | YES |
| T592 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.17 | 0.090 | 0.055 | YES |
| T593 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.11 | 0.135 | 0.078 | YES |
| T594 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.03 | 0.735 | 0.416 | YES |
| T595 | LTE B4 | 16QAM20M | 20050 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 22 | 21.78 | 0.06 | 0.782 | 0.444 | YES |
| T596 | LTE B4 | 64QAM20M | 20300 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 22 | 21.75 | 0.02 | 0.774 | 0.439 | YES |
| T597 | LTE B4 | QPSK20M | 20175 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.23 | 0.04 | 0.785 | 0.443 | YES |
| T598 | LTE B4 | QPSK20M | 20300 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.15 | 0.04 | 0.801 | 0.453 | YES |
| T599 | LTE B4 | QPSK20M | 20175 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.1 | 0.05 | 0.789 | 0.445 | YES |
| T600 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.04 | 0.02 | 0.798 | 0.450 | YES |
| T601 | LTE B4 | QPSK20M | 20050 | 100 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 21.78 | 0.07 | 0.762 | 0.427 | YES |
| T602 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 2 | 21.5 | 21.04 | 0.01 | 0.806 | 0.456 | YES |
| T603 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 3 | 21.5 | 21.04 | 0.02 | 0.810 | 0.459 | YES |
| T604 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 4 | 21.5 | 21.04 | 0.03 | 0.815 | 0.466 | YES |
| T605 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side | 1 | Main | 1 | 5 | 21.5 | 21.04 | 0.07 | **0.825** | **0.467** | YES |
| T606 | LTE B4 | QPSK20M | 20300 | 50 | 0 | Bottom Side (repeated) | 1 | Main | 1 | 5 | 21.5 | 21.04 | 0.02 | 0.806 | 0.458 | YES |
| T618 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 22.5 | 22.48 | 0.02 | 0.403 | 0.236 | YES |
| T619 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 22.5 | 22.48 | 0.07 | 0.454 | 0.267 | YES |
| T620 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 22.5 | 22.48 | 0.13 | 0.183 | 0.110 | YES |
| T621 | LTE B4 | QPSK20M | 20050 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 22.5 | 22.48 | -0.15 | 0.671 | 0.366 | YES |
| T622 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 22.5 | 22.35 | 0.07 | 0.403 | 0.235 | YES |
| T623 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 22.5 | 22.35 | 0.04 | 0.454 | 0.267 | YES |
| T624 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 22.5 | 22.35 | 0.08 | 0.183 | 0.110 | YES |
| T625 | LTE B4 | QPSK20M | 20050 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 22.5 | 22.35 | -0.13 | 0.687 | 0.372 | YES |
| T626 | LTE B4 | 16QAM20M | 20300 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 23 | 22.91 | -0.04 | **0.719** | **0.390** | YES |
| T627 | LTE B4 | 64QAM20M | 20300 | 1 | 50 | Top Side | 1 | Second | 1 | 1 | 23 | 22.71 | 0 | 0.636 | 0.344 | YES |
| T628 | LTE B4 | 16QAM20M | 20300 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 23 | 22.91 | 0.07 | 0.684 | 0.369 | YES |
| T629 | LTE B4 | 16QAM20M | 20300 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 23 | 22.91 | 0.09 | 0.699 | 0.376 | YES |
| T630 | LTE B4 | 16QAM20M | 20300 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 23 | 22.91 | 0.02 | 0.704 | 0.380 | YES |
| T631 | LTE B4 | 16QAM20M | 20300 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 23 | 22.91 | -0.4 | 0.688 | 0.372 | YES |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T642 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Front Face | 1 | Main | 1 | 1 | 24 | 23.41 | -0.01 | 0.151 | 0.096 | YES |
| T643 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 1 | 24 | 23.41 | 0.05 | 0.317 | 0.186 | YES |
| T644 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Left Side | 1 | Main | 1 | 1 | 24 | 23.41 | -0.06 | 0.214 | 0.149 | YES |
| T645 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Right Side | 1 | Main | 1 | 1 | 24 | 23.41 | 0.01 | 0.129 | 0.089 | YES |
| T646 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Bottom Side | 1 | Main | 1 | 1 | 24 | 23.41 | -0.01 | 0.197 | 0.112 | YES |
| T647 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Front Face | 1 | Main | 1 | 1 | 23.5 | 22.98 | 0.03 | 0.114 | 0.073 | YES |
| T648 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Rear Face | 1 | Main | 1 | 1 | 23.5 | 22.98 | -0.02 | 0.231 | 0.137 | YES |
| T649 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Left Side | 1 | Main | 1 | 1 | 23.5 | 22.98 | -0.06 | 0.175 | 0.122 | YES |
| T650 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Right Side | 1 | Main | 1 | 1 | 23.5 | 22.98 | -0.03 | 0.105 | 0.073 | YES |
| T651 | LTE B5 | QPSK10M | 20525 | 25 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23.5 | 22.98 | 0.05 | 0.135 | 0.077 | YES |
| T652 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 2 | 24 | 23.41 | -0.03 | 0.341 | 0.199 | YES |
| T653 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 3 | 24 | 23.41 | 0.02 | **0.373** | **0.217** | YES |
| T654 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 4 | 24 | 23.41 | 0.07 | 0.338 | 0.193 | YES |
| T655 | LTE B5 | QPSK10M | 20600 | 1 | 49 | Rear Face | 1 | Main | 1 | 5 | 24 | 23.41 | 0.02 | 0.357 | 0.206 | YES |
| T666 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 24.5 | 24.16 | 0.02 | 0.086 | 0.057 | YES |
| T667 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 24.5 | 24.16 | 0.06 | 0.093 | 0.061 | YES |
| T668 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 24.5 | 24.16 | 0.05 | 0.033 | 0.023 | YES |
| T669 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 24.5 | 24.16 | -0.07 | 0.096 | 0.060 | YES |
| T670 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Front Face | 1 | Second | 1 | 1 | 24 | 23.31 | 0.08 | 0.080 | 0.054 | YES |
| T671 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Rear Face | 1 | Second | 1 | 1 | 24 | 23.31 | 0.07 | 0.085 | 0.057 | YES |
| T672 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Left Side | 1 | Second | 1 | 1 | 24 | 23.31 | 0.06 | 0.027 | 0.020 | YES |
| T673 | LTE B5 | QPSK10M | 20525 | 25 | 12 | Top Side | 1 | Second | 1 | 1 | 24 | 23.31 | 0.04 | 0.088 | 0.057 | YES |
| T674 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 24.5 | 24.16 | -0.07 | 0.091 | 0.057 | YES |
| T675 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 24.5 | 24.16 | 0.03 | 0.134 | 0.080 | YES |
| T676 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 24.5 | 24.16 | -0.03 | **0.140** | **0.082** | YES |
| T677 | LTE B5 | QPSK10M | 20525 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 24.5 | 24.16 | 0.05 | 0.114 | 0.066 | YES |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T690 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.07 | 0.320 | 0.185 | YES |
| T691 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.15 | 0.443 | 0.240 | YES |
| T692 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.05 | 0.071 | 0.037 | YES |
| T693 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 20.99 | -0.03 | 0.236 | 0.127 | YES |
| T694 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 20.99 | 0.02 | 0.266 | 0.135 | YES |
| T695 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 21.5 | 20.91 | 0.02 | 0.327 | 0.190 | YES |
| T696 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 21.5 | 20.91 | 0.16 | 0.455 | 0.245 | YES |
| T697 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 21.5 | 20.91 | -0.09 | 0.072 | 0.037 | YES |
| T698 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 21.5 | 20.91 | -0.03 | 0.240 | 0.129 | YES |
| T699 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 21.5 | 20.91 | -0.01 | 0.277 | 0.142 | YES |
| T700 | LTE B7 | 16QAM20M | 21350 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 22 | 21.5 | 0.04 | 0.544 | 0.285 | YES |
| T701 | LTE B7 | 64QAM20M | 21100 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 22 | 21.46 | 0.03 | 0.513 | 0.278 | YES |
| T702 | LTE B7 | 16QAM20M | 21350 | 1 | 0 | Rear Face | 1 | Main | 1 | 2 | 22 | 21.5 | 0.01 | 0.422 | 0.225 | YES |
| T703 | LTE B7 | 16QAM20M | 21350 | 1 | 0 | Rear Face | 1 | Main | 1 | 3 | 22 | 21.5 | 0.13 | 0.506 | 0.270 | YES |
| T704 | LTE B7 | 16QAM20M | 21350 | 1 | 0 | Rear Face | 1 | Main | 1 | 4 | 22 | 21.5 | 0.07 | 0.423 | 0.226 | YES |
| T705 | LTE B7 | 16QAM20M | 21350 | 1 | 0 | Rear Face | 1 | Main | 1 | 5 | 22 | 21.5 | 0.07 | **0.555** | **0.293** | YES |
| T718 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 17 | 16.95 | 0.06 | 0.209 | 0.095 | YES |
| T719 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 17 | 16.95 | 0.02 | 0.263 | 0.115 | YES |
| T720 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 17 | 16.95 | 0.17 | 0.115 | 0.058 | YES |
| T721 | LTE B7 | QPSK20M | 21100 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 17 | 16.95 | -0.1 | 0.582 | 0.231 | YES |
| T722 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 17 | 16.94 | 0.04 | 0.218 | 0.099 | YES |
| T723 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 17 | 16.94 | -0.02 | 0.280 | 0.123 | YES |
| T724 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 17 | 16.94 | 0.11 | 0.123 | 0.062 | YES |
| T725 | LTE B7 | QPSK20M | 21100 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 17 | 16.94 | -0.03 | 0.606 | 0.240 | YES |
| T726 | LTE B7 | 16QAM20M | 21100 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 18 | 17.6 | -0.05 | 0.629 | 0.250 | YES |
| T727 | LTE B7 | 64QAM20M | 21350 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 18 | 17.55 | -0.05 | 0.693 | 0.273 | YES |
| T728 | LTE B7 | 64QAM20M | 21350 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 18 | 17.55 | -0.16 | 0.758 | 0.313 | YES |
| T729 | LTE B7 | 64QAM20M | 21350 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 18 | 17.55 | 0.07 | **0.811** | **0.336** | YES |
| T730 | LTE B7 | 64QAM20M | 21350 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 18 | 17.55 | -0.05 | 0.719 | 0.296 | YES |
| T731 | LTE B7 | 64QAM20M | 21350 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 18 | 17.55 | 0.05 | 0.610 | 0.245 | YES |
| T732 | LTE B7 | 64QAM20M | 21350 | 1 | 0 | Top Side (Repeated) | 1 | Second | 1 | 3 | 18 | 17.55 | 0.03 | 0.802 | 0.331 | YES |
| T742 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 25 | 24.08 | 0 | 0.107 | 0.081 | YES |
| T743 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 25 | 24.08 | 0.02 | 0.164 | 0.097 | YES |
| T744 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 25 | 24.08 | 0.06 | 0.143 | 0.093 | YES |
| T745 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 25 | 24.08 | 0.14 | 0.072 | 0.047 | YES |
| T746 | LTE B26 | QPSK15M | 26765 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 25 | 24.08 | 0.05 | 0.103 | 0.055 | YES |
| T747 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Front Face | 1 | Main | 1 | 1 | 24 | 23.12 | 0.09 | 0.105 | 0.080 | YES |
| T748 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 1 | 24 | 23.12 | 0.07 | 0.167 | 0.098 | YES |
| T749 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Side | 1 | Main | 1 | 1 | 24 | 23.12 | -0.02 | 0.146 | 0.096 | YES |
| T750 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Right Side | 1 | Main | 1 | 1 | 24 | 23.12 | 0.06 | 0.074 | 0.049 | YES |
| T751 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Bottom Side | 1 | Main | 1 | 1 | 24 | 23.12 | -0.05 | 0.110 | 0.058 | YES |
| T752 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 2 | 24 | 23.12 | 0.07 | 0.161 | 0.092 | YES |
| T753 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 3 | 24 | 23.12 | 0.02 | **0.178** | **0.105** | YES |
| T754 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 4 | 24 | 23.12 | 0.11 | 0.143 | 0.083 | YES |
| T755 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Main | 1 | 5 | 24 | 23.12 | 0.03 | 0.163 | 0.096 | YES |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T766 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Front Face | 1 | Second | 1 | 1 | 24.5 | 24.39 | 0.09 | 0.062 | 0.039 | YES |
| T767 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Rear Face | 1 | Second | 1 | 1 | 24.5 | 24.39 | 0.04 | 0.065 | 0.043 | YES |
| T768 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Left Side | 1 | Second | 1 | 1 | 24.5 | 24.39 | -0.11 | 0.027 | 0.018 | YES |
| T769 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 1 | 24.5 | 24.39 | 0.07 | 0.067 | 0.041 | YES |
| T770 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Front Face | 1 | Second | 1 | 1 | 24 | 23.65 | -0.02 | 0.046 | 0.030 | YES |
| T771 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Rear Face | 1 | Second | 1 | 1 | 24 | 23.65 | 0.06 | 0.048 | 0.031 | YES |
| T772 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Left Side | 1 | Second | 1 | 1 | 24 | 23.65 | 0.06 | 0.021 | 0.014 | YES |
| T773 | LTE B26 | QPSK15M | 26765 | 36 | 0 | Top Side | 1 | Second | 1 | 1 | 24 | 23.65 | 0.07 | 0.049 | 0.028 | YES |
| T774 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 2 | 24.5 | 24.39 | -0.08 | 0.061 | 0.037 | YES |
| T775 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 3 | 24.5 | 24.39 | 0.17 | 0.063 | 0.039 | YES |
| T776 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 4 | 24.5 | 24.39 | 0.05 | 0.072 | 0.046 | YES |
| T777 | LTE B26 | QPSK15M | 26765 | 1 | 37 | Top Side | 1 | Second | 1 | 5 | 24.5 | 24.39 | -0.17 | **0.076** | **0.046** | YES |
| T788 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.66 | -0.05 | 0.250 | 0.135 | YES |
| T789 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.66 | 0.02 | 0.422 | 0.222 | YES |
| T790 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.66 | 0.02 | 0.055 | 0.028 | YES |
| T791 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.66 | -0.09 | 0.212 | 0.111 | YES |
| T792 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.66 | -0.12 | 0.229 | 0.118 | YES |
| T793 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.47 | 0.03 | 0.247 | 0.133 | YES |
| T794 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.47 | 0.03 | 0.402 | 0.216 | YES |
| T795 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.47 | 0.07 | 0.050 | 0.025 | YES |
| T796 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.47 | -0.02 | 0.207 | 0.109 | YES |
| T797 | LTE B38 | QPSK20M | 37850 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.47 | -0.13 | 0.224 | 0.116 | YES |
| T798 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 2 | 23 | 22.66 | 0.17 | 0.391 | 0.205 | YES |
| T799 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 3 | 23 | 22.66 | 0.06 | 0.418 | 0.220 | YES |
| T800 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 4 | 23 | 22.66 | 0.01 | 0.413 | 0.216 | YES |
| T801 | LTE B38 | QPSK20M | 37850 | 1 | 0 | Rear Face | 1 | Main | 1 | 5 | 23 | 22.66 | 0.17 | **0.482** | **0.252** | YES |
| T812 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 19.5 | 19.21 | 0.11 | 0.241 | 0.120 | YES |
| T813 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 19.5 | 19.21 | -0.04 | 0.380 | 0.178 | YES |
| T814 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 19.5 | 19.21 | -0.07 | 0.182 | 0.096 | YES |
| T815 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 19.5 | 19.21 | 0.09 | 0.627 | 0.256 | YES |
| T816 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Front Face | 1 | Second | 1 | 1 | 19.5 | 18.93 | 0.1 | 0.162 | 0.079 | YES |
| T817 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Rear Face | 1 | Second | 1 | 1 | 19.5 | 18.93 | -0.07 | 0.353 | 0.166 | YES |
| T818 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Left Side | 1 | Second | 1 | 1 | 19.5 | 18.93 | -0.08 | 0.174 | 0.091 | YES |
| T819 | LTE B38 | QPSK20M | 38150 | 50 | 25 | Top Side | 1 | Second | 1 | 1 | 19.5 | 18.93 | 0.08 | 0.586 | 0.239 | YES |
| T820 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 19.5 | 19.21 | 0.03 | 0.673 | 0.268 | YES |
| T821 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 19.5 | 19.21 | -0.13 | 0.663 | 0.272 | YES |
| T822 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 19.5 | 19.21 | 0.08 | **0.696** | **0.287** | YES |
| T823 | LTE B38 | QPSK20M | 38150 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 19.5 | 19.21 | -0.01 | 0.649 | 0.249 | YES |

| Test No. | Band | Mode | Channel | RB | offset | Test Position | Separation Distance (cm) | Ant | SIM | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T834 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.69 | 0.11 | 0.288 | 0.152 | YES |
| T835 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.69 | 0.11 | **0.411** | **0.214** | YES |
| T836 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.69 | -0.05 | 0.053 | 0.028 | YES |
| T837 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.69 | -0.01 | 0.206 | 0.108 | YES |
| T838 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.69 | 0 | 0.236 | 0.119 | YES |
| T839 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Front Face | 1 | Main | 1 | 1 | 23 | 22.46 | 0.14 | 0.287 | 0.152 | YES |
| T840 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Rear Face | 1 | Main | 1 | 1 | 23 | 22.46 | 0.09 | 0.388 | 0.210 | YES |
| T841 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Left Side | 1 | Main | 1 | 1 | 23 | 22.46 | 0.01 | 0.051 | 0.027 | YES |
| T842 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Right Side | 1 | Main | 1 | 1 | 23 | 22.46 | 0.09 | 0.199 | 0.104 | YES |
| T843 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Bottom Side | 1 | Main | 1 | 1 | 23 | 22.46 | 0.03 | 0.230 | 0.116 | YES |
| T844 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 2 | 23 | 22.69 | -0.05 | 0.404 | 0.211 | YES |
| T845 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 3 | 23 | 22.69 | -0.08 | 0.392 | 0.201 | YES |
| T846 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 4 | 23 | 22.69 | 0.01 | 0.402 | 0.208 | YES |
| T847 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Rear Face | 1 | Main | 1 | 5 | 23 | 22.69 | 0.06 | 0.383 | 0.206 | YES |
| T860 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.01 | 0.263 | 0.138 | YES |
| T861 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.63 | 0.11 | 0.468 | 0.206 | YES |
| T862 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.63 | -0.14 | 0.335 | 0.168 | YES |
| T863 | LTE B41 | QPSK20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.63 | 0.08 | 0.581 | 0.225 | YES |
| T864 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Front Face | 1 | Second | 1 | 1 | 21 | 20.49 | 0.19 | 0.256 | 0.134 | YES |
| T865 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Rear Face | 1 | Second | 1 | 1 | 21 | 20.49 | 0.04 | 0.454 | 0.200 | YES |
| T866 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Left Side | 1 | Second | 1 | 1 | 21 | 20.49 | -0.15 | 0.327 | 0.164 | YES |
| T867 | LTE B41 | QPSK20M | 41490 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.49 | -0.06 | 0.543 | 0.211 | YES |
| T868 | LTE B41 | 16QAM20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21.5 | 20.99 | -0.07 | 0.565 | 0.223 | YES |
| T869 | LTE B41 | 64QAM20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21.5 | 21.13 | -0.07 | **0.585** | **0.228** | YES |
| T1078 | LTE B41 | QPSK20M | 39750 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.46 | 0.03 | 0.557 | 0.267 | YES |
| T1079 | LTE B41 | QPSK20M | 40185 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.22 | 0.07 | 0.521 | 0.322 | YES |
| T1080 | LTE B41 | QPSK20M | 40620 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.55 | 0.05 | 0.568 | 0.277 | YES |
| T1081 | LTE B41 | QPSK20M | 41055 | 1 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.13 | 0.03 | 0.506 | 0.214 | YES |
| T1082 | LTE B41 | QPSK20M | 39750 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.32 | 0.14 | 0.502 | 0.278 | YES |
| T1083 | LTE B41 | QPSK20M | 40185 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.18 | 0.06 | 0.513 | 0.331 | YES |
| T1084 | LTE B41 | QPSK20M | 40620 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.45 | 0.09 | 0.559 | 0.272 | YES |
| T1085 | LTE B41 | QPSK20M | 41055 | 50 | 0 | Top Side | 1 | Second | 1 | 1 | 21 | 20.11 | -0.01 | 0.476 | 0.200 | YES |
| T870 | LTE B41 | 64QAM20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 2 | 21.5 | 21.13 | 0.12 | 0.565 | 0.211 | YES |
| T871 | LTE B41 | 64QAM20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 3 | 21.5 | 21.13 | 0.01 | 0.571 | 0.218 | YES |
| T872 | LTE B41 | 64QAM20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 4 | 21.5 | 21.13 | -0.05 | 0.562 | 0.207 | YES |
| T873 | LTE B41 | 64QAM20M | 41490 | 1 | 0 | Top Side | 1 | Second | 1 | 5 | 21.5 | 21.13 | 0.07 | 0.578 | 0.221 | YES |

| Test No. | PCC | | | | | SCC | | | | | Tune-up For LTE CA TX Power | LTE CA TX Power | Test Position | Separation Distance (cm) | Ant | Battery | Power Drift | SAR 1g | SAR 10g | Reported 10g SAR | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Band | Band width [MHZ] | Modulation | Channel (UL) | RB Size/ Offset | Band | Band width [MHZ] | Modulation | Channel (UL) | RB Size/ Offset | | | | | | | | | | | |
| T994 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 1 | 0.06 | **0.392** | **0.210** | **0.393** | YES |
| T995 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 2 | 0.09 | 0.364 | 0.189 | 0.365 | YES |
| T996 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 3 | 0.03 | 0.381 | 0.203 | 0.382 | YES |
| T997 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 4 | 0.04 | 0.354 | 0.192 | 0.355 | YES |
| T998 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 21.5 | 21.49 | Rear Face | 1 | Main | 5 | 0.02 | 0.375 | 0.202 | 0.376 | YES |
| T1006 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 1 | 0.09 | **0.720** | **0.302** | **0.779** | YES |
| T1007 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 2 | 0.03 | 0.669 | 0.284 | 0.723 | YES |
| T1008 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 3 | 0.02 | 0.584 | 0.227 | 0.632 | YES |
| T1009 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 4 | 0.15 | 0.621 | 0.255 | 0.672 | YES |
| T1010 | LTE B7 | 20 | QPSK | 20850 | 1/99 | LTE B7 | 20 | QPSK | 21048 | 1/0 | 17 | 16.66 | Top Side | 1 | Second | 5 | 0.04 | 0.686 | 0.275 | 0.742 | YES |
| T1018 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 1 | 0.07 | 0.317 | 0.172 | 0.348 | YES |
| T1019 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 2 | 0.09 | **0.385** | **0.196** | **0.423** | YES |
| T1020 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 3 | 0 | 0.308 | 0.168 | 0.338 | YES |
| T1021 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 4 | 0.06 | 0.337 | 0.187 | 0.370 | YES |
| T1022 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 23 | 22.59 | Rear Face | 1 | Main | 5 | 0.01 | 0.353 | 0.194 | 0.388 | YES |
| T1030 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 1 | 0.08 | **0.519** | **0.211** | **0.550** | YES |
| T1031 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 2 | 0.12 | 0.471 | 0.189 | 0.499 | YES |
| T1032 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 3 | 0.02 | 0.486 | 0.197 | 0.515 | YES |
| T1033 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 4 | 0 | 0.483 | 0.196 | 0.512 | YES |
| T1034 | LTE B38 | 20 | QPSK | 37952 | 1/99 | LTE B38 | 20 | QPSK | 38150 | 1/0 | 19 | 18.75 | Top Side | 1 | Second | 5 | 0.04 | 0.510 | 0.208 | 0.540 | YES |
| T1042 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 1 | 0.09 | 0.296 | 0.168 | 0.331 | YES |
| T1043 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 2 | -0.12 | 0.315 | 0.171 | 0.353 | YES |
| T1044 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 3 | 0.08 | **0.329** | **0.172** | **0.368** | YES |
| T1045 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 4 | 0.03 | 0.290 | 0.148 | 0.325 | YES |
| T1046 | LTE B41 | 20 | QPSK | 39750 | 1/99 | LTE B41 | 20 | QPSK | 39948 | 1/0 | 24 | 23.51 | Rear Face | 1 | Main | 5 | 0.04 | 0.269 | 0.133 | 0.301 | YES |
| T1054 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 1 | 0.02 | **0.393** | **0.155** | **0.428** | YES |
| T1055 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 2 | -0.06 | 0.236 | 0.105 | 0.257 | YES |
| T1056 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 3 | 0.01 | 0.374 | 0.146 | 0.407 | YES |
| T1057 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 4 | 0.09 | 0.347 | 0.133 | 0.378 | YES |
| T1058 | LTE B41 | 20 | QPSK | 41292 | 1/99 | LTE B41 | 20 | QPSK | 41490 | 1/0 | 20 | 19.63 | Top Side | 1 | Second | 5 | 0.02 | 0.316 | 0.127 | 0.344 | YES |

| Test No. | Band | Channel | Test Position | Separation Distance (cm) | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | product specific 10-g SAR Exclusion |
|---|---|---|---|---|---|---|---|---|---|---|---|
| T881 | 802.11b | 11 | Front Face | 1 | 1 | 19 | 18.97 | 0.03 | 0.154 | 0.079 | YES |
| T882 | 802.11b | 11 | Rear Face | 1 | 1 | 19 | 18.97 | 0.01 | 0.202 | 0.094 | YES |
| T883 | 802.11b | 11 | Right Side | 1 | 1 | 19 | 18.97 | 0.06 | 0.062 | 0.032 | YES |
| T884 | 802.11b | 11 | Top Side | 1 | 1 | 19 | 18.97 | -0.06 | **0.260** | **0.125** | YES |
| T885 | 802.11b | 11 | Top Side | 1 | 2 | 19 | 18.97 | 0.05 | 0.243 | 0.103 | YES |
| T886 | 802.11b | 11 | Top Side | 1 | 3 | 19 | 18.97 | 0.01 | 0.250 | 0.110 | YES |
| T887 | 802.11b | 11 | Top Side | 1 | 4 | 19 | 18.97 | 0.06 | 0.256 | 0.119 | YES |
| T888 | 802.11b | 11 | Top Side | 1 | 5 | 19 | 18.97 | 0.02 | 0.233 | 0.096 | YES |
| T896 | 802.11a | 36 | Front Face | 1 | 1 | 18 | 17.89 | 0.09 | 0.078 | 0.024 | YES |
| T897 | 802.11a | 36 | Rear Face | 1 | 1 | 18 | 17.89 | 0.04 | 0.143 | 0.062 | YES |
| T898 | 802.11a | 36 | Right Side | 1 | 1 | 18 | 17.89 | 0.02 | **0.172** | **0.063** | YES |
| T899 | 802.11a | 36 | Top Side | 1 | 1 | 18 | 17.89 | 0.03 | 0.157 | 0.062 | YES |
| T900 | 802.11a | 36 | Right Side | 1 | 2 | 18 | 17.89 | 0.01 | 0.153 | 0.060 | YES |
| T901 | 802.11a | 36 | Right Side | 1 | 3 | 18 | 17.89 | 0.07 | 0.166 | 0.062 | YES |
| T902 | 802.11a | 36 | Right Side | 1 | 4 | 18 | 17.89 | 0.03 | 0.169 | 0.063 | YES |
| T903 | 802.11a | 36 | Right Side | 1 | 5 | 18 | 17.89 | 0.09 | 0.158 | 0.061 | YES |
| T945 | 802.11a | 149 | Front Face | 1 | 1 | 15 | 14.97 | -0.08 | 0.100 | 0.037 | YES |
| T946 | 802.11a | 149 | Rear Face | 1 | 1 | 15 | 14.97 | 0.03 | 0.215 | 0.076 | YES |
| T947 | 802.11a | 149 | Right Side | 1 | 1 | 15 | 14.97 | -0.03 | **0.410** | **0.144** | YES |
| T948 | 802.11a | 149 | Top Side | 1 | 1 | 15 | 14.97 | -0.17 | 0.149 | 0.059 | YES |
| T949 | 802.11a | 149 | Right Side | 1 | 2 | 15 | 14.97 | 0.07 | 0.248 | 0.088 | YES |
| T950 | 802.11a | 149 | Right Side | 1 | 3 | 15 | 14.97 | 0.01 | 0.259 | 0.093 | YES |
| T951 | 802.11a | 149 | Right Side | 1 | 4 | 15 | 14.97 | 0.05 | 0.278 | 0.100 | YES |
| T952 | 802.11a | 149 | Right Side | 1 | 5 | 15 | 14.97 | -0.07 | 0.321 | 0.114 | YES |

Product specific 10-g SAR test results of WIFI

| Test No. | Band | Channel | Test Position | Separation Distance (cm) | Battery | Maximum Tune-up (dBm) | Conducted Power (dBm) | Duty cycle | Power Drift (dB) | SAR 1g (W/kg) | SAR 10g (W/kg) | Reported 1g SAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| T913 | 802.11a | 60 | Front Face | 0 | 1 | 18 | 17.98 | - | 0.03 | 1.800 | 0.470 | 0.472 |
| T914 | 802.11a | 60 | Rear Face | 0 | 1 | 18 | 17.98 | - | 0.04 | 2.440 | 0.720 | 0.723 |
| T915 | 802.11a | 60 | Right Side | 0 | 1 | 18 | 17.98 | - | 0.13 | **2.750** | **0.763** | **0.767** |
| T916 | 802.11a | 60 | Top Side | 0 | 1 | 18 | 17.98 | - | 0.02 | 0.705 | 0.247 | 0.248 |
| T917 | 802.11a | 60 | Right Side | 0 | 2 | 18 | 17.98 | - | -0.08 | 2.590 | 0.742 | 0.745 |
| T918 | 802.11a | 60 | Right Side | 0 | 3 | 18 | 17.98 | - | 0.03 | 2.530 | 0.733 | 0.736 |
| T919 | 802.11a | 60 | Right Side | 0 | 4 | 18 | 17.98 | - | 0.07 | 2.670 | 0.752 | 0.755 |
| T920 | 802.11a | 60 | Right Side | 0 | 5 | 18 | 17.98 | - | 0.11 | 2.460 | 0.711 | 0.714 |
| T929 | 802.11a | 100 | Front Face | 0 | 1 | 14.5 | 14.42 | - | 0.06 | 0.998 | 0.294 | 0.299 |
| T930 | 802.11a | 100 | Rear Face | 0 | 1 | 14.5 | 14.42 | - | 0.01 | 1.040 | 0.341 | 0.347 |
| T931 | 802.11a | 100 | Right Side | 0 | 1 | 14.5 | 14.42 | - | 0.03 | **1.620** | **0.422** | **0.430** |
| T932 | 802.11a | 100 | Top Side | 0 | 1 | 14.5 | 14.42 | - | 0.07 | 0.548 | 0.182 | 0.185 |
| T933 | 802.11a | 100 | Right Side | 0 | 2 | 14.5 | 14.42 | - | 0.15 | 1.430 | 0.389 | 0.396 |
| T934 | 802.11a | 100 | Right Side | 0 | 3 | 14.5 | 14.42 | - | -0.02 | 1.600 | 0.415 | 0.423 |
| T935 | 802.11a | 100 | Right Side | 0 | 4 | 14.5 | 14.42 | - | 0.08 | 1.550 | 0.402 | 0.409 |
| T936 | 802.11a | 100 | Right Side | 0 | 5 | 14.5 | 14.42 | - | 0.04 | 1.490 | 0.396 | 0.403 |

Note: The value with boldface is the maximum SAR Value of each test band.

## 7.3 MULTIPLE TRANSMITTER EVALUATION

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498D01 General RF Exposure Guidance v06.

The location of the antenna inside EUT, please refer to Appendix E.

### 7.3.1 STAND-ALONE SAR TEST EXCLUSION

Per FCC KDB 447498 D01, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)][√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for product specific 10-g SAR, where:

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Standalone SAR test exclusion for BT

| Mode | Position | $P_{max}$ (dBm)* | $P_{max}$ (mW) | Distance (mm) | f (GHz) | Calculation Result | SAR Exclusion threshold | SAR test exclusion |
|---|---|---|---|---|---|---|---|---|
| BT | product specific 10-g SAR | 13 | 19.95 | 5 | 2.48 | 6.28 | 7.5 | Yes |

Note: * - maximum possible output power declared by manufacturer

When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]·[√f(GHz)/x] W/kg for test separation distances ≤ 50 mm, where x = 7.5 for 1-g SAR and x = 18.75 for 10-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

According to KDB 447498 D01, when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standslone SAR was estimated according to following formula to result in substantially conservative SAR values of ≤ 0.4W/kg to determine simultaneous transmission SAR test exclusion.

$$\text{Estimated SAR} = \frac{\text{Max. Tune up Power}_{(mW)}}{\text{Min. Test Separation Distance}_{(mm)}} \times \frac{\sqrt{f_{(GHz)}}}{7.5}$$

Estimated SAR calculation

| Mode | Position | | $P_{max}$ (dBm)* | $P_{max}$ (mW) | Distance (mm) | f (GHz) | X | Estimated SAR (W/kg)* |
|---|---|---|---|---|---|---|---|---|
| BT | product specific 10-g SAR | Front Face/ Rear Face/ Right Side/ Top Side | 13 | 19.95 | 5 | 2.48 | 18.75 | 0.335 |
| | | Left Side/ Bottom Side | 13 | 19.95 | >50mm | 2.48 | 18.75 | 0.400 |

Note: * - maximum possible output power declared by manufacturer

### 7.3.2 SIMULTANEOUS TRANSMISSION CONDITIONS

Per FCC KDB 447498 D01, SAR compliance for simultaneous transmission must be considered when the maximum duration of overlapping transmissions, including network hand-offs, is greater than 30 seconds. This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis.

The Simultaneous Transmission Possibilities of this device are as below:

| NO. | Simultaneous Tx Combination | Head | Body-worn | Hotspot (10mm) | Product specific 10-g (0mm) |
|---|---|---|---|---|---|
| 1 | GSM/UMTS/LTE(Main Ant) + 2.4G WIFI | Yes | Yes | Yes | Yes |
| 2 | GSM/UMTS/LTE(Main Ant) + 5G WIFI | Yes | Yes | Yes | Yes |
| 3 | GSM/UMTS/LTE(Main Ant) + BT | Yes | Yes | No | Yes |
| 4 | GSM/UMTS/LTE(Second Ant) + 2.4G WIFI | Yes | Yes | Yes | Yes |
| 5 | GSM/UMTS/LTE(Second Ant) + 5G WIFI | Yes | Yes | Yes | Yes |
| 6 | GSM/UMTS/LTE(Second Ant) + BT | Yes | Yes | No | Yes |

Note:
1) 2G&3G&4G share the same Tx antenna and can’t transmit simultaneously.
2) WiFi and Bluetooth share the same Tx antenna and can’t transmit simultaneously.
3) Main Ant and Second Ant can’t transmit simultaneously.

### 7.3.3 SAR SUMMATION SCENARIO

1. About BT/WIFI and GSM/UMTS/LTE main antenna

| Position | Head | | | | Body-worn | | Hotspot | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right Cheek | Right Tilted | Left Cheek | Left Tilted | Front Face (1.5cm) | Rear Face (1.5cm) | Front Face (1cm) | Rear Face (1cm) | Left Side (1cm) | Right Side (1cm) | Top Side (1cm) | Bottom Side (1cm) |
| GSM 850 | 0.153 | 0.077 | 0.205 | 0.083 | 0.087 | 0.120 | 0.103 | 0.240 | 0.155 | 0.099 | / | 0.118 |
| GSM 1900 | 0.083 | 0.071 | 0.119 | 0.066 | 0.123 | 0.210 | 0.247 | 0.463 | 0.065 | 0.119 | / | 0.624 |
| UMTS B2 | 0.096 | 0.082 | 0.160 | 0.068 | 0.181 | 0.314 | 0.315 | 0.595 | 0.088 | 0.142 | / | 0.803 |
| UMTS B4 | 0.124 | 0.087 | 0.242 | 0.071 | 0.176 | 0.306 | 0.313 | 0.579 | 0.076 | 0.148 | / | 0.918 |
| UMTS B5 | 0.140 | 0.072 | 0.160 | 0.073 | 0.103 | 0.146 | 0.116 | 0.240 | 0.166 | 0.108 | / | 0.125 |
| LTE B2 | 0.190 | 0.151 | 0.229 | 0.138 | 0.185 | 0.323 | 0.308 | 0.497 | 0.083 | 0.152 | / | 0.826 |
| LTE B4 | 0.113 | 0.084 | 0.224 | 0.075 | 0.201 | 0.361 | 0.341 | 0.622 | 0.097 | 0.146 | / | 0.917 |
| LTE B5 | 0.139 | 0.069 | 0.192 | 0.075 | 0.168 | 0.245 | 0.194 | 0.479 | 0.275 | 0.166 | / | 0.253 |
| LTE B7 | 0.267 | 0.438 | 0.326 | 0.184 | 0.228 | 0.302 | 0.375 | 0.636 | 0.082 | 0.275 | / | 0.317 |
| LTE B26 | 0.119 | 0.072 | 0.153 | 0.084 | 0.115 | 0.165 | 0.132 | 0.218 | 0.179 | 0.091 | / | 0.135 |
| LTE B38 | 0.278 | 0.120 | 0.128 | 0.072 | 0.164 | 0.285 | 0.279 | 0.521 | 0.059 | 0.234 | / | 0.253 |
| LTE B41 | 0.220 | 0.107 | 0.103 | 0.082 | 0.164 | 0.248 | 0.325 | 0.441 | 0.057 | 0.225 | / | 0.260 |
| 2.4G WLAN | 0.332 | 0.375 | 0.771 | 0.581 | 0.090 | 0.098 | 0.155 | 0.203 | / | 0.062 | 0.262 | / |
| 5.2G WLAN | / | / | / | / | / | / | 0.080 | 0.147 | / | 0.176 | 0.161 | / |
| 5.3G WLAN | 0.137 | 0.157 | 0.385 | 0.637 | 0.092 | 0.137 | / | / | / | / | / | / |
| 5.6G WLAN | 0.207 | 0.211 | 0.638 | 0.619 | 0.058 | 0.164 | / | / | / | / | / | / |
| 5.8G WLAN | 0.182 | 0.183 | 0.577 | 0.501 | 0.064 | 0.198 | 0.100 | 0.216 | / | 0.413 | 0.150 | / |
| Bluetooth | 0.105 | 0.133 | 0.240 | 0.193 | 0.031 | 0.034 | / | / | / | / | / | / |
| Max. SAR Summation | **0.610** | **0.813** | **1.097** | **0.821** | **0.320** | **0.559** | **0.530** | **0.852** | **0.275** | **0.688** | **0.262** | **0.918** |
| Hot Spot Separation | - | - | - | - | - | - | - | - | - | - | - | - |

Note: MAX. $\sum SAR_{1g}$ =1.097W/Kg <1.6W/Kg, so the SAR to peak location separation ratio should not be considered.

2. About BT/WIFI and GSM/UMTS/LTE second antenna

| Position | Head | | | | Bodyworn | | Hotspot | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Right Cheek | Right Tilted | Left Cheek | Left Tilted | Front Face (1.5cm) | Rear Face (1.5cm) | Front Face (1cm) | Rear Face (1cm) | Left Side (1cm) | Right Side (1cm) | Top Side (1cm) | Bottom Side (1cm) |
| GSM 850 | 0.847 | 0.987 | 0.646 | 0.593 | 0.102 | 0.124 | 0.229 | 0.257 | 0.146 | / | 0.235 | / |
| GSM 1900 | 0.532 | 0.770 | 0.351 | 0.437 | 0.144 | 0.125 | 0.313 | 0.266 | 0.083 | / | 0.549 | / |
| UMTS B2 | 0.830 | 1.066 | 0.541 | 0.690 | 0.237 | 0.213 | 0.435 | 0.366 | 0.107 | / | 0.726 | / |
| UMTS B4 | 0.942 | 1.073 | 0.621 | 0.749 | 0.178 | 0.197 | 0.346 | 0.374 | 0.155 | / | 0.607 | / |
| UMTS B5 | 0.267 | 0.306 | 0.176 | 0.242 | 0.027 | 0.036 | 0.041 | 0.044 | 0.021 | / | 0.073 | / |
| LTE B2 | 0.661 | 0.983 | 0.413 | 0.527 | 0.255 | 0.195 | 0.396 | 0.371 | 0.119 | / | 0.846 | / |
| LTE B4 | 0.826 | 1.059 | 0.508 | 0.646 | 0.223 | 0.260 | 0.417 | 0.470 | 0.189 | / | 0.729 | / |
| LTE B5 | 0.696 | 0.429 | 0.358 | 0.314 | 0.058 | 0.068 | 0.104 | 0.112 | 0.041 | / | 0.170 | / |
| LTE B7 | 0.669 | 0.959 | 0.311 | 0.427 | 0.153 | 0.301 | 0.221 | 0.284 | 0.125 | / | 0.822 | / |
| LTE B26 | 0.411 | 0.269 | 0.238 | 0.241 | 0.037 | 0.042 | 0.071 | 0.075 | 0.030 | / | 0.087 | / |
| LTE B38 | 0.632 | 0.891 | 0.252 | 0.372 | 0.117 | 0.195 | 0.258 | 0.406 | 0.198 | / | 0.744 | / |
| LTE B41 | 0.573 | 0.820 | 0.163 | 0.192 | 0.152 | 0.230 | 0.288 | 0.511 | 0.368 | / | 0.656 | / |
| 2.4G WLAN | 0.332 | 0.375 | 0.771 | 0.581 | 0.090 | 0.098 | 0.155 | 0.203 | / | 0.062 | 0.262 | / |
| 5.2G WLAN | / | / | / | / | / | / | 0.080 | 0.147 | / | 0.176 | 0.161 | / |
| 5.3G WLAN | 0.137 | 0.157 | 0.385 | 0.637 | 0.092 | 0.137 | / | / | / | / | / | / |
| 5.6G WLAN | 0.207 | 0.211 | 0.638 | 0.619 | 0.058 | 0.164 | / | / | / | / | / | / |
| 5.8G WLAN | 0.182 | 0.183 | 0.577 | 0.501 | 0.064 | 0.198 | 0.100 | 0.216 | / | 0.413 | 0.150 | / |
| Bluetooth | 0.105 | 0.133 | 0.240 | 0.193 | 0.031 | 0.034 | / | / | / | / | / | / |
| Max. SAR Summation | **1.274** | **1.448** | **1.417** | **1.386** | **0.347** | **0.499** | **0.590** | **0.727** | **0.368** | **0.413** | **1.108** | **-** |
| Hot Spot Separation | - | - | - | - | - | - | - | - | - | - | - | - |

Note: MAX. $\sum SAR_{1g}$ =1.448W/Kg <1.6W/Kg, so the SAR to peak location separation ratio should not be considered.

3. About product specific 10g SAR

| Position | Product Specific 10g SAR | | | | | |
|---|---|---|---|---|---|---|
| | Front Face (0cm) | Rear Face (0cm) | Left Side (0cm) | Right Side (0cm) | Top Side (0cm) | Bottom Side (0cm) |
| GSM 850 | / | / | / | / | / | / |
| GSM 1900 | / | / | / | / | / | / |
| UMTS B2 | / | / | / | / | / | / |
| UMTS B4 | / | / | / | / | / | / |
| UMTS B5 | / | / | / | / | / | / |
| LTE B2 | / | / | / | / | / | / |
| LTE B4 | / | / | / | / | / | / |
| LTE B5 | / | / | / | / | / | / |
| LTE B7 | / | / | / | / | / | / |
| LTE B26 | / | / | / | / | / | / |
| LTE B38 | / | / | / | / | / | / |
| LTE B41 | / | / | / | / | / | / |
| 2.4G WLAN | / | / | / | / | / | / |
| 5.2G WLAN | / | / | / | / | / | / |
| 5.3G WLAN | 0.472 | 0.723 | / | 0.767 | 0.248 | / |
| 5.6G WLAN | 0.299 | 0.347 | / | 0.430 | 0.185 | / |
| 5.8G WLAN | / | / | / | / | / | / |
| Bluetooth | 0.335 | 0.335 | 0.400 | 0.335 | 0.335 | 0.400 |
| Max. SAR Summation | **0.472** | **0.723** | **0.400** | **0.767** | **0.335** | **0.400** |
| Hot Spot Separation | - | - | - | - | - | - |

Note: The Simultaneous SAR of product Specific 10-g SAR is 0.767W/Kg which less than 4.0W/Kg, so the Simultaneous SAR is not required to calculate.

# APPENDIX

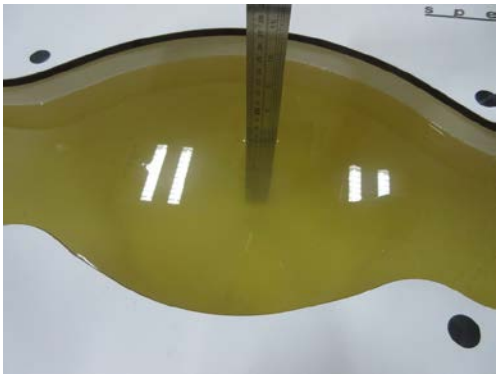
## 1. TEST LAYOUT

**Specific Absorption Rate Test Layout**

**Liquid depth in the flat Phantom (≥15cm depth)**

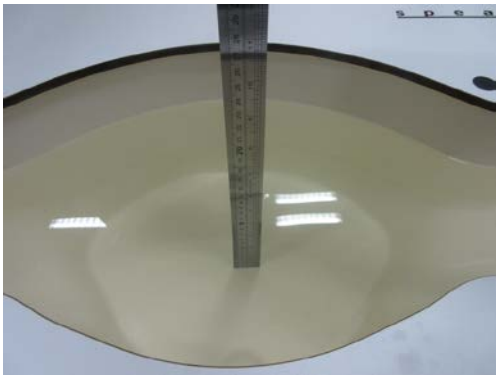
HSL835MHz-900MHz_Head_15.7cm

HSL835MHz-900MHz_Body_16.4cm

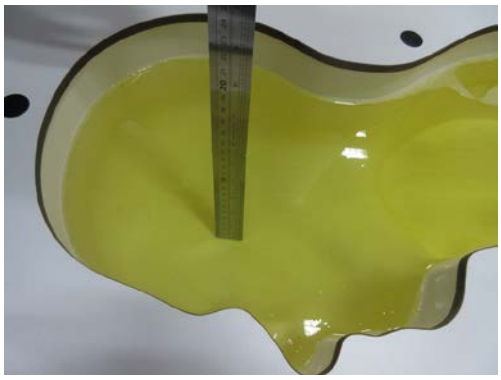


HSL1750MHz_Head_15.1cm

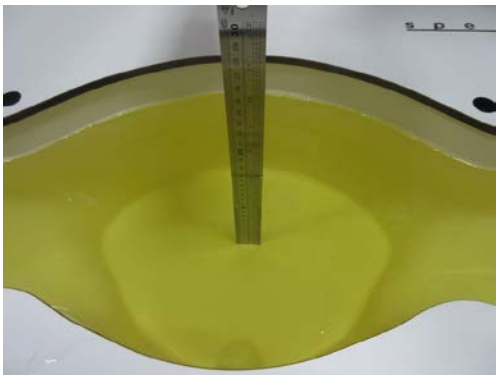
HSL1750MHz_Body_15.5cm



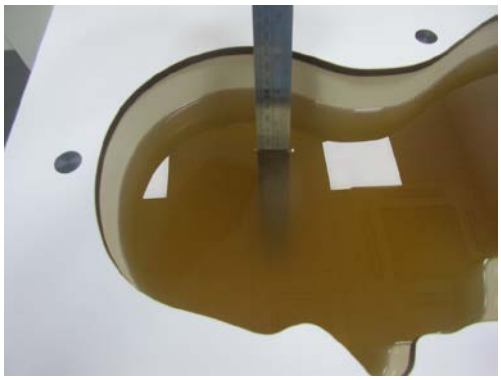
HSL1900MHz-2600MHz_Head_15.9cm



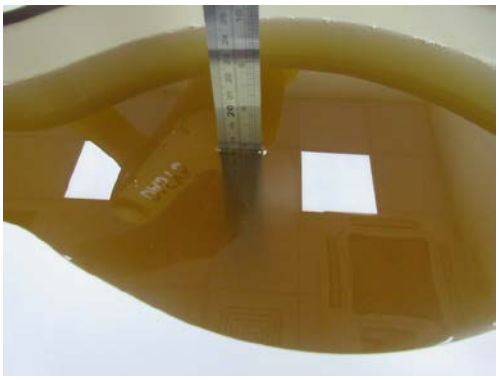
HSL1900MHz-2600MHz_Body_15.2cm



HSL5GHz_Head_15.5cm



HSL5GHz_Body_17.5cm



# Appendix A. SAR Plots of System Verification

**(Pls See BTL-FCC SAR-1-1909C106_Appendix A.)**

# Appendix B. SAR Plots of SAR Measurement

**(Pls See BTL-FCC SAR-1-1909C106_Appendix B.)**

# Appendix C. Calibration Certificate

**(Pls See BTL-FCC SAR-1-1909C106_Appendix C.)**

# Appendix D. Photographs of the Test Set-Up

**(Pls See BTL-FCC SAR-1-1909C106_Appendix D.)**

# Appendix E. Antenna location

**(Pls See BTL-FCC SAR-1-1909C106_Appendix E.)**

**End of Test Report**