# SAR TEST REPORT

| | |
|---|---|
| **Applicant** | Huawei Technologies Co., Ltd. |
| **FCC ID** | QISVKY-L29 |
| **Product** | Smart Phone |
| **Model** | VKY-L29 |
| **Report No.** | RHA1611-0091SAR01R1 |
| **Issue Date** | January 23, 2017 |

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528- 2013, ANSI/ IEEE C95.1-1992.** The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Jiangpeng Lan　　Kai Xu

*Performed by: Jiangpeng Lan*　　*Approved by: Kai Xu*


## TA Technology (Shanghai) Co., Ltd.

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# 1 Test Laboratory

## 1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **TA technology (shanghai) co., Ltd.**The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein .Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above. This report must not be used by the client to claim product certification, approval, or endorsement by CNAS or any government agencies.

## 1.2 Test facility

**CNAS (accreditation number: L2264)**

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS).

**FCC (recognition number is 428261)**

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

**IC (recognition number is 8510A)**

TA Technology (Shanghai) Co., Ltd. has been listed by industry Canada to perform electromagnetic emission measurement.

**VCCI (recognition number is C-4595, T-2154, R-4113, G-766)**

TA Technology (Shanghai) Co., Ltd. has been listed by industry Japan to perform electromagnetic emission measurement.

**A2LA (Certificate Number: 3857.01)**

TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

## 1.3 Testing Location


| | |
|---|---|
| Company: | TA Technology (Shanghai) Co., Ltd. |
| Address: | No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China |
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## 1.4 Laboratory Environment

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

# 2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:
Table 2.1: Highest Reported SAR (Main-antenna and Wi-Fi antenna)

| Mode | Highest Reported SAR (W/kg) | | | |
|---|---|---|---|---|
| | 1g SAR Head | 1g SAR Body-worn (Separation 15mm) | 1g SAR Hotspot (Separation 10mm) | Product Specific 10-g SAR (Separation 0mm) |
| GSM 850 | 0.34 | 0.38 | 0.55 | NA |
| GSM 1900 | 0.49 | 0.18 | 0.47 | NA |
| WCDMA Band II | 1.10 | 0.40 | 0.58 | NA |
| WCDMA Band IV | 0.55 | 0.32 | 0.47 | NA |
| WCDMA Band V | 0.41 | 0.28 | 0.41 | NA |
| LTE FDD 2 | 1.32 | 0.53 | 1.03 | NA |
| LTE FDD 4 | 0.48 | 0.29 | 0.44 | NA |
| LTE FDD 5 | 0.38 | 0.27 | 0.38 | NA |
| LTE FDD 7 | 0.35 | 0.25 | 0.33 | NA |
| LTE FDD 12 | 0.18 | 0.20 | 0.25 | NA |
| LTE FDD 17 | 0.13 | 0.20 | 0.32 | NA |
| LTE FDD 26 | 0.27 | 0.26 | 0.31 | NA |
| LTE TDD 38 | 0.23 | 0.18 | 0.68 | NA |
| LTE TDD 41 | 0.40 | 0.24 | 0.73 | NA |
| Wi-Fi (2.4G, Ant 1) | 0.75 | 0.07 | 0.15 | NA |
| Wi-Fi (2.4G, Ant 2) | 0.59 | NA | 0.15 | NA |
| Wi-Fi (2.4G, MIMO) | 0.39 | 0.05 | 0.12 | NA |
| Wi-Fi (5G, Ant 1) | 0.39 | 0.07 | 0.13 | 0.28 |
| Wi-Fi (5G, Ant 2) | 0.29 | NA | NA | 0.20 |
| Wi-Fi (5G, MIMO) | 0.47 | 0.04 | 0.18 | 0.24 |
| Date of Testing: | November 20, 2016~ December 25, 2016 | | | |
| Note: The device is in compliance with SAR for Uncontrolled Environment /General Population exposure limits (1.6 W/kg and 4.0 W/kg) specified in ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013. | | | | |

Table 2.2: Highest Reported SAR (Second Antenna)

| Mode | Highest Reported SAR (W/kg) | | | |
|---|---|---|---|---|
| | 1g SAR Head | 1g SAR Body-worn (Separation 15mm) | 1g SAR Hotspot (Separation 10mm) | Product Specific 10-g SAR (Separation 0mm) |
| GSM 850 | 1.10 | 0.26 | 0.55 | NA |
| GSM 1900 | 1.13 | 0.11 | 0.26 | NA |
| WCDMA Band II | 1.26 | 0.15 | 0.25 | NA |
| WCDMA Band IV | 1.12 | 0.07 | 0.17 | NA |
| WCDMA Band V | 1.25 | 0.26 | 0.47 | NA |
| LTE FDD 2 | 1.34 | 0.17 | 0.27 | NA |
| LTE FDD 4 | 1.04 | 0.09 | 0.20 | NA |
| LTE FDD 5 | 1.40 | 0.24 | 0.43 | NA |
| LTE FDD 7 | 1.13 | 0.10 | 0.24 | NA |
| LTE FDD 12 | 1.44 | 0.40 | 0.70 | NA |
| LTE FDD 17 | 1.44 | 0.38 | 0.65 | NA |
| LTE FDD 26 | 0.94 | 0.21 | 0.47 | NA |
| LTE TDD 38 | 1.39 | 0.17 | 0.30 | NA |
| LTE TDD 41 | 1.39 | 0.14 | 0.25 | NA |
| Date of Testing: | November 20, 2016~ December 25, 2016 | | | |
| Note: The device is in compliance with SAR for Uncontrolled Environment /General Population exposure limits (1.6 W/kg and 4.0 W/kg) specified in ANSI/IEEE C95.1-1992, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013. | | | | |

Table 2.3: Highest Simultaneous Transmission SAR

| Exposure Configuration | 1g SAR Head | 1g SAR Body-worn (Separation 15mm) | 1g SAR Hotspot (Separation 10mm) | Product Specific 10-g SAR (Separation 0mm) |
|---|---|---|---|---|
| Highest Simultaneous Transmission SAR (W/kg) | 1.55 | 0.94 | 1.52 | 0.28 |
| Note: 1. The detail for simultaneous transmission consideration is described in chapter 10.4. | | | | |

Note：The highest SAR for head, body, Hotspot, Product Specific 10-g SAR and simultaneous transmission exposure conditions are 1.44 W/kg, 0.53 W/kg, 1.03 W/kg, 0.28 W/kg and 1.55 W/kg.

# 3 Description of Equipment under Test

**Client Information**

| | |
|---|---|
| **Applicant** | Huawei Technologies Co., Ltd. |
| **Applicant address** | Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District<br>Shenzhen<br>518129<br>P.R.China. |
| **Manufacturer** | Huawei Technologies Co., Ltd. |
| **Manufacturer address** | Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District<br>Shenzhen<br>518129<br>P.R.China. |

**General Technologies**

| | |
|---|---|
| Application Purpose: | Original Grant |
| EUT Stage | Identical Prototype |
| Model: | VKY-L29 |
| IMEI: | SIM 1: 862940030039279<br>SIM 2: 862940030046977 |
| Hardware Version: | HL1AVICKYM |
| Software Version: | D189-L29C432B083 |
| Antenna Type: | Internal Antenna |
| Device Class: | B |
| Wi-Fi Hotspot | Wi-Fi 2.4G<br>Wi-Fi 5G U-NII-1&U-NII-3 |
| Power Class: | GSM 850:4<br>GSM 1900:1<br>UMTS Band II/IV/V:3<br>LTE FDD 2/4/5/7/12/17/26:3<br>LTE TDD 38/41:3 |
| Power Level | GSM 850:level 5<br>GSM 1900:level 0<br>UMTS Band II/IV/V:all up bits<br>LTE FDD 2/4/5/7/12/17/26:max power<br>LTE TDD 38/41:max power |

| EUT Accessory | |
|---|---|
| Battery 1 | Manufacturer: SCUD (FUJIAN) Electronics Co., Ltd<br>Model: HB386589ECW<br>Power Rating: DC 3.82V, 3650mAh, Li-ion |
| Battery 2 | Manufacturer: Desay Battery Co., Ltd.<br>Model: HB386589ECW<br>Power Rating: DC 3.82V, 3650mAh, Li-ion |
| Battery 3 | Manufacturer: Sunwoda Electronic Co., LTD<br>Model: HB386589ECW<br>Power Rating: DC 3.82V, 3650mAh, Li-ion |
| Earphone 1 | Manufacturer: JIANGXI LIANCHUANG HONGSHENG ELECTRONIC CO., LTD<br>Model: MEMD1632B580C00<br>1.17m, Shielded |
| Earphone 2 | Manufacturer: BOLUO COUNTY QUANCHENG ELECTRONIC CO., LTD<br>Model: 1311-3291-3.5mm-229<br>1.17m, Shielded |
| Earphone 3 | Manufacturer: Goer Tek Inc<br>Model: NA12<br>1.17m, Shielded |
| Earphone 4 | Manufacturer: MERRY ELECTRONICS (SHENZHEN) CO., LTD.<br>Model: EMC309-001<br>1.17m, Shielded |

**Wireless Technology and Frequency Range**

| Wireless Technology | | Modulation | Operating mode | Tx (MHz) | Rx (MHz) |
|---|---|---|---|---|---|
| GSM | 850 | Voice(GMSK)<br>GPRS(GMSK)<br>EGPRS(GMSK,8PSK) | ☐Multi-slot Class:8-1UP<br>☐Multi-slot Class:10-2UP<br>☒Multi-slot Class:12-4UP<br>☐Multi-slot Class:33-4UP | 824 ~ 849 | 869 ~ 894 |
| | 1900 | | | 1850 ~ 1910 | 1930 ~ 1990 |
| | Does this device support DTM (Dual Transfer Mode)? ☐Yes ☒No | | | | |
| UMTS | Band II | QPSK | HSDPA UE Category:14<br>HSUPA UE Category:6<br>DC-HSDPA UE Category:24 | 1850 ~ 1910 | 1930 ~ 1990 |
| | Band IV | | | 1710 ~ 1755 | 2110 ~ 2155 |
| | Band V | | | 824 ~ 849 | 869 ~ 894 |
| LTE | FDD 2 | QPSK, 16QAM, | / | 1850 ~ 1910 | 1930 ~ 1990 |
| | FDD 4 | | | 1710 ~ 1755 | 2110 ~ 2155 |
| | FDD 5 | | | 824 ~ 849 | 869 ~ 894 |
| | FDD 7 | | | 2500 ~ 2570 | 2620 ~ 2690 |
| | FDD 12 | | | 699 ~ 716 | 729 ~ 746 |
| | FDD 17 | | | 704 ~ 716 | 734 ~ 746 |
| | FDD 26 | | | 814 ~ 849 | 814 ~ 824 |
| | FDD 29 | | | NA | 717 ~ 728 |
| | TDD 38 | | | 2570 ~ 2620 | 2570 ~ 2620 |
| | TDD 41 | | | 2555 ~ 2655 | 2555 ~ 2655 |
| | Does this device support Carrier Aggregation (CA) ☒Yes downlink only☐No | | | | |
| | Does this device support SV-LTE (1xRTT-LTE)? ☐Yes ☒No | | | | |
| BT | 2.4G | Version 4.2 LE | | 2400 ~2480 | 2400 ~2480 |
| Wi-Fi | 2.4G | DSSS, OFDM | 802.11b/g/n (HT20) | 2402 ~2472 | 2402 ~2472 |
| | 5G | OFDM | 802.11a/n 20M/40M/<br>ac 20M/40M/80M | 5150 ~ 5350<br>5470 ~ 5825 | 5150 ~ 5350<br>5470 ~ 5825 |
| | Does this device support MIMO ☒Yes ☐No | | | | |
| NFC | 13.56MHz | | | | |
| Note: LTE Band 29 only work in Rx mode, not work in Tx mode. | | | | | |

# 4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE 1528- 2013, ANSI/IEEE C95.1-1992, the following FCC Published RF exposure KDB procedures:

248227 D01 802.11 Wi-Fi SAR v02r02
447498 D01 General RF Exposure Guidance v06
648474 D04 Handset SAR v01r03
865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
865664 D02 RF Exposure Reporting v01r02
941225 D01 3G SAR Procedures v03r01
941225 D05 SAR for LTE Devices v02r05
941225 D06 Hotspot Mode v02r01
941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
616217 D04 SAR for laptop and tablets v01r02

# 5 Operational Conditions during Test

## 5.1 Test Positions

### 5.1.1 Against Phantom Head

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

The positions used in the measurements were according to IEEE 1528 - 2013 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

### 5.1.2 Body Worn 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.

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration. Per FCC KDB Publication 648474 D04, Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB Publication 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

Body-worn accessories may not always be supplied or available as options for some devices intended to be authorized for body-worn use. In this case, a test configuration with a separation distance between the back of the device and the flat phantom is used. Test position spacing was documented. Transmitters that are designed to operate in front of a person’s face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom in head fluid. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessories, including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

### 5.1.3 Phablet SAR test considerations

For smart phones, with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, that can provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets and support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance.

a) The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.

b) The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR / product specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. The 1-g SAR at 5 mm for UMPC mini-tablets is not required. When hotspot mode applies, 10-g extremity 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. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Extremity 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode 10-g extremity SAR.

c) The simultaneous transmission operating configurations applicable to voice and data transmissions for both phone and mini-tablet modes must be taken into consideration separately for 1-g and 10-g SAR to determine the simultaneous transmission SAR test exclusion and measurement requirements for the relevant wireless modes and exposure conditions.

## 5.2 Measurement Variability

Per FCC KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:
1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

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.

## 5.3 Test Configuration

### 5.3.1 GSM Test Configuration

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:

Output power of reductions:

**Table 5.1: The allowed power reduction in the multi-slot configuration**

| Number of timeslots in uplink assignment | Permissible nominal reduction of maximum output power,(dB) |
|---|---|
| 1 | 0 |
| 2 | 0 to 3,0 |
| 3 | 1,8 to 4,8 |
| 4 | 3,0 to 6,0 |

### 5.3.2 3G Test Configuration

**3G SAR Test Reduction Procedure**

In the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. 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 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.

**WCDMA Test Configuration**
**Output power Verification**

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1’s” for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) are requied in the SAR report. All configurations that are not supported by the handset or cannot be measured due to technical or equipment limitations must be clearly identified.

**Head SAR**

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. 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 in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure.

**Body-Worn Accessory SAR**

SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreaing code or DPDCHn, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the handset, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC.

**Handsets with Release 5 HSDPA**

The 3G SAR test reduction procedure is applied to HSDPA body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the "Release 5 HSDPA Data Devices" section of this document, for the highest reported SAR body-worn accessory exposure configuration in 12.2 kbps RMC. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

HSDPA should be configured according to the UE category of a test device.The number of HSDSCH/ HS-PDSCHs, HARQ 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 conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors(βc, βd), and HS-DPCCH power offset parameters (ΔACK, ΔNACK, ΔCQI) should be set according to values indicated in the Table below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

**Table 5.2: Subtests for UMTS Release 5 HSDPA**

| Sub-set | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{hs}$ (note 1, note 2) | CM(dB) (note 3) | MPR(dB) |
|---|---|---|---|---|---|---|---|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 0.0 | 0.0 |
| 2 | 12/15 (note 4) | 15/15 (note 4) | 64 | 12/15 (note 4) | 24/15 | 1.0 | 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 |

Note1: $\Delta_{ACK}$, $\Delta_{NACK}$ and $\Delta_{CQI}$= 8$\Leftrightarrow$$A_{hs}$ = $\beta_{hs}/\beta_c$=30/15 $\Leftrightarrow$ $\beta_{hs}$=30/15*$\beta_c$

Note2: CM=1 for $\beta_c/\beta_d$ =12/15, $\beta_{hs}/\beta_c$=24/15.

Note3: 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 signaled gain factors for the reference TFC (TFC1,TF1) to $\beta_c$=11/15 and $\beta_d$=15/15.

**HSUPA Test Configuration**

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn accessory configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the "Release 6 HSPA Data Devices" section of this document, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body-worn accessory measurements is tested for next to the ear head exposure.

Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the β values indicated in Table 2 and other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Devices' sections of this document

**Table 5.3：Sub-Test 5 Setup for Release 6 HSUPA**

| Sub-set | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c/\beta_d$ | $\beta_{hs}$ (1) | $\beta_{ec}$ | $\beta_{ed}$ | $\beta_{ed}$ (SF) | $\beta_{ed}$ (codes) | 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 $\beta_{ed2}$: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 $\Leftrightarrow$ $A_{hs}$ = $\beta_{hs}/\beta_c$ = 30/15 $\Leftrightarrow$ $\beta_{hs}$= 30/15 *$\beta_c$.

Note 2: CM = 1 for βc/βd =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 βc/βd ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 10/15 and βd = 15/15.

Note 4: For subtest 5 the βc/βd ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 14/15 and βd = 15/15.

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

Note 6: βed can not be set directly; it is set by Absolute Grant Value.

**Table 5.4: HSUPA UE category**

| UE E-DCH Category | Maximum E-DCH Codes Transmitted | Number of HARQ Processes | E-DCH TTI (ms) | Minimum Spreading 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 | 2 | 2 SF2 & 2 SF4 | 11484 | 5.76 |
| | 4 | 4 | 10 | | 20000 | 2.00 |
| 7 (No DPDCH) | 4 | 8 | 2 | 2 SF2 & 2 SF4 | 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 supports QPSK only. UE Category 7 supports QPSK and 16QAM. (TS25.306-7.3.0)

**HSPA, HSPA+ and DC-HSDPA Test Configuration**

Measurement is required for HSPA, HSPA+ or DC-HSDPA, a KDB inquiry is required to confirm that the wireless mode configurations in the test setup have remained stable throughout the SAR measurements.35 Without prior KDB confirmation to determine the SAR results are acceptable, a PBA is required for TCB approval.
SAR test exclusion for HSPA, HSPA+ and DC-HSDPA is determined according to the following:
1) The HSPA procedures are applied to configure 3GPP Rel. 6 HSPA devices in the required sub-test mode(s) to determine SAR test exclusion.
2) SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode.36 Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.
3) 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 secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.
4) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting HSPA, HSPA+ or DC-HSDPA: a) The output power measurement results and applicable release version(s) of 3GPP TS 34.121.

i) Power measurement difficulties due to test equipment setup or availability must be resolved between the grantee and its test lab.

b) The power measurement results are in agreement with the individual device implementation and specifications. When Enhanced MPR (E-MPR) applies, the normal MPR targets may be modified according to the Cubic Metric (CM) measured by the device, which must be taken into consideration.
c) The UE category, operating parameters, such as the β and Δ values used to configure the device for testing, power setback procedures described in 3GGPP TS 34.121 for the power measurements, and HSPA/HSPA+ channel conditions (active and stable) for the entire duration of the measurement according to the required E-TFCI and AG index values.

5) When SAR measurement is required, the test configurations, procedures and power measurement results must be clearly described to confirm that the required test parameters are used, including E-TFCI and AG index stability and output power conditions.

**Table 5.5: HS-DSCH UE category**

Table 5.1a: FDD HS-DSCH physical layer categories

| HS-DSCH category | Maximum number of HS-DSCH codes received | Minimum inter-TTI interval | Maximum number of bits of an HS-DSCH transport block received within an HS-DSCH TTI NOTE 1 | Total number of soft channel bits | Supported modulations without MIMO operation or dual cell operation | Supported modulations with MIMO operation and without dual cell operation | Supported modulations with dual cell operation |
|---|---|---|---|---|---|---|---|
| Category 1 | 5 | 3 | 7298 | 19200 | QPSK, 16QAM | Not applicable (MIMO not supported) | Not applicable (dual cell operation not supported) |
| Category 2 | 5 | 3 | 7298 | 28800 | | | |
| Category 3 | 5 | 2 | 7298 | 28800 | | | |
| Category 4 | 5 | 2 | 7298 | 38400 | | | |
| Category 5 | 5 | 1 | 7298 | 57600 | | | |
| Category 6 | 5 | 1 | 7298 | 67200 | | | |
| Category 7 | 10 | 1 | 14411 | 115200 | | | |
| Category 8 | 10 | 1 | 14411 | 134400 | | | |
| Category 9 | 15 | 1 | 20251 | 172800 | | | |
| Category 10 | 15 | 1 | 27952 | 172800 | | | |
| Category 11 | 5 | 2 | 3630 | 14400 | QPSK | | |
| Category 12 | 5 | 1 | 3630 | 28800 | | | |
| Category 13 | 15 | 1 | 35280 | 259200 | QPSK, 16QAM, 64QAM | | |
| Category 14 | 15 | 1 | 42192 | 259200 | | | |
| Category 15 | 15 | 1 | 23370 | 345600 | QPSK, 16QAM | | |
| Category 16 | 15 | 1 | 27952 | 345600 | | | |
| Category 17 NOTE 2 | 15 | 1 | 35280 | 259200 | QPSK, 16QAM, 64QAM | – | |
| | | | 23370 | 345600 | – | QPSK, 16QAM | |
| Category 18 NOTE 3 | 15 | 1 | 42192 | 259200 | QPSK, 16QAM, 64QAM | – | |
| | | | 27952 | 345600 | – | QPSK, 16QAM | |
| Category 19 | 15 | 1 | 35280 | 518400 | QPSK, 16QAM, 64QAM | | |
| Category 20 | 15 | 1 | 42192 | 518400 | | | |
| Category 21 | 15 | 1 | 23370 | 345600 | - | - | QPSK, 16QAM |
| Category 22 | 15 | 1 | 27952 | 345600 | | | |
| Category 23 | 15 | 1 | 35280 | 518400 | | | QPSK, 16QAM, 64QAM |
| Category 24 | 15 | 1 | 42192 | 518400 | | | |

### 5.3.3 LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

**A) Spectrum Plots for RB Configurations**

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

**B) MPR**

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

**C) A-MPR**

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

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

1) 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.

2) QPSK with 50% RB allocation

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

3) 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 1) and 2) 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.

4) 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.

**E) 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.

### 5.3.4 TDD LTE specification

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 Band 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

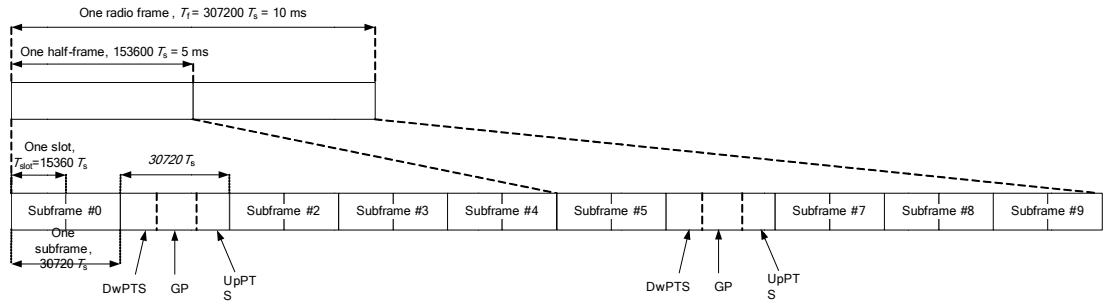



Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

| 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 Band, 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 configuration | 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 4~7 |
| 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% |

SAR test Plan: 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

### 5.3.5 Wi-Fi Test Configuration

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the *initial test position(s)* by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The *initial test position(s)* is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the *reported* SAR for the *initial test position* is:

- ≤ 0.4 W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- 0.4 W/kg, SAR is repeated using the same wireless mode test configuration tested in the *initial test position* to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the *reported* SAR is ≤ 0.8 W/kg or all required test positions are tested.
    - ✧ For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
    - ✧ When it is unclear, all equivalent conditions must be tested.
- For all positions/configurations tested using the *initial test position* and subsequent test positions, when the *reported* SAR is > 0.8 W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the *reported* SAR is ≤ 1.2 W/kg or all required test channels are considered.
    - ✧ The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.

To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement. This RF signal utilized in SAR measurement has almost 100% duty cycle and its crest factor is 1.

| wireless technology | Supporting Bands and Modes |
|---|---|
| WLAN SISO | WiFi 2.4G 802.11b/11g/11n<br>WiFi 5G 802.11a/n/ac |
| WLAN MIMO | WiFi 2.4G 802.11n,<br>WiFi 5G 802.11n/11ac |
| WLAN CDD | WiFi 2.4G 802.11g ,<br>WiFi 5G 802.11a |

### 5.3.6 Downlink LTE CA specification

The device supports downlink LTE Carrier Aggregation (CA) only. Other Release 10 or higher features are not supported, including Uplink Carrier Aggregation, Enhanced SC-FDMA and Uplink MIMO or other antenna diversity configurations etc. All uplink communications are identical to the Release 8 Specifications.

The possible downlink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.101 V13.5.0. The conducted power measurement results of downlink LTE CA are provided in Section 9 of this report per 3GPP TS 36.521-1 V13.0.1. According to KDB 941225 D05A, the downlink LTE CA SAR test is not required and PAG requirements can be excluded.

**Table 5.3.6-1: 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 | 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] | Channel bandwidths for carrier [MHz] | | |
| CA_2C | 5 | 20 | | 40 | 0 |
| | 10 | 15, 20 | | | |
| | 15 | 10, 15, 20 | | | |
| | 20 | 5, 10, 15, 20 | | | |
| CA_5B | 5,10 | 10 | | 20 | 0 |
| | 10 | 5 | | | |
| CA_7C | 15 | 15 | | 40 | 0 |
| | 20 | 20 | | | |
| | 10 | 20 | | 40 | 1 |
| | 15 | 15, 20 | | | |
| | 20 | 10, 15, 20 | | | |
| CA_12B | 5 | 5,10 | | 15 | 0 |
| CA_38C | 15 | 15 | | 40 | 0 |
| | 20 | 20 | | | |
| 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 |
| | 15 | 10, 15, 20 | | | |
| | 20 | 10, 15, 20 | | | |
| | 10 | 20 | | 40 | 3 |
| | 20 | 20 | | | |

**Table 5.3.6-3: Test frequencies for CA_2C**

| Range | CC-Combo / NRB_agg [RB] | CC1 Note1 | | | | | CC2 Note1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] |
| Low | 25+100 | 25 | 18633 | 1853.3 | 633 | 1933.3 | 100 | 18750 | 1865 | 750 | 1945 |
| | | 100 | 18700 | 1860 | 700 | 1940 | 25 | 18817 | 1871.7 | 817 | 1951.7 |
| | 50+75 | 50 | 18653 | 1855.3 | 653 | 1935.3 | 75 | 18773 | 1867.3 | 773 | 1947.3 |
| | | 75 | 18675 | 1857.5 | 675 | 1937.5 | 50 | 18795 | 1869.5 | 795 | 1949.5 |
| | 50+100 | 50 | 18655 | 1855.5 | 655 | 1935.5 | 100 | 18799 | 1869.9 | 799 | 1949.9 |
| | | 100 | 18700 | 1860 | 700 | 1940 | 50 | 18844 | 1874.4 | 844 | 1954.4 |
| | 75+75 | 75 | 18675 | 1857.5 | 675 | 1937.5 | 75 | 18825 | 1872.5 | 825 | 1952.5 |
| | 75+100 | 75 | 18678 | 1857.8 | 678 | 1937.8 | 100 | 18849 | 1874.9 | 849 | 1954.9 |
| | | 100 | 18700 | 1860 | 700 | 1940 | 75 | 18871 | 1877.1 | 871 | 1957.1 |
| | 100+100 | 100 | 18700 | 1860 | 700 | 1940 | 100 | 18898 | 1879.8 | 898 | 1959.8 |
| Mid | 25+100 | 25 | 18808 | 1870.8 | 808 | 1950.8 | 100 | 18925 | 1882.5 | 925 | 1962.5 |
| | | 100 | 18875 | 1877.5 | 875 | 1957.5 | 25 | 18992 | 1889.2 | 992 | 1969.2 |
| | 50+75 | 50 | 18829 | 1872.9 | 829 | 1952.9 | 75 | 18949 | 1884.9 | 949 | 1964.9 |
| | | 75 | 18851 | 1875.1 | 851 | 1955.1 | 50 | 18971 | 1887.1 | 971 | 1967.1 |
| | 50+100 | 50 | 18806 | 1870.6 | 806 | 1950.6 | 100 | 18950 | 1885 | 950 | 1965 |
| | | 100 | 18851 | 1875.1 | 851 | 1955.1 | 50 | 18995 | 1889.5 | 995 | 1969.5 |
| | 75+75 | 75 | 18825 | 1872.5 | 825 | 1952.5 | 75 | 18975 | 1887.5 | 975 | 1967.5 |
| | 75+100 | 75 | 18803 | 1870.3 | 803 | 1950.3 | 100 | 18974 | 1887.4 | 974 | 1967.4 |
| | | 100 | 18826 | 1872.6 | 826 | 1952.6 | 75 | 18997 | 1889.7 | 997 | 1969.7 |
| | 100+100 | 100 | 18801 | 1870.1 | 801 | 1950.1 | 100 | 18999 | 1889.9 | 999 | 1969.9 |
| High | 25+100 | 25 | 18983 | 1888.3 | 983 | 1968.3 | 100 | 19100 | 1900 | 1100 | 1980 |
| | | 100 | 19050 | 1895 | 1050 | 1975 | 25 | 19167 | 1906.7 | 1167 | 1986.7 |
| | 50+75 | 50 | 19005 | 1890.5 | 1005 | 1970.5 | 75 | 19125 | 1902.5 | 1125 | 1982.5 |
| | | 75 | 19027 | 1892.7 | 1027 | 1972.7 | 50 | 19147 | 1904.7 | 1147 | 1984.7 |
| | 50+100 | 50 | 18956 | 1885.6 | 956 | 1965.6 | 100 | 19100 | 1900 | 1100 | 1980 |
| | | 100 | 19001 | 1890.1 | 1001 | 1970.1 | 50 | 19145 | 1904.5 | 1145 | 1984.5 |
| | 75+75 | 75 | 18975 | 1887.5 | 975 | 1967.5 | 75 | 19125 | 1902.5 | 1125 | 1982.5 |
| | 75+100 | 75 | 18929 | 1882.9 | 929 | 1962.9 | 100 | 19100 | 1900 | 1100 | 1980 |
| | | 100 | 18951 | 1885.1 | 951 | 1965.1 | 75 | 19122 | 1902.2 | 1122 | 1982.2 |
| | 100+100 | 100 | 18902 | 1880.2 | 902 | 1960.2 | 100 | 19100 | 1900 | 1100 | 1980 |

Note 1: Carriers in increasing frequency order.

**Table 5.3.6-4: Test frequencies for CA_5B**

| Range | CC-Combo/NRB_agg [RB] | CC1 Note1 | | | | | CC2 Note1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] |
| Low | 25+50 | 25 | 20428 | 826.8 | 2428 | 871.8 | 50 | 20500 | 834 | 2500 | 879 |
| | 50+25 | 50 | 20450 | 829 | 2450 | 874 | 25 | 20522 | 836.2 | 2522 | 881.2 |
| | 50+50 | 50 | 20450 | 829 | 2450 | 874 | 50 | 20549 | 838.9 | 2549 | 883.9 |
| Mid | 25+50 | 25 | 20478 | 831.8 | 2478 | 876.8 | 50 | 20550 | 839 | 2550 | 884 |
| | 50+25 | 50 | 20500 | 834 | 2500 | 879 | 25 | 20572 | 841.2 | 2572 | 886.2 |
| | 50+50 | 50 | 20476 | 831.6 | 2476 | 876.6 | 50 | 20575 | 841.5 | 2575 | 886.5 |
| High | 25+50 | 25 | 20528 | 836.8 | 2528 | 881.8 | 50 | 20600 | 844 | 2600 | 889 |
| | 50+25 | 50 | 20550 | 839 | 2550 | 884 | 25 | 20622 | 846.2 | 2622 | 891.2 |
| | 50+50 | 50 | 20501 | 834.1 | 2501 | 879.1 | 50 | 20600 | 844 | 2600 | 889 |
| Note 1: Carriers in increasing frequency order. | | | | | | | | | | | |

**Table 5.3.6-6: Test frequencies for CA_7C**

| Range | CC-Combo / NRB_agg [RB] | CC1 Note1 | | | | | CC2 Note1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] |
| Low | 50+100 | 50 | 20805 | 2505.5 | 2805 | 2625.5 | 100 | 20949 | 2519.9 | 2949 | 2639.9 |
| | | 100 | 20850 | 2510 | 2850 | 2630 | 50 | 20994 | 2524.4 | 2994 | 2644.4 |
| | 75+75 | 75 | 20825 | 2507.5 | 2825 | 2627.5 | 75 | 20975 | 2522.5 | 2975 | 2642.5 |
| | 75+100 | 75 | 20828 | 2507.8 | 2828 | 2627.8 | 100 | 20999 | 2524.9 | 2999 | 2644.9 |
| | | 100 | 20850 | 2510 | 2850 | 2630 | 75 | 21021 | 2527.1 | 3021 | 2647.1 |
| | 100+100 | 100 | 20850 | 2510 | 2850 | 2630 | 100 | 21048 | 2529.8 | 3048 | 2649.8 |
| Mid | 50+100 | 50 | 21006 | 2525.6 | 3006 | 2645.6 | 100 | 21150 | 2540 | 3150 | 2660 |
| | | 100 | 21051 | 2530.1 | 3051 | 2650.1 | 50 | 21195 | 2544.5 | 3195 | 2664.5 |
| | 75+75 | 75 | 21025 | 2527.5 | 3025 | 2647.5 | 75 | 21175 | 2542.5 | 3175 | 2662.5 |
| | 75+100 | 75 | 21003 | 2525.3 | 3003 | 2645.3 | 100 | 21174 | 2542.4 | 3174 | 2662.4 |
| | | 100 | 21026 | 2527.6 | 3026 | 2647.6 | 75 | 21197 | 2544.7 | 3197 | 2664.7 |
| | 100+100 | 100 | 21001 | 2525.1 | 3001 | 2645.1 | 100 | 21199 | 2544.9 | 3199 | 2664.9 |
| High | 50+100 | 50 | 21206 | 2545.6 | 3206 | 2665.6 | 100 | 21350 | 2560 | 3350 | 2680 |
| | | 100 | 21251 | 2550.1 | 3251 | 2670.1 | 50 | 21395 | 2564.5 | 3395 | 2684.5 |
| | 75+75 | 75 | 21225 | 2547.5 | 3225 | 2667.5 | 75 | 21375 | 2562.5 | 3375 | 2682.5 |
| | 75+100 | 75 | 21179 | 2542.9 | 3179 | 2662.9 | 100 | 21350 | 2560 | 3350 | 2680 |
| | | 100 | 21201 | 2545.1 | 3201 | 2665.1 | 75 | 21372 | 2562.2 | 3372 | 2682.2 |
| | 100+100 | 100 | 21152 | 2540.2 | 3152 | 2660.2 | 100 | 21350 | 2560 | 3350 | 2680 |
| Note 1: Carriers in increasing frequency order. | | | | | | | | | | | |

**Table 5.3.6-7: Test frequencies for CA_12B**

| Range | CC-Combo / NRB_agg [RB] | CC1 Note1 | | | | | CC2 Note1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] | BW [RB] | NUL | fUL [MHz] | NDL | fDL [MHz] |
| Low | 25+25 | 25 | 23035 | 701.5 | 5035 | 731.5 | 25 | 23083 | 706.3 | 5083 | 736.3 |
| | 25+50 | 25 | 23035 | 701.5 | 5035 | 731.5 | 50 | 23107 | 708.7 | 5107 | 738.7 |
| Mid | 25+25 | 25 | 23070 | 705 | 5070 | 735 | 25 | 23118 | 709.8 | 5118 | 739.8 |
| | 25+50 | 25 | 23045 | 702.5 | 5045 | 732.5 | 50 | 23117 | 709.7 | 5117 | 739.7 |
| High | 25+25 | 25 | 23107 | 708.7 | 5107 | 738.7 | 25 | 23155 | 713.5 | 5155 | 743.5 |
| | 25+50 | 25 | 23058 | 703.8 | 5058 | 733.8 | 50 | 23130 | 711 | 5130 | 741 |
| Note 1: Carriers in increasing frequency order. | | | | | | | | | | | |

**Table 5.3.6-9: Test frequencies for CA_38C**

| Range | CC-Combo /NRB_agg [RB] | CC1 Note1 | | | CC2 Note1 | | |
|---|---|---|---|---|---|---|---|
| | | BW [RB] | NUL/DL | fUL/DL [MHz] | BW [RB] | NUL/DL | fUL/DL [MHz] |
| Low | 75+75 | 75 | 37825 | 2577.5 | 75 | 37975 | 2592.5 |
| | 100+100 | 100 | 37850 | 2580 | 100 | 38048 | 2599.8 |
| Mid | 75+75 | 75 | 37925 | 2587.5 | 75 | 38075 | 2602.5 |
| | 100+100 | 100 | 37901 | 2585.1 | 100 | 38099 | 2604.9 |
| High | 75+75 | 75 | 38025 | 2597.5 | 75 | 38175 | 2612.5 |
| | 100+100 | 100 | 37952 | 2590.2 | 100 | 38150 | 2610 |
| Note 1: Carriers in increasing frequency order. | | | | | | | |

**Table 5.3.6-10: Test frequencies for CA_41C**

| Range | CC-Combo / NRB_agg [RB] | CC1 Note1 | | | CC2 Note1 | | |
|---|---|---|---|---|---|---|---|
| | | BW [RB] | NUL/DL | fUL/DL [MHz] | BW [RB] | NUL/DL | fUL/DL [MHz] |
| Low | 25+100 | 25 | 40265 | 2557.5 | 100 | 40382 | 2569.2 |
| | | 100 | 40340 | 2565 | 25 | 40457 | 2576.7 |
| | 50+100 | 50 | 40290 | 2560 | 100 | 40434 | 2574.4 |
| | | 100 | 40340 | 2565 | 50 | 40484 | 2579.4 |
| | 75+75 | 75 | 40315 | 2562.5 | 75 | 40465 | 2577.5 |
| | 75+100 | 75 | 40315 | 2562.5 | 100 | 40486 | 2592.1 |
| | | 100 | 40340 | 2565 | 75 | 40511 | 2582.1 |
| | 100+100 | 100 | 40340 | 2565 | 100 | 40538 | 2584.8 |
| Mid | 25+100 | 25 | 40528 | 2583.8 | 100 | 40645 | 2595.5 |
| | | 100 | 40595 | 2590.5 | 25 | 40712 | 2602.2 |
| | 50+100 | 50 | 40526 | 2583.6 | 100 | 40670 | 2598.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 100 | 40571 | 2588.1 | 50 | 40715 | 2602.5 |
| | 75+75 | 75 | 40545 | 2585.5 | 75 | 40695 | 2600.5 |
| | 75+100 | 75 | 40523 | 2583.3 | 100 | 40694 | 2600.4 |
| | | 100 | 40546 | 2585.6 | 75 | 40717 | 2602.7 |
| | 100+100 | 100 | 40521 | 2583.1 | 100 | 40719 | 2602.9 |
| High | 25+100 | 25 | 41023 | 2633.3 | 100 | 41140 | 2645 |
| | | 100 | 41098 | 2640.8 | 25 | 41215 | 2652.5 |
| | 50+100 | 50 | 40996 | 2630.6 | 100 | 41140 | 2645 |
| | | 100 | 41046 | 2635.6 | 50 | 41190 | 2650 |
| | 75+75 | 75 | 41014 | 2632.5 | 75 | 41165 | 2647.5 |
| | 75+100 | 75 | 40969 | 2627.9 | 100 | 41140 | 2645 |
| | | 100 | 40994 | 2630.4 | 75 | 41165 | 2647.5 |
| | 100+100 | 100 | 40942 | 2625.2 | 100 | 41140 | 2645 |
| Note 1: Carriers in increasing frequency order. | | | | | | | |

**Table 5.3.6-11: 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** | **E-UTRA Bands** | **1.4 MHz** | **3 MHz** | **5 MHz** | **10 MHz** | **15 MHz** | **20 MHz** | **Maximum aggregated bandwidth [MHz]** | **Bandwidth combination set** |
| CA_1A-5A | 1 | | | | Yes | | | 20 | 0 |
| | 5 | | | | Yes | | | | |
| | 1 | | | Yes | Yes | Yes | Yes | 30 | 1 |
| | 5 | | | Yes | Yes | | | | |
| CA_1A-26A | 1 | | | Yes | Yes | Yes | Yes | 35 | 0 |
| | 26 | | | Yes | Yes | Yes | | | |
| | 1 | | | Yes | Yes | | | 20 | 1 |
| | 26 | | | Yes | Yes | | | | |
| CA_2A-5A | 2 | | | Yes | Yes | Yes | Yes | 30 | 0 |
| | 5 | | | Yes | Yes | | | | |
| CA_2A-12A | 2 | | | Yes | Yes | Yes | Yes | 30 | 0 |
| | 12 | | | Yes | Yes | | | | |
| | 2 | | | Yes | Yes | Yes | Yes | 30 | 1 |
| | 12 | | Yes | Yes | Yes | | | | |
| CA_2A-17A | 2 | | | Yes | Yes | | | 20 | 0 |
| | 17 | | | Yes | Yes | | | | |
| CA_2A-28A | 2 | | | Yes | Yes | Yes | Yes | 40 | 0 |
| | 28 | | | Yes | Yes | Yes | Yes | | |
| CA_2A-29A | 2 | | | Yes | Yes | | | 20 | 0 |
| | 29 | | Yes | Yes | Yes | | | | |
| | 2 | | | Yes | Yes | | | 20 | 1 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 29 | | | Yes | Yes | | | | |
| | 2 | | | Yes | Yes | Yes | Yes | 30 | 2 |
| | 29 | | | Yes | Yes | | | | |
| CA_2C-29A | 2 | See CA_2C Bandwidth Combination Set 0 in table 5.4.2A.1-1 | | | | | | 50 | 0 |
| | 29 | | | Yes | Yes | | | | |
| CA_3A-5A | 3 | | | | Yes | Yes | Yes | 30 | 0 |
| | 5 | | | Yes | Yes | | | | |
| | 3 | | | | Yes | | | 20 | 1 |
| | 5 | | | Yes | Yes | | | | |
| | 3 | | | Yes | Yes | Yes | Yes | 30 | 2 |
| | 5 | | | Yes | Yes | | | | |
| CA_3C-5A | 3 | See CA_3C Bandwidth Combination Set 0 in Table 5.4.2A.1-1 | | | | | | 50 | 0 |
| | 5 | | | Yes | Yes | | | | |
| CA_3A-7A | 3 | | | Yes | Yes | Yes | Yes | 40 | 0 |
| | 7 | | | | Yes | Yes | Yes | | |
| CA_3C-7A | 3 | See CA_3C Bandwidth Combination Set 0 in table 5.4.2A.1-1 | | | | | | 60 | 0 |
| | 7 | | | Yes | Yes | Yes | Yes | | |
| CA_3A-26A | 3 | | | Yes | Yes | Yes | Yes | 35 | 0 |
| | 26 | | | Yes | Yes | Yes | | | |
| | 3 | | | Yes | Yes | | | 20 | 1 |
| | 26 | | | Yes | Yes | | | | |
| CA_4A-5A | 4 | | | Yes | Yes | | | 20 | 0 |
| | 5 | | | Yes | Yes | | | | |
| | 4 | | | Yes | Yes | Yes | Yes | 30 | 1 |
| | 5 | | | Yes | Yes | | | | |
| CA_4A-12A | 4 | Yes | Yes | Yes | Yes | | | 20 | 0 |
| | 12 | | | Yes | Yes | | | | |
| | 4 | Yes | Yes | Yes | Yes | Yes | Yes | 30 | 1 |
| | 12 | | | Yes | Yes | | | | |
| | 4 | | | Yes | Yes | Yes | Yes | 30 | 2 |
| | 12 | | Yes | Yes | Yes | | | | |
| | 4 | | | Yes | Yes | | | 20 | 3 |
| | 12 | | | Yes | Yes | | | | |
| | 4 | | | Yes | Yes | Yes | Yes | 30 | 4 |
| | 12 | | | Yes | Yes | | | | |
| CA_4A-12B | 4 | | | Yes | Yes | Yes | Yes | 35 | 0 |
| | 12 | See CA_12B Bandwidth Combination Set 0 in Table 5.4.2A.1-1 | | | | | | | |
| CA_4A-17A | 4 | | | Yes | Yes | | | 20 | 0 |
| | 17 | | | Yes | Yes | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CA_4A-28A | 4 | | | Yes | Yes | Yes | Yes | 40 | 0 |
| | 28 | | | Yes | Yes | Yes | Yes | | |
| CA_4A-29A | 4 | | | Yes | Yes | | | 20 | 0 |
| | 29 | | Yes | Yes | Yes | | | | |
| | 4 | | | Yes | Yes | | | 20 | 1 |
| | 29 | | | Yes | Yes | | | | |
| | 4 | | | Yes | Yes | Yes | Yes | 30 | 2 |
| | 29 | | | Yes | Yes | | | | |
| CA_5A-7A | 5 | Yes | Yes | Yes | Yes | | | 30 | 0 |
| | 7 | | | | Yes | Yes | Yes | | |
| CA_7A-8A | 7 | | | | Yes | Yes | Yes | 30 | 0 |
| | 8 | | Yes | Yes | Yes | | | | |
| CA_7A-20A | 7 | | | | Yes | Yes | Yes | 30 | 0 |
| | 20 | | | Yes | Yes | | | | |
| | 7 | | | | Yes | Yes | Yes | 40 | 1 |
| | 20 | | | Yes | Yes | Yes | Yes | | |
| CA_7A-28A | 7 | | | Yes | Yes | Yes | Yes | 35 | 0 |
| | 28 | | | Yes | Yes | Yes | | | |
| | 41 | | | | | | Yes | | |
| CA_39A-41A | 39 | | | | Yes | Yes | Yes | 40 | 0 |
| | 41 | | | | | | Yes | | |
| CA_39A-41C | 39 | | | | Yes | Yes | Yes | 60 | 0 |
| | 41 | | | | | | Yes | | |
| | 41 | | | | | | Yes | | |
| CA_39C-41A | 39 | | See CA_39C Bandwidth Combination Set 0 in Table 5.6A.1-1 | | | | | 55 | 0 |
| | 41 | | | | | | Yes | | |

NOTE 1: The CA Configuration refers to a combination of an operating band and a CA bandwidth class specified in Table 5.4.2A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

NOTE 2: For each band combination, all combinations of indicated bandwidths belong to the set

NOTE 3: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal

Note:1) For the inter-band CA combinations, Except CA_2A-29A, CA_2C-29A, CA_4A-12A, CA_4A-12B, CA_4A-17A, CA_4A-28A, CA_4A-29A, CA_7A-8A, B12/B17/B29 can not be PCC, other 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 V13.5.0.

3) The reference test frequencies for CA refers to 3GPP TS 36.508 V13.1.0.

4) Testing is not required in bands or modes not intended/allowed for US operation

**Table 5.3.6-12: Inter-band CA operating bands (three bands)**

| E-UTRA CA configuration / Bandwidth combination set | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **E-UTRA CA Configuration** | | **E-UTRA Bands** | **1.4 MHz** | **3 MHz** | **5 MHz** | **10 MHz** | **15 MHz** | **20 MHz** | **Maximum aggregated bandwidth [MHz]** | **Bandwidth combination set** |
| CA_1A-3A-5A | - | 1 | | | Yes | Yes | Yes | Yes | 50 | 0 |
| | | 3 | | | Yes | Yes | Yes | Yes | | |
| | | 5 | | | Yes | Yes | | | | |
| | | 1 | | | Yes | Yes | | | 40 | 1 |
| | | 3 | | | Yes | Yes | Yes | Yes | | |
| | | 5 | | | Yes | Yes | | | | |
| CA_1A-3A-26A | - | 1 | | | Yes | Yes | Yes | Yes | 50 | 0 |
| | | 3 | | | Yes | Yes | Yes | Yes | | |
| | | 26 | | | Yes | Yes | | | | |
| NOTE 1: The CA Configuration refers to a combination of 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.<br>NOTE 2: For each band combination, all combinations of indicated bandwidths belong to the set.<br>NOTE 3: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal. | | | | | | | | | | |

Note: 1) 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 V13.5.1.

3) The reference test frequencies for CA refers to 3GPP TS 36.508 V13.1.0.

4) Testing is not required in bands or modes not intended/allowed for US operation

### 5.3.7 Dynamic antenna tuning description

The device supports the dynamic antenna tuning function to optimize transmission efficiency for 1710MHz~2700MHz frequency operations (Modem1-Main Antenna: GSM 1900/ WCDMA Band 2/4/ FDD LTE Band 2/4/7/ TDD LTE Band 38/41), especially in any hand usage scenario. The dynamic antenna tuning function is only applicable for the 2G/3G/4G main Tx antenna, which is located in the bottom part of the device. The 2G/3G/4G main antenna has two fixed states for some bands: the state 1 and state 2.

**Summary test plan for Dynamic antenna tuning:**

For dynamic antenna tuning SAR test of each model device, all the tuning states will be considered for SAR compliance:

a) Firstly, some commands or test scripts are used to fix the tuning state at state1 or state 2, so that only one antenna tuning state is chosen at a time for SAR test. The antenna is set to the MAX transmit output power level.

b) Secondly, per KDB648474D04 section 5, in order to reduce the number of SAR tests required to demonstrate compliance for the numerous tuning states, we plan to perform one single point zoom scan SAR measurement between state1 and state 2 for each antenna tuning band and applicable RF exposure condition to identify the higher SAR tuning state that need the full set of normally required SAR measurements and allow SAR test reduction for the lower SAR conditions.

c) Thirdly, full normally required SAR measurements are performed for the higher SAR tuning state. Moreover, the SAR worst case check will also be tested for the other tuning state in each antenna tuning band and applicable RF exposure condition. We think it is conservative enough to ensure the SAR compliance.

### 5.3.8 Power Reduction Configuration

This device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation per the PAG exclusion clause in KDB388624D02 item II.C.1.k:

1) A fixed level power reduction is applied for some frequency bands when hotspot mode becomes active. When the hotspot is disabled, the power value will be recovered.

2) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with the other antennas in certain simultaneous transmission conditions. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction. The PAG requirements can be excluded per KDB 388624D02.

The following tables summerize the key power reduction information. The detailed full power and reduced power measurement results are provided in Section 8 of this report.

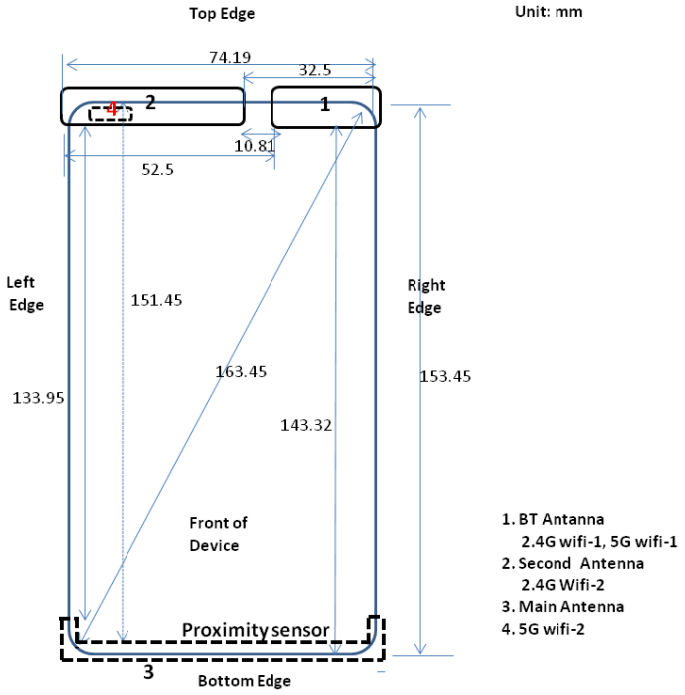
| Main Antenna | GSM 850 | GSM 1900 | UMTS B2 | UMTS B4 | UMTS B5 | LTE B2 | LTE B4 | LTE B5 | LTE B7 | LTE B12 | LTE B17 | LTE B26 | LTE 38 | LTE 41 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hotspot on | 0 | 0 | -1.5 | 0 | 0 | -0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2G&3G&4G + Wi-Fi station simultaneous Transmission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Second Antenna | GSM 850 | GSM 1900 | UMTS B2 | UMTS B4 | UMTS B5 | LTE B2 | LTE B4 | LTE B5 | LTE B7 | LTE B12 | LTE B17 | LTE B26 | LTE 38 | LTE 41 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hotspot on | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2G&3G&4G + Wi-Fi station simultaneous Transmission | 0 | -0.5 | -1 | -1 | 0 | -1 | 0 | -0.5 | 0 | -0.5 | -0.8 | -1 | -1 | -1 |

| Wi-Fi Antenna 1 | 2.4G | 5G U-NII-1 | 5G U-NII-2A | 5G U-NII-2C | 5G U-NII-3 |
|---|---|---|---|---|---|
| Hotspot on | 0 | 0 | NA | NA | 0 |
| 2G&3G&4G + Wi-Fi station simultaneous Transmission | -4 | -1.5 | -1.5 | -2 | -1.5 |

### 5.3.9 Proximity sensor Configuration

The device uses a proximity sensor that share the same metallic electrode as the transmitting antenna to facilitate triggering in typical user interactivity with the device.



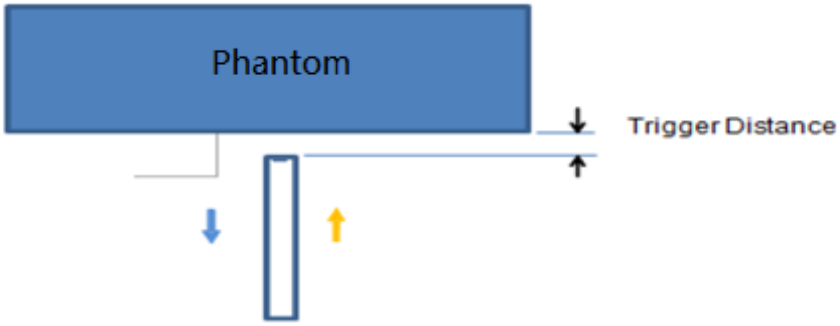

| Tx Antenna | Antenna/Sensor-to- DUT sides separation distances | | | | | |
|---|---|---|---|---|---|---|
| | Front side | Back side | Left Edge | Right Edge | Top Edge | Bottom Edge |
| Main 2G&3G&4G Antenna | NA | NA | NA | NA | 143.3mm | NA |
| Second 2G&3G&4G Antenna | NA | NA | NA | 32.5mm | NA | 143.3mm |
| 2.4G/5G WiFi Antenna | NA | NA | 52.5mm | NA | NA | 143.3mm |
| sensor | NA | NA | NA | NA | 143.3mm | NA |

The proximity sensor and main antenna use same metallic electrode, so the location is same.

FCC KDB 616217 D04 Section 6 was used as guideline for selecting SAR test distance for this device at these additional exposure conditions.

**Proximity Sensor Triggering Distance (Per KDB 616217 D04 §6.2)**

Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the phantom were both assessed.




Picture: Proximity sensor triggering distances assessment (Bottom side)


Picture: Proximity sensor triggering distances assessment (Back side)

**Table: Summary of Trigger Distances**

| Liquid Type (MHz) | Trigger distance –bottom side | | Trigger distance – back side | |
|---|---|---|---|---|
| | Moving toward phantom | Moving from phantom | Moving toward phantom | Moving from phantom |
| 2600 Body | **9mm** | **9mm** | **9mm** | **9mm** |

**Table: KDB 616217 D04 § 6.2.6(Reduced power)**

| LTE B7 Measure Power [dBm] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Distance[mm] | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 |
| Bottom side | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 |
| Back side | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 |

**Table: KDB 616217 D04 § 6.2.8(Full power)**

| LTE B7 Measure Power [dBm] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distance[mm] | 20 | 17 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 1 | 0 |
| Bottom side | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 |
| Back side | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 |

Note: 1) SAR tests with proximity sensor power reduction are only required for back side and bottom side of main antenna with LTE B7. For the other sides or other frequency bands of the device, the proximity sensor is not triggered. Therefore, the proximity sensor coverage is not evaluated on these orientations.

2) For the SAR test of main ant LTE B7, the more conservative SAR test results at the maximum power level with sensor off is used. So additional SAR test at the sensor triggering distance minus 1 mm per KDB616217 is not required.

**Proximity sensor triggering coverage (Per KDB 616217 D04 §6.3)**

The proximity sensor and main antenna use same metallic electrode, so there is no spatial offset.

**Tilt angle influences to proximity sensor triggering (Per KDB 616217 D04 §6.4)**

The influence of table tilt angles to proximity sensor triggering was determined by positioning each side that contains a transmitting antenna, perpendicular to the phantom, at 9mm separation for bottom side.

Rotating the phablet around the edge next to the phantom in ≦10° increments until the tablet is ±45° from the vertical position at 0°, and the maximum output power remains in the reduced mode.

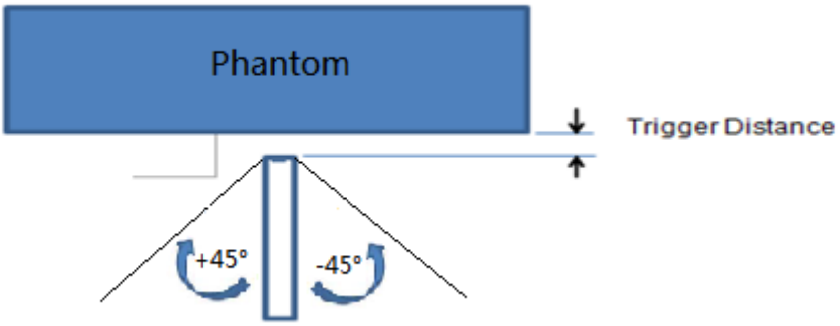


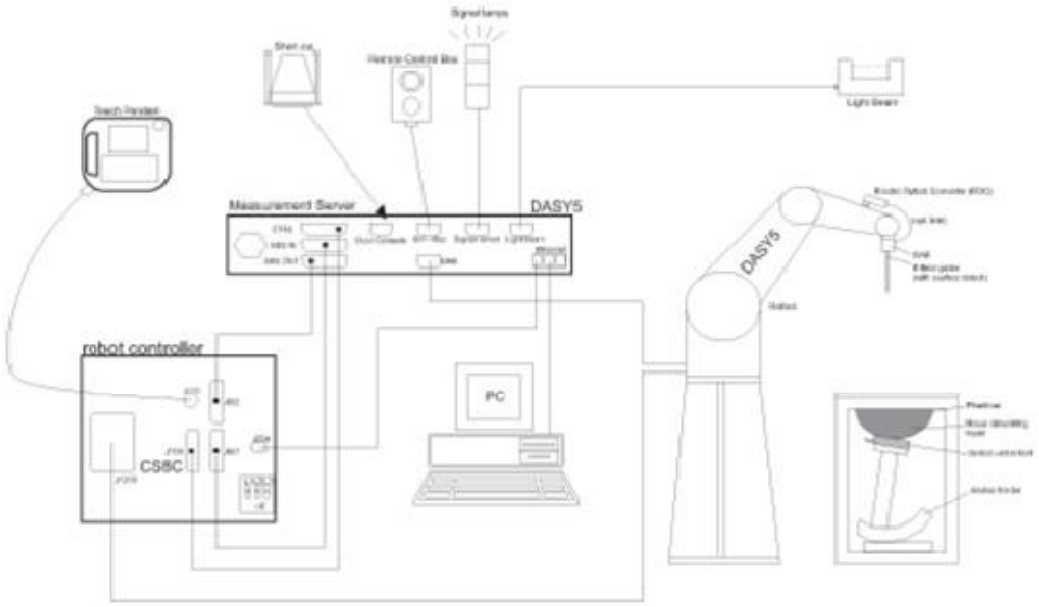

**Table: KDB 616217 D04 § 6.4.1**

| LTE B7 Measure Power [dBm] | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Tilt angle | +45° | +40° | +30° | +20° | +10° | 0° | -10° | -20° | -30° | -40° | -45° |
| Bottom side | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 | 21.5 |
| Note: The test distance is 9mm from bottom side. | | | | | | | | | | | |

# 6 SAR Measurements System Configuration

## 6.1 SAR Measurement Set-up

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




- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (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.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP or Win7 and the DASY software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

## 6.2 DASY5 E-field Probe System

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

**ES3DV3 Probe Specification**

| | |
|---|---|
| Construction | Symmetrical design with triangular core<br>Interleaved sensors<br>Built-in shielding against static charges<br>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<br>(30 MHz to 4 GHz) |
| Directivity | ± 0.2 dB in HSL (rotation around probe axis) ± 0.3 dB in tissue material (rotation normal to probe axis) |
| Dynamic Range | 5 μW/g to > 100 mW/g Linearity: ± 0.2dB |
| Dimensions | Overall length: 330 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm |
| Application | General dosimetry up to 4 GHz<br>Dosimetry in strong gradient fields<br>Compliance tests of mobile phones |

**EX3DV4 Probe Specification**

| | |
|---|---|
| Construction | Symmetrical design with triangular core 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 Linearity: ± 0.2 dB (30 MHz to 6 GHz) |
| Directivity | ± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis) |
| Dynamic Range | 10 µW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 µW/g) |
| Dimensions | Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm |
| Application | High precision dosimetric measurements in any exposure Scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%. |

**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.

$$SAR = C\Delta T / \Delta t$$

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

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

ΔT = Temperature increase due to RF exposure.

Or

$$SAR=|E|^2\sigma/\rho$$

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m$^3$).

## 6.3 SAR Measurement Procedure

**Power Reference Measurement**

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

**Area Scan**

The area scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan), if only one zoom scan follows the area scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of zoom scans has to be increased accordingly.
Area scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

| | ≤3 GHz | > 3 GHz |
|---|---|---|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface | 5 ± 1 mm | ½·δ·ln(2) ± 0.5 mm |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location | 30° ± 1° | 20° ± 1° |
| Maximum area scan spatial resolution: ΔxArea, ΔyArea | ≤ 2 GHz: ≤ 15 mm<br>2 – 3 GHz: ≤ 12 mm | 3 – 4 GHz: ≤ 12 mm<br>4 – 6 GHz: ≤ 10 mm |
| | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device. | |

**Zoom Scan**

Zoom scans are used assess the peak spatial SAR values within a cubic averaging volume containing 1 gram and 10 gram of simulated tissue. The zoom scan measures points (refer to table below) within a cube shoes base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

Zoom scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

| | | | ≤3GHz | > 3 GHz |
|---|---|---|---|---|
| Maximum zoom scan spatial resolution: $\triangle x_{zoom}$ $\triangle y_{zoom}$ | | | ≤2GHz: ≤8mm<br>2 – 3GHz: ≤5mm* | 3 – 4GHz: ≤5mm*<br>4 – 6GHz: ≤4mm* |
| Maximum zoom scan spatial resolution, normal to phantom surface | Uniform grid: $\triangle z_{zoom}(n)$ | | ≤5mm | 3 – 4GHz: ≤4mm<br>4 – 5GHz: ≤3mm<br>5 – 6GHz: ≤2mm |
| | Graded grid | $\triangle z_{zoom}(1)$: between 1st two points closest to phantom surface | ≤4mm | 3 – 4GHz: ≤3mm<br>4 – 5GHz: ≤2.5mm<br>5 – 6GHz: ≤2mm |
| | | $\triangle z_{zoom}(n>1)$: between subsequent points | ≤1.5•$\triangle z_{zoom}(n-1)$ | |
| Minimum zoom scan volume | X, y, z | | ≥30mm | 3 – 4GHz: ≥28mm<br>4 – 5GHz: ≥25mm<br>5 – 6GHz: ≥22mm |
| Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.<br>* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4W/kg, ≤8mm, ≤7mm and ≤5mm zoom scan resolution may be applied, respectively, for 2GHz to 3GHz, 3GHz to 4GHz and 4GHz to 6GHz. | | | | |

**Volume Scan Procedures**

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing. When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to calculating the multiband SAR.

**Power Drift Monitoring**

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drifts more than 5%, the SAR will be retested.

# 7 Main Test Equipment

| Name of Equipment | Manufacturer | Type/Model | Serial Number | Last Cal. | Cal. Due Date |
|---|---|---|---|---|---|
| Network analyzer | Agilent | E5071B | MY42404014 | 2016-05-21 | 2017-05-20 |
| Dielectric Probe Kit | HP | 85070E | US44020115 | No Calibration Requested | |
| Power meter | Agilent | E4417A | GB41291714 | 2016-05-21 | 2017-05-20 |
| Power sensor | Agilent | N8481H | MY50350004 | 2016-05-21 | 2017-05-20 |
| Power sensor | Agilent | E9327A | US40441622 | 2016-05-21 | 2017-05-20 |
| Dual directional coupler | Agilent | 778D-012 | 50519 | 2016-05-21 | 2017-05-20 |
| Dual directional coupler | Agilent | 777D | 50146 | 2016-05-21 | 2017-05-20 |
| Amplifier | INDEXSAR | IXA-020 | 0401 | 2016-05-21 | 2017-05-20 |
| Wideband radio communication tester | R&S | CMW 500 | 113645 | 2016-05-21 | 2017-05-20 |
| E-field Probe | SPEAG | ES3DV3 | 3189 | 2016-07-27 | 2017-07-26 |
| E-field Probe | SPEAG | EX3DV4 | 3898 | 2016-07-11 | 2017-07-10 |
| DAE | SPEAG | DAE4 | 1317 | 2016-08-02 | 2017-08-01 |
| Validation Kit 750MHz | SPEAG | D750V3 | 1017 | 2014-08-28 | 2017-08-27 |
| Validation Kit 835MHz | SPEAG | D835V2 | 4d020 | 2014-08-28 | 2017-08-27 |
| Validation Kit 1750MHz | SPEAG | D1750V2 | 1033 | 2014-01-26 | 2017-01-25 |
| Validation Kit 1900MHz | SPEAG | D1900V2 | 5d060 | 2014-09-01 | 2017-08-31 |
| Validation Kit 2450MHz | SPEAG | D2450V2 | 786 | 2014-09-01 | 2017-08-31 |
| Validation Kit 2600MHz | SPEAG | D2600V2 | 1025 | 2014-12-08 | 2017-12-07 |
| Validation Kit 5GHz | SPEAG | D5GHzV2 | 1151 | 2013-12-30 | 2016-12-29 |
| Temperature Probe | Tianjin jinming | JM222 | AA1009129 | 2016-05-21 | 2017-05-20 |
| Hygrothermograph | Anymetr | NT-311 | 20150732 | 2016-05-21 | 2017-05-20 |

# 8 Tissue Dielectric Parameter Measurements & System Verification

## 8.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance.

**Target values**

| Frequency (MHz) | | Water (%) | Salt (%) | Sugar (%) | Glycol (%) | Preventol (%) | Cellulose (%) | $\varepsilon_r$ | σ(s/m) |
|---|---|---|---|---|---|---|---|---|---|
| Head | 750 | 41.448 | 1.452 | 56 | 0 | 0.1 | 1.0 | 41.9 | 0.89 |
| | 835 | 41.45 | 1.45 | 56 | 0 | 0.1 | 1.0 | 41.5 | 0.90 |
| | 1750 | 55.24 | 0.31 | 0 | 44.45 | 0 | 0 | 40.1 | 1.37 |
| | 1900 | 55.242 | 0.306 | 0 | 44.452 | 0 | 0 | 40.0 | 1.40 |
| | 2450 | 62.7 | 0.5 | 0 | 36.8 | 0 | 0 | 39.2 | 1.80 |
| | 2600 | 55.242 | 0.306 | 0 | 44.452 | 0 | 0 | 39.0 | 1.96 |
| Body | 750 | 52.49 | 1.41 | 45 | 0 | 0.1 | 1.0 | 55.5 | 0.96 |
| | 835 | 52.5 | 1.4 | 45 | 0 | 0.1 | 1.0 | 55.2 | 0.97 |
| | 1750 | 69.91 | 0.12 | 0 | 29.97 | 0 | 0 | 53.4 | 1.49 |
| | 1900 | 69.91 | 0.13 | 0 | 29.96 | 0 | 0 | 53.3 | 1.52 |
| | 2450 | 73.2 | 0.1 | 0 | 26.7 | 0 | 0 | 52.7 | 1.95 |
| | 2600 | 72.6 | 0.1 | 0 | 27.3 | 0 | 0 | 52.5 | 2.16 |

| Frequency (MHz) | | Water (%) | Diethylenglycol monohexylether | Triton X-100 | $\varepsilon_r$ | σ(s/m) |
|---|---|---|---|---|---|---|
| Head | 5300 | 65.53 | 17.24 | 17.23 | 35.9 | 4.76 |
| | 5600 | 65.53 | 17.24 | 17.23 | 35.5 | 5.07 |
| | 5800 | 65.53 | 17.24 | 17.23 | 35.3 | 5.27 |
| Body | 5200 | 72.52 | 13.74 | 13.74 | 49.0 | 5.30 |
| | 5300 | 72.52 | 13.74 | 13.74 | 48.9 | 5.42 |
| | 5600 | 72.52 | 13.74 | 13.74 | 48.5 | 5.77 |
| | 5800 | 72.52 | 13.74 | 13.74 | 48.2 | 6.00 |

**Measurements results**

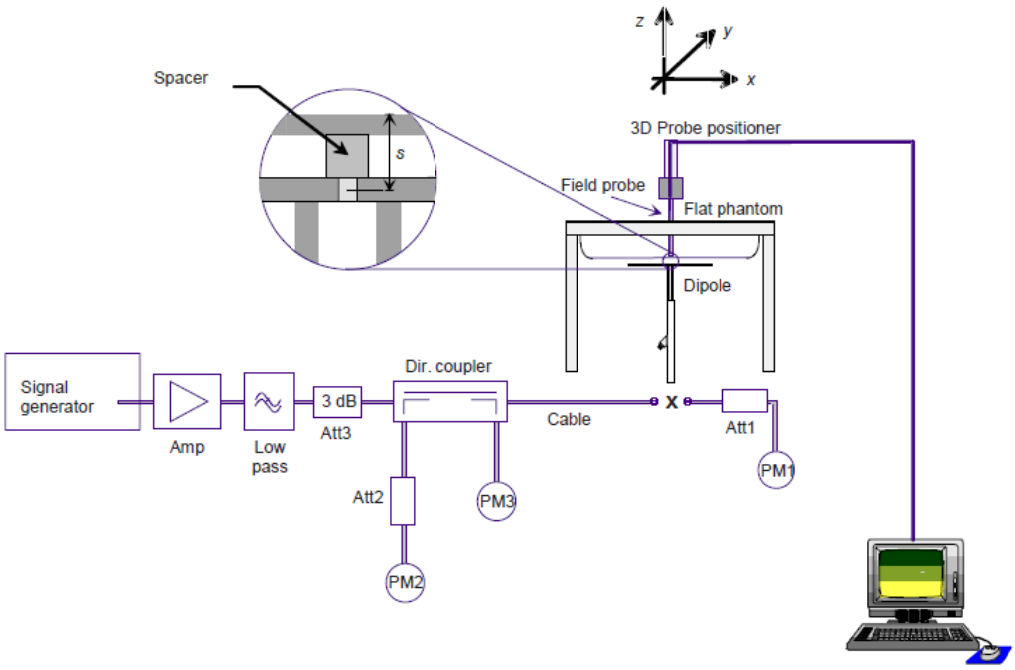
| Frequency (MHz) | | Test Date | Temp ℃ | Measured Dielectric Parameters | | Target Dielectric Parameters | | Limit (Within ±5%) | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | $\varepsilon_r$ | σ(s/m) | $\varepsilon_r$ | σ(s/m) | Dev $\varepsilon_r$(%) | Dev σ(%) |
| 750 | Head | 11/30/2016 | 21.5 | 41.1 | 0.90 | 41.9 | 0.89 | -1.91 | 1.12 |
| | | 12/1/2016 | 21.5 | 42.0 | 0.87 | 41.9 | 0.89 | 0.24 | -2.25 |
| | | 12/2/2016 | 21.5 | 41.8 | 0.89 | 41.9 | 0.89 | -0.24 | 0.00 |
| | | 12/3/2016 | 21.5 | 42.0 | 0.87 | 41.9 | 0.89 | 0.24 | -2.25 |
| | Body | 11/20/2016 | 21.5 | 57.0 | 0.95 | 55.5 | 0.96 | 2.70 | -1.04 |
| | | 11/21/2016 | 21.5 | 54.5 | 0.96 | 55.5 | 0.96 | -1.80 | 0.00 |
| 835 | Head | 11/24/2016 | 21.5 | 41.3 | 0.90 | 41.5 | 0.90 | -0.48 | 0.00 |
| | | 11/25/2016 | 21.5 | 41.3 | 0.88 | 41.5 | 0.90 | -0.48 | -2.22 |
| | Body | 11/22/2016 | 21.5 | 54.4 | 1.00 | 55.2 | 0.97 | -1.45 | 3.09 |
| | | 11/23/2016 | 21.5 | 54.6 | 0.98 | 55.2 | 0.97 | -1.09 | 1.03 |
| | | 11/29/2016 | 21.5 | 54.5 | 0.98 | 55.2 | 0.97 | -1.27 | 1.03 |
| 1750 | Head | 11/26/2016 | 21.5 | 39.5 | 1.37 | 40.1 | 1.37 | -1.50 | 0.00 |
| | | 12/11/2016 | 21.5 | 40.1 | 1.34 | 40.1 | 1.37 | 0.00 | -2.19 |
| | Body | 12/9/2016 | 21.5 | 52.7 | 1.48 | 53.4 | 1.49 | -1.31 | -0.67 |
| | | 12/10/2016 | 21.5 | 52.5 | 1.51 | 53.4 | 1.49 | -1.69 | 1.34 |
| 1900 | Head | 11/27/2016 | 21.5 | 40.1 | 1.41 | 40.0 | 1.40 | 0.25 | 0.71 |
| | | 11/28/2016 | 21.5 | 40.2 | 1.43 | 40.0 | 1.40 | 0.50 | 2.14 |
| | | 12/12/2016 | 21.5 | 40.1 | 1.41 | 40.0 | 1.40 | 0.25 | 0.71 |
| | Body | 12/7/2016 | 21.5 | 52.6 | 1.51 | 53.3 | 1.52 | -1.31 | -0.66 |
| | | 12/8/2016 | 21.5 | 52.8 | 1.51 | 53.3 | 1.52 | -0.94 | -0.66 |
| 2450 | Head | 12/17/2016 | 21.5 | 38.6 | 1.81 | 39.2 | 1.80 | -1.53 | 0.56 |
| | Body | 12/16/2016 | 21.5 | 52.5 | 1.98 | 52.7 | 1.95 | -0.38 | 1.54 |
| 2600 | Head | 12/4/2016 | 21.5 | 38.2 | 2.01 | 39.0 | 1.96 | -2.05 | 2.55 |
| | | 12/5/2016 | 21.5 | 38.4 | 1.94 | 39.0 | 1.96 | -1.54 | -1.02 |
| | | 12/6/2016 | 21.5 | 38.3 | 1.99 | 39.0 | 1.96 | -1.79 | 1.53 |
| | | 12/20/2016 | 21.5 | 38.2 | 2.01 | 39.0 | 1.96 | -2.05 | 2.55 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Body | 12/13/2016 | 21.5 | 51.5 | 2.23 | 52.5 | 2.16 | -1.90 | 3.24 |
| | | 12/14/2016 | 21.5 | 51.7 | 2.21 | 52.5 | 2.16 | -1.52 | 2.31 |
| | | 12/15/2016 | 21.5 | 51.8 | 2.20 | 52.5 | 2.16 | -1.33 | 1.85 |
| 5200 | Body | 12/21/2016 | 21.5 | 48.1 | 5.32 | 49.0 | 5.30 | -1.84 | 0.38 |
| 5300 | Head | 12/23/2016 | 21.5 | 35.2 | 4.95 | 35.9 | 4.76 | -1.95 | 3.99 |
| | Body | 12/22/2016 | 21.5 | 48.4 | 5.30 | 48.9 | 5.42 | -1.02 | -2.21 |
| 5600 | Head | 12/24/2016 | 21.5 | 34.2 | 5.21 | 35.5 | 5.07 | -3.66 | 2.76 |
| | Body | 12/25/2016 | 21.5 | 47.9 | 5.78 | 48.5 | 5.77 | -1.24 | 0.17 |
| 5800 | Head | 12/19/2016 | 21.5 | 34.9 | 5.21 | 35.3 | 5.27 | -1.13 | -1.14 |
| | Body | 12/18/2016 | 21.5 | 47.6 | 6.14 | 48.2 | 6.00 | -1.24 | 2.33 |
| Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz. | | | | | | | | | |

## 8.2 System Performance Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured using the dielectric probe kit and the network analyzer. A system check measurement for every day was made following the determination of the dielectric parameters of the Tissue simulates, using the dipole validation kit. The dipole antenna was placed under the flat section of the twin SAM phantom.

System check is performed regularly on all frequency bands where tests are performed with the DASY system.




**Picture 1 System Performance Check setup**

**Picture 2 Setup Photo**

**Justification for Extended SAR Dipole Calibrations**

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (< - 20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

| Dipole | | Date of Measurement | Return Loss(dB) | Δ % | Impedance (Ω) | ΔΩ |
|---|---|---|---|---|---|---|
| Dipole D750V3 SN: 1017 | Head Liquid | 8/28/2014 | -30.1 | / | 53.2 | / |
| | | 8/27/2015 | -30.0 | 0.3% | 52.7 | 0.5Ω |
| | | 8/26/2016 | -29.7 | 1.0% | 52.4 | 0.3Ω |
| | Body Liquid | 8/28/2014 | -28.9 | / | 48.0 | / |
| | | 8/27/2015 | -29.3 | 1.4% | 48.6 | 0.6Ω |
| | | 8/26/2016 | -29.2 | 0.3% | 48.7 | 0.1Ω |
| Dipole D835V2 SN: 4d020 | Head Liquid | 8/28/2014 | -30.1 | / | 48.6 | / |
| | | 8/27/2015 | -31.1 | 3.3% | 49.7 | 1.1Ω |
| | | 8/26/2016 | -32.2 | -3.4% | 49.8 | 0.1Ω |
| | Body Liquid | 8/28/2014 | -23.3 | / | 54.0 | / |
| | | 8/27/2015 | -23.9 | 2.6% | 53.5 | 0.5Ω |
| | | 8/26/2016 | -24.2 | -1.2% | 53.1 | 0.4Ω |
| Dipole D1750V2 SN: 1033 | Head Liquid | 1/26/2014 | -41.9 | / | 50.5 | / |
| | | 1/25/2015 | -40.6 | 3.1% | 52.4 | 1.9Ω |
| | | 1/24/2016 | -40.4 | 0.5% | 51.1 | 1.3Ω |
| | Body Liquid | 1/26/2014 | -24.3 | / | 45.8 | / |
| | | 1/25/2015 | -23.5 | 3.3% | 48.5 | 2.7Ω |
| | | 1/24/2016 | -24.2 | 3.0% | 47.6 | 0.9Ω |
| Dipole D1900V2 SN: 5d060 | Head Liquid | 9/1/2014 | -22.8 | / | 54.1 | / |
| | | 8/31/2015 | -23.7 | 3.8% | 55.4 | 1.3Ω |
| | | 8/30/2016 | -23.2 | 2.2% | 56.7 | 1.3Ω |
| | Body Liquid | 9/1/2014 | -21.6 | / | 57.6 | / |
| | | 8/31/2015 | -20.8 | 3.8% | 57.3 | 0.3Ω |
| | | 8/30/2016 | -20.8 | 3.5% | 57.0 | 0.3Ω |
| Dipole D2450V2 SN: 786 | Head Liquid | 9/1/2014 | -23.6 | / | 57.1 | / |
| | | 8/31/2015 | -23.9 | 1.3% | 57.4 | 0.3Ω |
| | | 8/30/2016 | -23.3 | 2.6% | 57.7 | 0.3Ω |
| | Body Liquid | 9/1/2014 | -23.7 | / | 56.0 | / |
| | | 8/31/2015 | -24.0 | 1.3% | 55.8 | 0.2Ω |
| | | 8/30/2016 | -24.4 | -1.6% | 55.1 | 0.7Ω |

| | | | | | | |
|---|---|---|---|---|---|---|
| Dipole D2600V2 SN: 1025 | Head Liquid | 12/8/2014 | -24.2 | / | 49.7 | / |
| | | 12/7/2015 | -23.9 | 1.2% | 50.4 | 0.7Ω |
| | | 12/6/2016 | -23.4 | 2.1% | 50.5 | -0.1 |
| | Body Liquid | 12/8/2014 | -23.6 | / | 46.6 | / |
| | | 12/7/2015 | -24.0 | 1.7% | 47.2 | 0.6Ω |
| | | 12/6/2016 | -24.5 | -2.0% | 47.5 | -0.3 |
| Dipole D5GHzV2 SN: 1151 (5.2GHz) | Head Liquid | 12/30/2013 | -24.9 | / | 54.6 | / |
| | | 12/29/2014 | -23.8 | 4.4% | 54.5 | 0.1Ω |
| | | 12/28/2015 | -24.2 | 1.7% | 54.0 | 0.5Ω |
| | Body Liquid | 12/30/2013 | -26.2 | / | 53.8 | / |
| | | 12/29/2014 | -26.7 | 1.9% | 52.3 | 1.5Ω |
| | | 12/28/2015 | -25.9 | 3.0% | 53.0 | 0.7Ω |
| Dipole D5GHzV2 SN: 1151 (5.3GHz) | Head Liquid | 12/30/2013 | -22.8 | / | 45.2 | / |
| | | 12/29/2014 | -22.2 | 2.6% | 45.5 | 0.3Ω |
| | | 12/28/2015 | -23.0 | 3.6% | 45.9 | 0.4Ω |
| | Body Liquid | 12/30/2013 | -25.8 | / | 46.4 | / |
| | | 12/29/2014 | -25.4 | 1.6% | 45.6 | 0.8Ω |
| | | 12/28/2015 | -25.9 | 2.0% | 47.0 | 1.4Ω |
| Dipole D5GHzV2 SN: 1151 (5.6GHz) | Head Liquid | 12/30/2013 | -22.1 | / | 57.6 | / |
| | | 12/29/2014 | -22.6 | 2.3% | 57.2 | 0.4Ω |
| | | 12/28/2015 | -22.4 | 0.9% | 58.3 | 1.1Ω |
| | Body Liquid | 12/30/2013 | -22.1 | / | 58.1 | / |
| | | 12/29/2014 | -22.8 | 3.2% | 57.6 | 0.5Ω |
| | | 12/28/2015 | -22.7 | 0.4% | 58.3 | 0.7Ω |
| Dipole D5GHzV2 SN: 1151 (5.8GHz) | Head Liquid | 12/30/2013 | -20.2 | / | 50.6 | / |
| | | 12/29/2014 | -20.6 | 2.0% | 51.1 | 0.5Ω |
| | | 12/28/2015 | -21.0 | 1.9% | 50.3 | 0.8Ω |
| | Body Liquid | 12/30/2013 | -21.2 | / | 47.9 | / |
| | | 12/29/2014 | -21.7 | 2.4% | 47.6 | 0.3Ω |
| | | 12/28/2015 | -21.4 | 1.4% | 48.3 | 0.7Ω |

**System Check results**

| Frequency (MHz) | | Test Date | Temp ℃ | 250mW Measured $SAR_{1g}$ (W/kg) | 1W Normalized $SAR_{1g}$(W/kg) | 1W Target $SAR_{1g}$(W/kg) | Δ % (Limit ±10%) | Plot No. |
|---|---|---|---|---|---|---|---|---|
| 750 | Head | 11/30/2016 | 21.5 | 2.13 | 8.52 | 8.31 | 2.53 | 1 |
| | | 12/1/2016 | 21.5 | 2.10 | 8.40 | 8.31 | 1.08 | 2 |
| | | 12/2/2016 | 21.5 | 2.04 | 8.16 | 8.31 | -1.81 | 3 |
| | | 12/3/2016 | 21.5 | 2.07 | 8.28 | 8.31 | -0.36 | 4 |
| | Body | 11/20/2016 | 21.5 | 2.22 | 8.88 | 8.75 | 1.49 | 5 |
| | | 11/21/2016 | 21.5 | 2.17 | 8.68 | 8.75 | -0.80 | 6 |
| 835 | Head | 11/24/2016 | 21.5 | 2.44 | 9.76 | 9.54 | 2.31 | 7 |
| | | 11/25/2016 | 21.5 | 2.46 | 9.84 | 9.54 | 3.14 | 8 |
| | Body | 11/22/2016 | 21.5 | 2.41 | 9.64 | 9.54 | 1.05 | 9 |
| | | 11/23/2016 | 21.5 | 2.42 | 9.68 | 9.54 | 1.47 | 10 |
| | | 11/29/2016 | 21.5 | 2.45 | 9.80 | 9.54 | 2.73 | 11 |
| 1750 | Head | 11/26/2016 | 21.5 | 8.95 | 35.80 | 37.20 | -3.76 | 12 |
| | | 12/11/2016 | 21.5 | 9.11 | 36.44 | 37.20 | -2.04 | 13 |
| | Body | 12/9/2016 | 21.5 | 9.24 | 36.96 | 38.80 | -4.74 | 14 |
| | | 12/10/2016 | 21.5 | 9.40 | 37.60 | 38.80 | -3.09 | 15 |
| 1900 | Head | 11/27/2016 | 21.5 | 9.48 | 37.92 | 39.20 | -3.27 | 16 |
| | | 11/28/2016 | 21.5 | 9.45 | 37.80 | 39.20 | -3.57 | 17 |
| | | 12/12/2016 | 21.5 | 9.55 | 38.20 | 39.20 | -2.55 | 18 |
| | Body | 12/7/2016 | 21.5 | 9.93 | 39.72 | 40.00 | -0.70 | 19 |
| | | 12/8/2016 | 21.5 | 9.91 | 39.64 | 40.00 | -0.90 | 20 |
| 2450 | Head | 12/17/2016 | 21.5 | 13.70 | 54.80 | 52.50 | 4.38 | 21 |
| | Body | 12/16/2016 | 21.5 | 12.50 | 50.00 | 52.40 | -4.58 | 22 |
| 2600 | Head | 12/4/2016 | 21.5 | 13.90 | 55.60 | 56.90 | -2.28 | 23 |
| | | 12/5/2016 | 21.5 | 13.88 | 55.52 | 56.90 | -2.43 | 24 |
| | | 12/6/2016 | 21.5 | 13.94 | 55.76 | 56.90 | -2.00 | 25 |
| | | 12/20/2016 | 21.5 | 13.90 | 55.60 | 56.90 | -2.28 | 26 |
| | Body | 12/13/2016 | 21.5 | 13.50 | 54.00 | 56.40 | -4.26 | 27 |
| | | 12/14/2016 | 21.5 | 13.55 | 54.20 | 56.40 | -3.90 | 28 |
| | | 12/15/2016 | 21.5 | 13.89 | 55.56 | 56.40 | -1.49 | 29 |

Note： Target Values used derive from the calibration certificate Data Storage and Evaluation.

| Frequency (MHz) | | Test Date | Temp ℃ | 100mW Measured $SAR_{1g/10g}$ (W/kg) | 1W Normalized $SAR_{1g/10g}$ (W/kg) | 1W Target $SAR_{1g/10g}$ (W/kg) | Δ % (Limit ±10%) | Plot No. |
|---|---|---|---|---|---|---|---|---|
| 5200 | Body | 12/21/2016 | 21.5 | 7.46 ($_{1g}$) | 74.60 | 74.70 | -0.13 | 30 |
| 5300 | Head | 12/23/2016 | 21.5 | 8.13 ($_{1g}$) | 81.30 | 80.30 | 1.25 | 31 |
| | Body | 12/22/2016 | 21.5 | 7.75 ($_{1g}$) | 77.50 | 76.90 | 0.78 | 32 |
| | | | 21.5 | 2.24 ($_{10g}$) | 22.40 | 22.00 | 1.82 | |
| 5600 | Head | 12/24/2016 | 21.5 | 7.67 ($_{1g}$) | 76.70 | 78.50 | -2.29 | 33 |
| | Body | 12/25/2016 | 21.5 | 8.10 ($_{1g}$) | 81.00 | 80.70 | 0.37 | 34 |
| | | | 21.5 | 2.21 ($_{10g}$) | 22.10 | 22.70 | -2.64 | |
| 5800 | Head | 12/19/2016 | 21.5 | 7.66 ($_{1g}$) | 76.60 | 76.70 | -0.13 | 35 |
| | Body | 12/18/2016 | 21.5 | 7.15 ($_{1g}$) | 71.50 | 72.50 | -1.38 | 36 |
| | | | 21.5 | 1.99 ($_{10g}$) | 19.90 | 20.40 | -2.45 | |
| Note：Target Values used derive from the calibration certificate Data Storage and Evaluation. | | | | | | | | |

# 9 Normal and Maximum Output Power

KDB 447498 D01 at the maximum rated output power and within the tune-up tolerance range specified for the product, but not more than 2 dB lower than the maximum tune-up tolerance limit.

## 9.1 GSM Mode

**Main- Antenna**

| GSM 850 | | Burst Average Power(dBm) | | | Division Factors (dB) | Frame-Average Power(dBm) | | | Burst Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|---|---|
| Tx Channel | | 128 | 190 | 251 | | 128 | 190 | 251 | |
| Frequency(MHz) | | 824.2 | 836.6 | 848.8 | | 824.2 | 836.6 | 848.8 | |
| GSM(GMSK) | | 32.66 | 32.83 | 32.81 | 9.03 | 23.63 | 23.80 | 23.78 | 33.50 |
| GPRS (GMSK) | 1Txslot | 32.56 | 32.68 | 32.76 | 9.03 | 23.53 | 23.65 | 23.73 | 33.50 |
| | 2Txslots | 30.39 | 30.62 | 30.77 | 6.02 | **24.37** | **24.60** | **24.75** | 31.50 |
| | 3Txslots | 27.98 | 28.29 | 28.52 | 4.26 | 23.72 | 24.03 | 24.26 | 29.00 |
| | 4Txslots | 25.87 | 26.06 | 26.13 | 3.01 | 22.86 | 23.05 | 23.12 | 26.50 |
| EGPRS (GMSK) | 1Txslot | 32.50 | 32.60 | 32.63 | 9.03 | 23.47 | 23.57 | 23.60 | 33.50 |
| | 2Txslots | 30.28 | 30.59 | 30.54 | 6.02 | 24.26 | 24.57 | 24.52 | 31.50 |
| | 3Txslots | 27.93 | 28.27 | 28.37 | 4.26 | 23.67 | 24.01 | 24.11 | 29.00 |
| | 4Txslots | 25.76 | 26.02 | 26.06 | 3.01 | 22.75 | 23.01 | 23.05 | 26.50 |
| EGPRS (8PSK) | 1Txslot | 26.21 | 26.34 | 26.38 | 9.03 | 17.18 | 17.31 | 17.35 | 27.00 |
| | 2Txslots | 23.97 | 23.99 | 24.11 | 6.02 | 17.95 | 17.97 | 18.09 | 24.50 |
| | 3Txslots | 21.84 | 21.89 | 22.03 | 4.26 | 17.58 | 17.63 | 17.77 | 22.50 |
| | 4Txslots | 20.42 | 20.48 | 20.73 | 3.01 | 17.41 | 17.47 | 17.72 | 21.50 |
| GSM 1900 | | Power(dBm) | | | Division Factors (dB) | Power(dBm) | | | Burst Tune-up Limit (dBm) |
| Tx Channel | | 512 | 661 | 810 | | 512 | 661 | 810 | |
| Frequency(MHz) | | 1850.2 | 1880 | 1909.8 | | 1850.2 | 1880 | 1909.8 | |
| GSM(GMSK) | | 29.53 | 29.51 | 29.58 | 9.03 | 20.50 | 20.48 | 20.55 | 30.30 |
| GPRS (GMSK) | 1Txslot | 29.38 | 29.37 | 29.46 | 9.03 | 20.35 | 20.34 | 20.43 | 30.00 |
| | 2Txslots | 27.66 | 27.53 | 27.71 | 6.02 | **21.64** | **21.51** | **21.69** | 28.50 |
| | 3Txslots | 25.69 | 25.42 | 25.62 | 4.26 | 21.43 | 21.16 | 21.36 | 26.50 |
| | 4Txslots | 23.64 | 23.37 | 23.30 | 3.01 | 20.63 | 20.36 | 20.29 | 24.30 |
| EGPRS (GMSK) | 1Txslot | 29.30 | 29.31 | 29.37 | 9.03 | 20.27 | 20.28 | 20.34 | 30.00 |
| | 2Txslots | 27.59 | 27.51 | 27.59 | 6.02 | 21.57 | 21.49 | 21.57 | 28.50 |
| | 3Txslots | 25.60 | 25.40 | 25.46 | 4.26 | 21.34 | 21.14 | 21.20 | 26.50 |
| | 4Txslots | 22.56 | 23.32 | 23.25 | 3.01 | 19.55 | 20.31 | 20.24 | 24.30 |
| EGPRS | 1Txslot | 25.23 | 25.10 | 25.24 | 9.03 | 16.20 | 16.07 | 16.21 | 26.00 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| (8PSK) | 2Txslots | 23.02 | 22.83 | 22.89 | 6.02 | 17.00 | 16.81 | 16.87 | 23.80 |
| | 3Txslots | 21.38 | 21.31 | 21.47 | 4.26 | 17.12 | 17.05 | 17.21 | 22.00 |
| | 4Txslots | 20.14 | 20.04 | 20.21 | 3.01 | 17.13 | 17.03 | 17.20 | 21.00 |

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:

1. Standalone: GSM 850 GMSK (GPRS) mode with 2 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 2 time slots for Max power, based on the output power measurements above.
2. SAR is not required for EGPRS (8PSK) mode because its output power is less than that of GPRS Mode.

**Second - Antenna**

| GSM 850 | | Burst Average Power(dBm) | | | Division Factors (dB) | Frame-Average Power(dBm) | | | Burst Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|---|---|
| Tx Channel | | 128 | 190 | 251 | | 128 | 190 | 251 | |
| Frequency(MHz) | | 824.2 | 836.6 | 848.8 | | 824.2 | 836.6 | 848.8 | |
| GSM(GMSK) | | 32.28 | 32.50 | 32.56 | 9.03 | 23.25 | 23.47 | 23.53 | 33.00 |
| GPRS (GMSK) | 1Txslot | 32.26 | 32.32 | 32.36 | 9.03 | 23.23 | 23.29 | 23.33 | 33.00 |
| | 2Txslots | 30.06 | 30.28 | 32.41 | 6.02 | **24.04** | **24.26** | **26.39** | 31.00 |
| | 3Txslots | 27.67 | 28.03 | 28.02 | 4.26 | 23.41 | 23.77 | 23.76 | 28.50 |
| | 4Txslots | 25.49 | 25.89 | 25.84 | 3.01 | 22.48 | 22.88 | 22.83 | 26.50 |
| EGPRS (GMSK) | 1Txslot | 32.21 | 32.27 | 32.33 | 9.03 | 23.18 | 23.24 | 23.30 | 33.00 |
| | 2Txslots | 29.90 | 30.15 | 30.22 | 6.02 | 23.88 | 24.13 | 24.20 | 31.00 |
| | 3Txslots | 27.47 | 27.74 | 27.84 | 4.26 | 23.21 | 23.48 | 23.58 | 28.50 |
| | 4Txslots | 25.40 | 25.59 | 25.68 | 3.01 | 22.39 | 22.58 | 22.67 | 26.50 |
| EGPRS (8PSK) | 1Txslot | 26.25 | 26.38 | 26.43 | 9.03 | 17.22 | 17.35 | 17.40 | 27.00 |
| | 2Txslots | 24.31 | 24.51 | 24.56 | 6.02 | 18.29 | 18.49 | 18.54 | 25.00 |
| | 3Txslots | 22.35 | 22.57 | 22.65 | 4.26 | 18.09 | 18.31 | 18.39 | 23.50 |
| | 4Txslots | 20.68 | 20.83 | 20.90 | 3.01 | 17.67 | 17.82 | 17.89 | 21.50 |
| GSM 1900 | | Power(dBm) | | | Division Factors (dB) | Power(dBm) | | | Burst Tune-up Limit (dBm) |
| Tx Channel | | 512 | 661 | 810 | | 512 | 661 | 810 | |
| Frequency(MHz) | | 1850.2 | 1880 | 1909.8 | | 1850.2 | 1880 | 1909.8 | |
| GSM(GMSK) | | 28.56 | 28.61 | 28.63 | 9.03 | 19.53 | 19.58 | 19.60 | 29.00 |
| GPRS (GMSK) | 1Txslot | 28.25 | 28.45 | 28.54 | 9.03 | 19.22 | 19.42 | 19.51 | 29.00 |
| | 2Txslots | 26.47 | 26.17 | 26.15 | 6.02 | **20.45** | **20.15** | **20.13** | 27.00 |
| | 3Txslots | 24.31 | 24.08 | 24.21 | 4.26 | 20.05 | 19.82 | 19.95 | 25.00 |
| | 4Txslots | 23.04 | 23.01 | 23.06 | 3.01 | 20.03 | 20.00 | 20.05 | 24.00 |
| EGPRS (GMSK) | 1Txslot | 28.17 | 28.27 | 28.46 | 9.03 | 19.14 | 19.24 | 19.43 | 29.00 |
| | 2Txslots | 26.39 | 26.09 | 26.07 | 6.02 | 20.37 | 20.07 | 20.05 | 27.00 |
| | 3Txslots | 24.24 | 24.01 | 24.14 | 4.26 | 19.98 | 19.75 | 19.88 | 25.00 |
| | 4Txslots | 22.97 | 22.94 | 22.99 | 3.01 | 19.96 | 19.93 | 19.98 | 23.00 |
| EGPRS | 1Txslot | 24.55 | 24.68 | 24.85 | 9.03 | 15.52 | 15.65 | 15.82 | 25.50 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| (8PSK) | 2Txslots | 23.07 | 22.81 | 22.78 | 6.02 | 17.05 | 16.79 | 16.76 | 23.50 |
| | 3Txslots | 21.22 | 21.01 | 21.15 | 4.26 | 16.96 | 16.75 | 16.89 | 21.50 |
| | 4Txslots | 20.11 | 20.10 | 20.17 | 3.01 | 17.10 | 17.09 | 17.16 | 20.50 |
| **For Simultaneous Transmission** | | | | | | | | | |
| GSM(GMSK) | | 27.62 | 27.53 | 27.47 | 9.03 | 18.59 | 18.50 | 18.44 | 28.00 |
| GPRS (GMSK) | 1Txslot | 27.56 | 27.44 | 27.42 | 9.03 | 18.53 | 18.41 | 18.39 | 28.00 |
| | 2Txslots | 25.76 | 25.59 | 25.52 | 6.02 | **19.74** | **19.57** | **19.50** | 26.50 |
| | 3Txslots | 23.23 | 23.10 | 22.99 | 4.26 | 18.97 | 18.84 | 18.73 | 24.00 |
| | 4Txslots | 22.10 | 21.93 | 21.78 | 3.01 | 19.09 | 18.92 | 18.77 | 23.00 |
| EGPRS (GMSK) | 1Txslot | 27.48 | 27.26 | 27.41 | 9.03 | 18.45 | 18.23 | 18.38 | 28.00 |
| | 2Txslots | 25.33 | 25.07 | 25.15 | 6.02 | 19.31 | 19.05 | 19.13 | 26.50 |
| | 3Txslots | 23.16 | 23.03 | 22.92 | 4.26 | 18.90 | 18.77 | 18.66 | 24.00 |
| | 4Txslots | 22.03 | 21.86 | 21.71 | 3.01 | 19.02 | 18.85 | 18.70 | 23.00 |
| EGPRS (8PSK) | 1Txslot | 23.86 | 23.67 | 23.80 | 9.03 | 14.83 | 14.64 | 14.77 | 24.50 |
| | 2Txslots | 22.01 | 21.79 | 21.86 | 6.02 | 15.99 | 15.77 | 15.84 | 22.50 |
| | 3Txslots | 20.14 | 20.03 | 19.93 | 4.26 | 15.88 | 15.77 | 15.67 | 21.00 |
| | 4Txslots | 19.17 | 19.02 | 18.89 | 3.01 | 16.16 | 16.01 | 15.88 | 20.00 |

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:

1. Standalone: GSM 850 GMSK (GPRS) mode with 2 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 2 time slots for Max power, based on the output power measurements above.
2. SAR is not required for EGPRS (8PSK) mode because its output power is less than that of GPRS Mode.

## 9.2 WCDMA Mode

The following tests were completed according to the test requirements outlined in the 3GPP TS34.121 specification.

**Main- Antenna**

| WCDMA **Hotspot Off** | | Band II(dBm) | | | | Band IV(dBm) | | | | Band V(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tx Channel | | 9262 | 9400 | 9538 | Tune-up Limit (dBm) | 1312 | 1413 | 1513 | Tune-up Limit (dBm) | 4132 | 4183 | 4233 | Tune-up Limit (dBm) |
| Frequency(MHz) | | 1852.4 | 1880 | 1907.6 | | 1712.4 | 1732.6 | 1752.6 | | 826.4 | 836.6 | 846.6 | |
| AMR | 12.2kbps | 23.53 | 23.71 | 23.82 | 24.50 | 23.68 | 23.74 | 23.60 | 24.50 | 23.28 | 23.29 | 23.22 | 24.00 |
| RMC | 12.2kbps | 23.57 | 23.74 | 23.87 | 24.50 | 23.71 | 23.74 | 23.62 | 24.50 | 23.29 | 23.31 | 23.26 | 24.00 |
| | 64kbps | 23.54 | 23.67 | 23.84 | 24.50 | 23.68 | 23.76 | 23.58 | 24.50 | 23.25 | 23.26 | 23.31 | 24.00 |
| | 144kbps | 23.53 | 23.68 | 23.83 | 24.50 | 23.69 | 23.75 | 23.58 | 24.50 | 23.26 | 23.25 | 23.32 | 24.00 |
| | 384kbps | 23.54 | 23.68 | 23.83 | 24.50 | 23.69 | 23.74 | 23.59 | 24.50 | 23.27 | 23.32 | 23.25 | 24.00 |
| HSDPA | Sub 1 | 23.40 | 23.57 | 23.70 | 24.50 | 23.54 | 23.58 | 23.46 | 24.50 | 23.19 | 23.14 | 23.10 | 24.00 |
| | Sub 2 | 23.48 | 23.65 | 23.78 | 24.50 | 23.55 | 23.57 | 23.48 | 24.50 | 23.13 | 23.15 | 23.09 | 24.00 |
| | Sub 3 | 22.97 | 23.14 | 23.27 | 24.00 | 23.15 | 23.15 | 23.06 | 24.00 | 22.62 | 22.75 | 22.67 | 23.50 |
| | Sub 4 | 22.96 | 23.13 | 23.26 | 24.00 | 23.14 | 23.17 | 23.05 | 24.00 | 22.63 | 22.74 | 22.69 | 23.50 |
| HSUPA | Sub 1 | 23.45 | 23.62 | 23.75 | 24.50 | 23.63 | 23.66 | 23.54 | 24.50 | 23.12 | 23.23 | 23.18 | 24.00 |
| | Sub 2 | 21.64 | 21.81 | 21.94 | 22.50 | 21.79 | 21.82 | 21.70 | 22.50 | 21.37 | 21.39 | 21.34 | 22.00 |
| | Sub 3 | 22.37 | 22.54 | 22.83 | 23.50 | 22.61 | 22.64 | 22.52 | 23.50 | 22.19 | 22.21 | 22.16 | 23.00 |
| | Sub 4 | 21.59 | 21.76 | 21.92 | 22.50 | 21.80 | 21.83 | 21.71 | 22.50 | 21.38 | 21.40 | 21.35 | 22.00 |
| | Sub 5 | 23.51 | 23.68 | 23.81 | 24.50 | 23.59 | 23.62 | 23.50 | 24.50 | 23.17 | 23.19 | 23.14 | 24.00 |
| DC-HSDPA | Sub 1 | 23.50 | 23.63 | 23.76 | 24.50 | 23.58 | 23.61 | 23.49 | 24.50 | 23.16 | 23.18 | 23.13 | 24.00 |
| | Sub 2 | 23.49 | 23.62 | 23.75 | 24.50 | 23.56 | 23.60 | 23.48 | 24.50 | 23.25 | 23.16 | 23.12 | 24.00 |
| | Sub 3 | 22.98 | 23.11 | 23.24 | 24.00 | 23.05 | 23.09 | 22.97 | 24.00 | 22.74 | 22.65 | 22.61 | 23.50 |
| | Sub 4 | 22.97 | 23.20 | 23.22 | 24.00 | 23.04 | 23.08 | 22.96 | 24.00 | 22.73 | 22.64 | 22.60 | 23.50 |

Note: 1.Per KDB 941225 D01, SAR for Head / Hotspot / Body-worn exposure is measured using a 12.2 kbps AMR with TPC bits configured to all “1’s”.

2. 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.

| WCDMA **Hotspot On** | | Band II(dBm) | | | |
|---|---|---|---|---|---|
| Tx Channel | | 9262 | 9400 | 9538 | Tune-up Limit (dBm) |
| Frequency(MHz) | | 1852.4 | 1880 | 1907.6 | |
| AMR | 12.2kbps | 22.06 | 22.19 | 22.21 | 23.00 |
| RMC | 12.2kbps | 22.08 | 22.21 | 22.22 | 23.00 |
| | 64kbps | 22.02 | 22.09 | 22.06 | 22.80 |
| | 144kbps | 21.93 | 22.04 | 22.05 | 22.80 |
| | 384kbps | 21.92 | 22.05 | 22.06 | 22.80 |
| HSDPA | Sub 1 | 21.91 | 22.04 | 22.05 | 22.80 |
| | Sub 2 | 21.99 | 22.12 | 22.13 | 22.80 |
| | Sub 3 | 21.48 | 21.61 | 21.62 | 22.50 |
| | Sub 4 | 21.47 | 21.60 | 21.61 | 22.50 |
| HSUPA | Sub 1 | 21.96 | 22.09 | 22.10 | 22.80 |
| | Sub 2 | 20.15 | 20.28 | 20.29 | 21.00 |
| | Sub 3 | 20.88 | 21.01 | 21.18 | 21.80 |
| | Sub 4 | 20.10 | 20.23 | 20.27 | 21.00 |
| | Sub 5 | 22.02 | 22.15 | 22.16 | 23.00 |
| DC-HSDPA | Sub 1 | 22.01 | 22.10 | 22.11 | 22.80 |
| | Sub 2 | 22.00 | 22.09 | 22.10 | 22.80 |
| | Sub 3 | 21.49 | 21.58 | 21.59 | 22.30 |
| | Sub 4 | 21.48 | 21.67 | 21.57 | 22.30 |

Note: 1.Per KDB 941225 D01, SAR for Head / Hotspot / Body-worn exposure is measured using a 12.2 kbps AMR with TPC bits configured to all “1’s”.

2. 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.

**Second - Antenna**

| WCDMA | | Band II(dBm) | | | | Band IV(dBm) | | | | Band V(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tx Channel | | 9262 | 9400 | 9538 | Tune-up Limit (dBm) | 1312 | 1413 | 1513 | Tune-up Limit (dBm) | 4132 | 4183 | 4233 | Tune-up Limit (dBm) |
| Frequency(MHz) | | 1852.4 | 1880 | 1907.6 | | 1712.4 | 1732.6 | 1752.6 | | 826.4 | 836.6 | 846.6 | |
| AMR | 12.2kbps | 19.91 | 19.94 | 19.97 | 20.50 | 20.55 | 20.41 | 20.57 | 21.00 | 23.30 | 23.32 | 23.35 | 24.00 |
| RMC | 12.2kbps | 19.81 | 19.95 | 20.02 | 20.50 | 20.57 | 20.49 | 20.59 | 21.00 | 23.34 | 23.35 | 23.38 | 24.00 |
| | 64kbps | 19.75 | 19.83 | 19.86 | 20.50 | 20.43 | 20.43 | 20.46 | 21.00 | 23.27 | 23.21 | 23.32 | 24.00 |
| | 144kbps | 19.66 | 19.78 | 19.85 | 20.50 | 20.42 | 20.33 | 20.45 | 21.00 | 23.26 | 23.20 | 23.22 | 24.00 |
| | 384kbps | 19.65 | 19.79 | 19.86 | 20.50 | 20.41 | 20.32 | 20.44 | 21.00 | 23.25 | 23.19 | 23.21 | 24.00 |
| HSDPA | Sub 1 | 19.64 | 19.78 | 19.85 | 20.50 | 20.40 | 20.33 | 20.43 | 21.00 | 23.24 | 23.18 | 23.22 | 24.00 |
| | Sub 2 | 19.72 | 19.86 | 19.93 | 20.50 | 20.41 | 20.32 | 20.45 | 21.00 | 23.18 | 23.19 | 23.21 | 24.00 |
| | Sub 3 | 19.21 | 19.35 | 19.42 | 20.00 | 20.01 | 19.90 | 20.03 | 20.50 | 22.67 | 22.79 | 22.79 | 23.50 |
| | Sub 4 | 19.20 | 19.34 | 19.41 | 20.00 | 20.00 | 19.92 | 20.02 | 20.50 | 22.68 | 22.78 | 22.81 | 23.50 |
| HSUPA | Sub 1 | 19.69 | 19.83 | 19.90 | 20.50 | 20.49 | 20.41 | 20.51 | 21.00 | 23.17 | 23.27 | 23.30 | 24.00 |
| | Sub 2 | 17.88 | 18.02 | 18.09 | 18.50 | 18.65 | 18.57 | 18.67 | 19.00 | 21.42 | 21.43 | 21.46 | 22.00 |
| | Sub 3 | 18.61 | 18.75 | 18.98 | 19.50 | 19.47 | 19.39 | 19.49 | 20.00 | 22.24 | 22.25 | 22.28 | 23.00 |
| | Sub 4 | 17.83 | 17.97 | 18.07 | 18.50 | 18.66 | 18.58 | 18.68 | 19.00 | 21.43 | 21.44 | 21.47 | 22.00 |
| | Sub 5 | 19.75 | 19.89 | 19.96 | 20.50 | 20.45 | 20.37 | 20.47 | 21.00 | 23.22 | 23.23 | 23.26 | 24.00 |
| DC-HSDPA | Sub 1 | 19.74 | 19.84 | 19.91 | 20.50 | 20.44 | 20.36 | 20.46 | 21.00 | 23.21 | 23.22 | 23.25 | 24.00 |
| | Sub 2 | 19.73 | 19.83 | 19.90 | 20.00 | 20.42 | 20.35 | 20.45 | 21.00 | 23.30 | 23.20 | 23.24 | 24.00 |
| | Sub 3 | 19.22 | 19.32 | 19.39 | 20.00 | 19.91 | 19.84 | 19.94 | 20.50 | 22.79 | 22.69 | 22.73 | 23.50 |
| | Sub 4 | 19.21 | 19.41 | 19.37 | 20.00 | 19.90 | 19.83 | 19.93 | 20.50 | 22.78 | 22.68 | 22.72 | 23.50 |

Note: 1.Per KDB 941225 D01, SAR for Head / Hotspot / Body-worn exposure is measured using a 12.2 kbps AMR with TPC bits configured to all “1’s”.

2.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.

| WCDMA **For Simultaneous Transmission** | | Band II(dBm) | | | | Band IV(dBm) | | | |
|---|---|---|---|---|---|---|---|---|---|
| Tx Channel | | 9262 | 9400 | 9538 | Tune-up Limit (dBm) | 1312 | 1413 | 1513 | Tune-up Limit (dBm) |
| Frequency(MHz) | | 1852.4 | 1880 | 1907.6 | | 1712.4 | 1732.6 | 1752.6 | |
| AMR | 12.2kbps | 18.88 | 18.91 | 19.02 | 19.50 | 19.54 | 19.53 | 19.45 | 20.00 |
| RMC | 12.2kbps | 18.91 | 18.92 | 19.07 | 19.50 | 19.56 | 19.57 | 19.52 | 20.00 |
| | 64kbps | 18.85 | 18.80 | 18.91 | 19.50 | 19.42 | 19.51 | 19.39 | 20.00 |
| | 144kbps | 18.76 | 18.75 | 18.90 | 19.50 | 19.41 | 19.41 | 19.38 | 20.00 |
| | 384kbps | 18.75 | 18.76 | 18.91 | 19.50 | 19.40 | 19.40 | 19.37 | 20.00 |
| HSDPA | Sub 1 | 18.74 | 18.75 | 18.90 | 19.50 | 19.39 | 19.41 | 19.36 | 20.00 |
| | Sub 2 | 18.82 | 18.83 | 18.98 | 19.50 | 19.40 | 19.40 | 19.38 | 20.00 |
| | Sub 3 | 18.31 | 18.32 | 18.47 | 19.00 | 19.00 | 18.98 | 18.96 | 19.50 |
| | Sub 4 | 18.30 | 18.31 | 18.46 | 19.00 | 18.99 | 19.00 | 18.95 | 19.50 |
| HSUPA | Sub 1 | 18.79 | 18.80 | 18.95 | 19.50 | 19.48 | 19.49 | 19.44 | 20.00 |
| | Sub 2 | 16.98 | 16.99 | 17.14 | 17.50 | 17.64 | 17.65 | 17.60 | 18.00 |
| | Sub 3 | 17.71 | 17.72 | 18.03 | 18.50 | 18.46 | 18.47 | 18.42 | 19.00 |
| | Sub 4 | 16.93 | 16.94 | 17.12 | 17.50 | 17.65 | 17.66 | 17.61 | 18.00 |
| | Sub 5 | 18.85 | 18.86 | 19.01 | 19.50 | 19.44 | 19.45 | 19.40 | 20.00 |
| DC-HSDPA | Sub 1 | 18.84 | 18.81 | 18.96 | 19.50 | 19.43 | 19.44 | 19.39 | 20.00 |
| | Sub 2 | 18.83 | 18.80 | 18.95 | 19.50 | 19.41 | 19.43 | 19.38 | 20.00 |
| | Sub 3 | 18.32 | 18.29 | 18.44 | 19.00 | 18.90 | 18.92 | 18.87 | 19.50 |
| | Sub 4 | 18.31 | 18.38 | 18.42 | 19.00 | 18.89 | 18.91 | 18.86 | 19.50 |

Note: 1.Per KDB 941225 D01, SAR for Head / Hotspot / Body-worn exposure is measured using a 12.2 kbps AMR with TPC bits configured to all “1’s”.

2.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.

## 9.3 LTE Mode

UE Power Class: 3 (23 +/- 2dBm). 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 |

**Main- Antenna**

| LTE FDD Band 2 Hotspot Off | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 18607/1850.7 | 18900/1880 | 19193/1909.3 | |
| 1.4MHz | QPSK | 1 | 0 | 22.13 | 22.62 | 22.17 | 24.00 |
| | | 1 | 2 | 23.12 | 23.44 | 23.20 | |
| | | 1 | 5 | 22.56 | 22.79 | 22.72 | |
| | | 3 | 0 | 22.74 | 23.31 | 22.85 | 24.00 |
| | | 3 | 2 | 23.15 | 22.99 | 23.31 | |
| | | 3 | 3 | 23.16 | 22.67 | 22.69 | |
| | | 6 | 0 | 21.81 | 22.28 | 21.82 | 23.00 |
| | 16QAM | 1 | 0 | 21.94 | 22.44 | 22.11 | 23.00 |
| | | 1 | 2 | 22.42 | 22.60 | 22.57 | |
| | | 1 | 5 | 22.10 | 21.68 | 21.56 | |
| | | 3 | 0 | 21.61 | 22.14 | 21.84 | 23.00 |
| | | 3 | 2 | 22.12 | 21.92 | 22.21 | |
| | | 3 | 3 | 22.04 | 21.51 | 21.61 | |
| | | 6 | 0 | 20.76 | 21.14 | 20.78 | 22.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18615/1851.5 | 18900/1880 | 19185/1908.5 | |
| 3MHz | QPSK | 1 | 0 | 22.15 | 22.66 | 22.20 | 24.00 |
| | | 1 | 7 | 23.15 | 23.49 | 23.24 | |
| | | 1 | 14 | 22.59 | 22.84 | 22.76 | |
| | | 8 | 0 | 21.84 | 22.43 | 21.98 | 23.00 |
| | | 8 | 4 | 22.27 | 22.09 | 22.43 | |
| | | 8 | 7 | 22.26 | 21.78 | 21.79 | |
| | | 15 | 0 | 21.84 | 22.32 | 21.85 | 23.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 16QAM | 1 | 0 | 21.97 | 22.46 | 22.14 | 23.00 |
| | | 1 | 7 | 22.45 | 22.65 | 22.61 | |
| | | 1 | 14 | 22.12 | 21.72 | 21.59 | |
| | | 8 | 0 | 20.72 | 21.27 | 20.96 | 22.00 |
| | | 8 | 4 | 21.23 | 21.05 | 21.33 | |
| | | 8 | 7 | 21.14 | 20.63 | 20.74 | |
| | | 15 | 0 | 20.79 | 21.18 | 20.81 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18625/1852.5 | 18900/1880 | 19175/1907.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.12 | 22.64 | 22.16 | 24.00 |
| | | 1 | 13 | 23.13 | 23.45 | 23.21 | |
| | | 1 | 24 | 22.56 | 22.79 | 22.72 | |
| | | 12 | 0 | 21.81 | 22.38 | 21.94 | 23.00 |
| | | 12 | 6 | 22.25 | 22.05 | 22.38 | |
| | | 12 | 13 | 22.24 | 21.76 | 21.75 | |
| | | 25 | 0 | 21.82 | 22.31 | 21.83 | 23.00 |
| | 16QAM | 1 | 0 | 21.94 | 22.42 | 22.11 | 23.00 |
| | | 1 | 13 | 22.42 | 22.63 | 22.58 | |
| | | 1 | 24 | 22.09 | 21.70 | 21.55 | |
| | | 12 | 0 | 20.70 | 21.23 | 20.93 | 22.00 |
| | | 12 | 6 | 21.20 | 21.00 | 21.29 | |
| | | 12 | 13 | 21.11 | 20.58 | 20.70 | |
| | | 25 | 0 | 20.77 | 21.14 | 20.76 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18650/1855 | 18900/1880 | 19150/1905 | |
| **10MHz** | QPSK | 1 | 0 | 22.14 | 22.65 | 22.19 | 24.00 |
| | | 1 | 25 | 23.16 | 23.50 | 23.25 | |
| | | 1 | 49 | 22.58 | 22.83 | 22.75 | |
| | | 25 | 0 | 21.84 | 22.43 | 21.98 | 23.00 |
| | | 25 | 13 | 22.28 | 22.10 | 22.42 | |
| | | 25 | 25 | 22.26 | 21.80 | 21.80 | |
| | | 50 | 0 | 21.90 | 22.33 | 21.87 | 23.00 |
| | 16QAM | 1 | 0 | 21.96 | 22.45 | 22.13 | 23.00 |
| | | 1 | 25 | 22.45 | 22.67 | 22.61 | |
| | | 1 | 49 | 22.12 | 21.72 | 21.58 | |
| | | 25 | 0 | 20.73 | 21.28 | 20.97 | 22.00 |
| | | 25 | 13 | 21.22 | 21.04 | 21.32 | |
| | | 25 | 25 | 21.14 | 20.63 | 20.74 | |
| | | 50 | 0 | 20.80 | 21.19 | 20.80 | 22.00 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 18675/1857.5 | 18900/1880 | 19125/1902.5 | |
| 15MHz | QPSK | 1 | 0 | 22.13 | 22.61 | 22.17 | 24.00 |
| | | 1 | 38 | 23.14 | 23.49 | 23.22 | |
| | | 1 | 74 | 22.55 | 22.78 | 22.71 | |
| | | 36 | 0 | 21.82 | 22.39 | 21.95 | 23.00 |
| | | 36 | 18 | 22.25 | 22.05 | 22.38 | |
| | | 36 | 39 | 22.23 | 21.77 | 21.76 | |
| | | 75 | 0 | 21.88 | 22.29 | 21.82 | 23.00 |
| | 16QAM | 1 | 0 | 21.91 | 22.43 | 22.11 | 23.00 |
| | | 1 | 38 | 22.43 | 22.64 | 22.59 | |
| | | 1 | 74 | 22.09 | 21.68 | 21.55 | |
| | | 36 | 0 | 20.70 | 21.26 | 20.94 | 22.00 |
| | | 36 | 18 | 21.19 | 20.99 | 21.28 | |
| | | 36 | 39 | 21.12 | 20.59 | 20.71 | |
| | | 75 | 0 | 20.77 | 21.14 | 20.76 | 22.00 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 18700/1860 | 18900/1880 | 19100/1900 | |
| 20MHz | QPSK | 1 | 0 | 22.10 | 22.57 | 22.14 | 24.00 |
| | | 1 | 50 | 23.13 | 23.45 | 23.20 | |
| | | 1 | 99 | 22.53 | 22.77 | 22.68 | |
| | | 50 | 0 | 21.79 | 22.34 | 21.91 | 23.00 |
| | | 50 | 25 | 22.23 | 22.01 | 22.35 | |
| | | 50 | 50 | 22.20 | 21.72 | 21.72 | |
| | | 100 | 0 | 21.85 | 22.24 | 21.78 | 23.00 |
| | 16QAM | 1 | 0 | 21.89 | 22.39 | 22.06 | 23.00 |
| | | 1 | 50 | 22.39 | 22.62 | 22.55 | |
| | | 1 | 99 | 22.07 | 21.65 | 21.53 | |
| | | 50 | 0 | 20.67 | 21.22 | 20.91 | 22.00 |
| | | 50 | 25 | 21.16 | 20.97 | 21.25 | |
| | | 50 | 50 | 21.09 | 20.54 | 20.67 | |
| | | 100 | 0 | 20.75 | 21.10 | 20.73 | 22.00 |

| LTE FDD Band 2 Hotspot On | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 18607/1850.7 | 18900/1880 | 19193/1909.3 | |
| 1.4MHz | QPSK | 1 | 0 | 22.08 | 22.21 | 22.11 | 23.50 |
| | | 1 | 2 | 22.63 | 22.81 | 22.78 | |
| | | 1 | 5 | 22.19 | 21.84 | 21.85 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 3 | 0 | 22.46 | 22.74 | 22.55 | 23.50 |
| | | 3 | 2 | 22.73 | 22.69 | 22.81 | |
| | | 3 | 3 | 22.74 | 21.99 | 22.37 | |
| | | 6 | 0 | 21.58 | 21.78 | 21.55 | 22.50 |
| | 16QAM | 1 | 0 | 21.89 | 22.03 | 22.05 | 22.50 |
| | | 1 | 2 | 21.93 | 21.97 | 22.15 | |
| | | 1 | 5 | 21.73 | 20.73 | 20.69 | |
| | | 3 | 0 | 21.33 | 21.57 | 21.54 | 22.50 |
| | | 3 | 2 | 21.70 | 21.62 | 21.71 | |
| | | 3 | 3 | 21.62 | 20.83 | 21.29 | |
| | | 6 | 0 | 20.53 | 20.64 | 20.51 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18615/1851.5 | 18900/1880 | 19185/1908.5 | |
| **3MHz** | QPSK | 1 | 0 | 22.10 | 22.25 | 22.14 | 23.50 |
| | | 1 | 7 | 22.66 | 22.86 | 22.82 | |
| | | 1 | 14 | 22.22 | 21.89 | 21.89 | |
| | | 8 | 0 | 21.56 | 21.86 | 21.68 | 22.50 |
| | | 8 | 4 | 21.85 | 21.79 | 21.93 | |
| | | 8 | 7 | 21.84 | 21.10 | 21.47 | |
| | | 15 | 0 | 21.61 | 21.82 | 21.58 | 22.50 |
| | 16QAM | 1 | 0 | 21.92 | 22.05 | 22.08 | 22.50 |
| | | 1 | 7 | 21.96 | 22.02 | 22.19 | |
| | | 1 | 14 | 21.75 | 20.77 | 20.72 | |
| | | 8 | 0 | 20.44 | 20.70 | 20.66 | 21.50 |
| | | 8 | 4 | 20.81 | 20.75 | 20.83 | |
| | | 8 | 7 | 20.72 | 19.95 | 20.42 | |
| | | 15 | 0 | 20.56 | 20.68 | 20.54 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18625/1852.5 | 18900/1880 | 19175/1907.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.07 | 22.23 | 22.10 | 23.50 |
| | | 1 | 13 | 22.64 | 22.82 | 22.79 | |
| | | 1 | 24 | 22.19 | 21.84 | 21.85 | |
| | | 12 | 0 | 21.53 | 21.81 | 21.64 | 22.50 |
| | | 12 | 6 | 21.83 | 21.75 | 21.88 | |
| | | 12 | 13 | 21.82 | 21.08 | 21.43 | |
| | | 25 | 0 | 21.59 | 21.81 | 21.56 | 22.50 |
| | 16QAM | 1 | 0 | 21.89 | 22.01 | 22.05 | 22.50 |
| | | 1 | 13 | 21.93 | 22.00 | 22.16 | |
| | | 1 | 24 | 21.72 | 20.75 | 20.68 | |
| | | 12 | 0 | 20.42 | 20.66 | 20.63 | 21.50 |
| | | 12 | 6 | 20.78 | 20.70 | 20.79 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 13 | 20.69 | 19.90 | 20.38 | |
| | | 25 | 0 | 20.54 | 20.64 | 20.49 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18650/1855 | 18900/1880 | 19150/1905 | |
| **10MHz** | QPSK | 1 | 0 | 22.09 | 22.24 | 22.13 | 23.50 |
| | | 1 | 25 | 22.67 | 22.87 | 22.83 | |
| | | 1 | 49 | 22.21 | 21.88 | 21.88 | |
| | | 25 | 0 | 21.56 | 21.86 | 21.68 | 22.50 |
| | | 25 | 13 | 21.86 | 21.80 | 21.92 | |
| | | 25 | 25 | 21.84 | 21.12 | 21.48 | |
| | | 50 | 0 | 21.67 | 21.83 | 21.60 | 22.50 |
| | 16QAM | 1 | 0 | 21.91 | 22.04 | 22.07 | 22.50 |
| | | 1 | 25 | 21.96 | 22.04 | 22.19 | |
| | | 1 | 49 | 21.75 | 20.77 | 20.71 | |
| | | 25 | 0 | 20.45 | 20.71 | 20.67 | 21.50 |
| | | 25 | 13 | 20.80 | 20.74 | 20.82 | |
| | | 25 | 25 | 20.72 | 19.95 | 20.42 | |
| | | 50 | 0 | 20.57 | 20.69 | 20.53 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18675/1857.5 | 18900/1880 | 19125/1902.5 | |
| **15MHz** | QPSK | 1 | 0 | 22.08 | 22.20 | 22.11 | 23.50 |
| | | 1 | 38 | 22.65 | 22.86 | 22.80 | |
| | | 1 | 74 | 22.18 | 21.83 | 21.84 | |
| | | 36 | 0 | 21.54 | 21.82 | 21.65 | 22.50 |
| | | 36 | 18 | 21.83 | 21.75 | 21.88 | |
| | | 36 | 39 | 21.81 | 21.09 | 21.44 | |
| | | 75 | 0 | 21.65 | 21.79 | 21.55 | 22.50 |
| | 16QAM | 1 | 0 | 21.86 | 22.02 | 22.05 | 22.50 |
| | | 1 | 38 | 21.94 | 22.01 | 22.17 | |
| | | 1 | 74 | 21.72 | 20.73 | 20.68 | |
| | | 36 | 0 | 20.42 | 20.69 | 20.64 | 21.50 |
| | | 36 | 18 | 20.77 | 20.69 | 20.78 | |
| | | 36 | 39 | 20.70 | 19.91 | 20.39 | |
| | | 75 | 0 | 20.54 | 20.64 | 20.49 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18700/1860 | 18900/1880 | 19100/1900 | |
| **20MHz** | QPSK | 1 | 0 | 22.05 | 22.16 | 22.08 | 23.50 |
| | | 1 | 50 | 22.64 | 22.82 | 22.78 | |
| | | 1 | 99 | 22.16 | 21.82 | 21.81 | |
| | | 50 | 0 | 21.51 | 21.77 | 21.61 | 22.50 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 50 | 25 | 21.81 | 21.71 | 21.85 | |
| | | 50 | 50 | 21.78 | 21.04 | 21.40 | |
| | | 100 | 0 | 21.62 | 21.74 | 21.51 | 22.50 |
| | 16QAM | 1 | 0 | 21.84 | 21.98 | 22.00 | 22.50 |
| | | 1 | 50 | 21.90 | 21.99 | 22.13 | |
| | | 1 | 99 | 21.70 | 20.70 | 20.66 | |
| | | 50 | 0 | 20.39 | 20.65 | 20.61 | 21.50 |
| | | 50 | 25 | 20.74 | 20.67 | 20.75 | |
| | | 50 | 50 | 20.67 | 19.86 | 20.35 | |
| | | 100 | 0 | 20.52 | 20.60 | 20.46 | 21.50 |

| LTE FDD Band 4 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 19957/1710.7 | 20175/1732.5 | 20393/1754.3 | |
| 1.4MHz | QPSK | 1 | 0 | 22.60 | 23.35 | 23.19 | 24.00 |
| | | 1 | 2 | 23.27 | 22.79 | 23.09 | |
| | | 1 | 5 | 23.26 | 22.82 | 23.43 | |
| | | 3 | 0 | 23.03 | 23.40 | 23.01 | 24.00 |
| | | 3 | 2 | 23.22 | 23.27 | 23.14 | |
| | | 3 | 3 | 23.38 | 23.09 | 23.32 | |
| | | 6 | 0 | 22.19 | 22.28 | 22.24 | 23.00 |
| | 16QAM | 1 | 0 | 21.85 | 22.68 | 22.37 | 23.00 |
| | | 1 | 2 | 22.52 | 22.11 | 22.32 | |
| | | 1 | 5 | 22.43 | 22.14 | 22.60 | |
| | | 3 | 0 | 22.36 | 22.68 | 22.30 | 23.00 |
| | | 3 | 2 | 22.53 | 22.51 | 22.43 | |
| | | 3 | 3 | 22.64 | 22.43 | 22.58 | |
| | | 6 | 0 | 21.50 | 21.58 | 21.55 | 22.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 19965/1711.5 | 20175/1732.5 | 20385/1753.5 | |
| 3MHz | QPSK | 1 | 0 | 22.62 | 23.39 | 23.22 | 24.00 |
| | | 1 | 7 | 23.30 | 22.84 | 23.13 | |
| | | 1 | 14 | 23.29 | 22.87 | 23.47 | |
| | | 8 | 0 | 22.13 | 22.52 | 22.14 | 23.00 |
| | | 8 | 4 | 22.34 | 22.37 | 22.26 | |
| | | 8 | 7 | 22.48 | 22.20 | 22.42 | |
| | | 15 | 0 | 22.22 | 22.32 | 22.27 | 23.00 |
| | 16QAM | 1 | 0 | 21.88 | 22.70 | 22.40 | 23.00 |
| | | 1 | 7 | 22.55 | 22.16 | 22.36 | |
| | | 1 | 14 | 22.45 | 22.18 | 22.63 | |
| | | 8 | 0 | 21.47 | 21.81 | 21.42 | 22.50 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8 | 4 | 21.64 | 21.64 | 21.55 | |
| | | 8 | 7 | 21.74 | 21.55 | 21.71 | |
| | | 15 | 0 | 21.53 | 21.62 | 21.58 | 22.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 19975/1712.5 | 20175/1732.5 | 20375/1752.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.59 | 23.37 | 23.18 | 24.00 |
| | | 1 | 13 | 23.28 | 22.80 | 23.10 | |
| | | 1 | 24 | 23.26 | 22.82 | 23.43 | |
| | | 12 | 0 | 22.10 | 22.47 | 22.10 | 23.00 |
| | | 12 | 6 | 22.32 | 22.33 | 22.21 | |
| | | 12 | 13 | 22.46 | 22.18 | 22.38 | |
| | | 25 | 0 | 22.20 | 22.31 | 22.25 | 23.00 |
| | 16QAM | 1 | 0 | 21.85 | 22.66 | 22.37 | 23.00 |
| | | 1 | 13 | 22.52 | 22.14 | 22.33 | |
| | | 1 | 24 | 22.42 | 22.16 | 22.59 | |
| | | 12 | 0 | 21.45 | 21.77 | 21.39 | 22.50 |
| | | 12 | 6 | 21.61 | 21.59 | 21.51 | |
| | | 12 | 13 | 21.71 | 21.50 | 21.67 | |
| | | 25 | 0 | 21.51 | 21.58 | 21.53 | 22.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20000/1715 | 20175/1732.5 | 20350/1750 | |
| **10MHz** | QPSK | 1 | 0 | 22.61 | 23.38 | 23.21 | 24.00 |
| | | 1 | 25 | 23.31 | 22.85 | 23.14 | |
| | | 1 | 49 | 23.28 | 22.86 | 23.46 | |
| | | 25 | 0 | 22.13 | 22.52 | 22.14 | 23.00 |
| | | 25 | 13 | 22.35 | 22.38 | 22.25 | |
| | | 25 | 25 | 22.48 | 22.22 | 22.43 | |
| | | 50 | 0 | 22.28 | 22.33 | 22.29 | 23.00 |
| | 16QAM | 1 | 0 | 21.87 | 22.69 | 22.39 | 23.00 |
| | | 1 | 25 | 22.55 | 22.18 | 22.36 | |
| | | 1 | 49 | 22.45 | 22.18 | 22.62 | |
| | | 25 | 0 | 21.48 | 21.82 | 21.43 | 22.50 |
| | | 25 | 13 | 21.63 | 21.63 | 21.54 | |
| | | 25 | 25 | 21.74 | 21.55 | 21.71 | |
| | | 50 | 0 | 21.54 | 21.63 | 21.57 | 22.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20025/1717.5 | 20175/1732.5 | 20325/1747.5 | |
| **15MHz** | QPSK | 1 | 0 | 22.60 | 23.34 | 23.19 | 24.00 |
| | | 1 | 38 | 23.29 | 22.84 | 23.11 | |
| | | 1 | 74 | 23.25 | 22.81 | 23.42 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 36 | 0 | 22.11 | 22.48 | 22.11 | |
| | | 36 | 18 | 22.32 | 22.33 | 22.21 | 23.00 |
| | | 36 | 39 | 22.45 | 22.19 | 22.39 | |
| | | 75 | 0 | 22.26 | 22.29 | 22.24 | 23.00 |
| | | 1 | 0 | 21.82 | 22.67 | 22.37 | |
| | | 1 | 38 | 22.53 | 22.15 | 22.34 | 23.00 |
| | | 1 | 74 | 22.42 | 22.14 | 22.59 | |
| | 16QAM | 36 | 0 | 21.45 | 21.80 | 21.40 | |
| | | 36 | 18 | 21.60 | 21.58 | 21.50 | 22.50 |
| | | 36 | 39 | 21.72 | 21.51 | 21.68 | |
| | | 75 | 0 | 21.51 | 21.58 | 21.53 | 22.50 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 20050/1720 | 20175/1732.5 | 20300/1745 | |
| 20MHz | QPSK | 1 | 0 | 22.57 | 23.30 | 23.16 | 24.00 |
| | | 1 | 50 | 23.28 | 22.80 | 23.09 | |
| | | 1 | 99 | 23.23 | 22.80 | 23.39 | |
| | | 50 | 0 | 22.08 | 22.43 | 22.07 | 23.00 |
| | | 50 | 25 | 22.30 | 22.29 | 22.18 | |
| | | 50 | 50 | 22.42 | 22.14 | 22.35 | |
| | | 100 | 0 | 22.23 | 22.24 | 22.20 | 23.00 |
| | 16QAM | 1 | 0 | 21.80 | 22.63 | 22.32 | 23.00 |
| | | 1 | 50 | 22.49 | 22.13 | 22.30 | |
| | | 1 | 99 | 22.40 | 22.11 | 22.57 | |
| | | 50 | 0 | 21.42 | 21.76 | 21.37 | 22.50 |
| | | 50 | 25 | 21.57 | 21.56 | 21.47 | |
| | | 50 | 50 | 21.69 | 21.46 | 21.64 | |
| | | 100 | 0 | 21.49 | 21.54 | 21.50 | 22.50 |

| LTE FDD Band 5 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 20407/824.7 | 20525/836.5 | 20643/848.3 | |
| 1.4MHz | QPSK | 1 | 0 | 22.44 | 22.41 | 22.37 | 23.50 |
| | | 1 | 2 | 22.91 | 22.54 | 22.94 | |
| | | 1 | 5 | 22.22 | 22.25 | 22.28 | |
| | | 3 | 0 | 22.78 | 22.52 | 22.50 | 23.50 |
| | | 3 | 2 | 22.89 | 22.51 | 22.76 | |
| | | 3 | 3 | 22.58 | 22.28 | 22.71 | |
| | | 6 | 0 | 21.75 | 21.54 | 21.68 | 22.50 |
| | 16QAM | 1 | 0 | 21.60 | 21.44 | 21.58 | 22.50 |
| | | 1 | 2 | 22.40 | 21.54 | 22.30 | |
| | | 1 | 5 | 21.43 | 21.21 | 21.45 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 3 | 0 | 21.73 | 21.41 | 21.47 | 22.50 |
| | | 3 | 2 | 21.84 | 21.50 | 21.69 | |
| | | 3 | 3 | 21.51 | 21.31 | 21.62 | |
| | | 6 | 0 | 20.81 | 20.42 | 20.63 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20415/825.5 | 20525/836.5 | 20635/847.5 | |
| **3MHz** | QPSK | 1 | 0 | 22.46 | 22.45 | 22.40 | 23.50 |
| | | 1 | 7 | 22.94 | 22.59 | 22.98 | |
| | | 1 | 14 | 22.25 | 22.30 | 22.32 | |
| | | 8 | 0 | 21.88 | 21.64 | 21.63 | 22.50 |
| | | 8 | 4 | 22.01 | 21.61 | 21.88 | |
| | | 8 | 7 | 21.68 | 21.39 | 21.81 | |
| | | 15 | 0 | 21.78 | 21.58 | 21.71 | 22.50 |
| | 16QAM | 1 | 0 | 21.63 | 21.46 | 21.61 | 22.50 |
| | | 1 | 7 | 22.43 | 21.59 | 22.34 | |
| | | 1 | 14 | 21.45 | 21.25 | 21.48 | |
| | | 8 | 0 | 20.84 | 20.54 | 20.59 | 21.50 |
| | | 8 | 4 | 20.95 | 20.63 | 20.81 | |
| | | 8 | 7 | 20.61 | 20.43 | 20.75 | |
| | | 15 | 0 | 20.84 | 20.46 | 20.66 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20425/826.5 | 20525/836.5 | 20625/846.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.43 | 22.43 | 22.36 | 23.50 |
| | | 1 | 13 | 22.92 | 22.55 | 22.95 | |
| | | 1 | 24 | 22.22 | 22.25 | 22.28 | |
| | | 12 | 0 | 21.85 | 21.59 | 21.59 | 22.50 |
| | | 12 | 6 | 21.99 | 21.57 | 21.83 | |
| | | 12 | 13 | 21.66 | 21.37 | 21.77 | |
| | | 25 | 0 | 21.76 | 21.57 | 21.69 | 22.50 |
| | 16QAM | 1 | 0 | 21.60 | 21.42 | 21.58 | 22.50 |
| | | 1 | 13 | 22.40 | 21.57 | 22.31 | |
| | | 1 | 24 | 21.42 | 21.23 | 21.44 | |
| | | 12 | 0 | 20.82 | 20.50 | 20.56 | 21.50 |
| | | 12 | 6 | 20.92 | 20.58 | 20.77 | |
| | | 12 | 13 | 20.58 | 20.38 | 20.71 | |
| | | 25 | 0 | 20.82 | 20.42 | 20.61 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20450/829 | 20525/836.5 | 20600/844 | |
| **10MHz** | QPSK | 1 | 0 | 22.41 | 22.36 | 22.34 | 23.50 |
| | | 1 | 25 | 22.92 | 22.55 | 22.94 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 49 | 22.19 | 22.23 | 22.24 | |
| | | 25 | 0 | 21.83 | 21.55 | 21.56 | 22.50 |
| | | 25 | 13 | 21.97 | 21.53 | 21.80 | |
| | | 25 | 25 | 21.62 | 21.33 | 21.74 | |
| | | 50 | 0 | 21.79 | 21.50 | 21.64 | 22.50 |
| | 16QAM | 1 | 0 | 21.55 | 21.39 | 21.53 | 22.50 |
| | | 1 | 25 | 22.37 | 21.56 | 22.28 | |
| | | 1 | 49 | 21.40 | 21.18 | 21.42 | |
| | | 25 | 0 | 20.79 | 20.49 | 20.54 | 21.50 |
| | | 25 | 13 | 20.88 | 20.55 | 20.73 | |
| | | 25 | 25 | 20.56 | 20.34 | 20.68 | |
| | | 50 | 0 | 20.80 | 20.38 | 20.58 | 21.50 |

| LTE FDD Band 7 Sensor Off | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 20775/2502.5 | 21100/2535 | 21425/2567.5 | |
| 5MHz | QPSK | 1 | 0 | 22.16 | 22.32 | 22.27 | 23.50 |
| | | 1 | 13 | 22.39 | 22.82 | 22.13 | |
| | | 1 | 24 | 22.32 | 22.35 | 22.48 | |
| | | 12 | 0 | 21.81 | 21.72 | 21.68 | 22.50 |
| | | 12 | 6 | 21.43 | 21.80 | 21.48 | |
| | | 12 | 13 | 21.39 | 21.79 | 21.22 | |
| | | 25 | 0 | 21.57 | 21.75 | 21.61 | 22.50 |
| | 16QAM | 1 | 0 | 21.81 | 21.82 | 21.55 | 22.50 |
| | | 1 | 13 | 21.81 | 22.22 | 21.57 | |
| | | 1 | 24 | 21.82 | 21.83 | 21.85 | |
| | | 12 | 0 | 20.84 | 20.78 | 20.77 | 21.50 |
| | | 12 | 6 | 20.58 | 20.86 | 20.66 | |
| | | 12 | 13 | 20.44 | 20.83 | 20.33 | |
| | | 25 | 0 | 20.63 | 20.78 | 20.73 | 21.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20800/2505 | 21100/2535 | 21400/2565 | |
| 10MHz | QPSK | 1 | 0 | 22.18 | 22.33 | 22.30 | 23.50 |
| | | 1 | 25 | 22.42 | 22.87 | 22.17 | |
| | | 1 | 49 | 22.34 | 22.39 | 22.51 | |
| | | 25 | 0 | 21.84 | 21.77 | 21.72 | 22.50 |
| | | 25 | 13 | 21.46 | 21.85 | 21.52 | |
| | | 25 | 25 | 21.41 | 21.83 | 21.27 | |
| | | 50 | 0 | 21.65 | 21.77 | 21.65 | 22.50 |
| | 16QAM | 1 | 0 | 21.83 | 21.85 | 21.57 | 22.50 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 25 | 21.84 | 22.26 | 21.60 | |
| | | 1 | 49 | 21.85 | 21.85 | 21.88 | |
| | | 25 | 0 | 20.87 | 20.83 | 20.81 | |
| | | 25 | 13 | 20.60 | 20.90 | 20.69 | 21.50 |
| | | 25 | 25 | 20.47 | 20.88 | 20.37 | |
| | | 50 | 0 | 20.66 | 20.83 | 20.77 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20825/2507.5 | 21100/2535 | 21375/2562.5 | |
| **15MHz** | QPSK | 1 | 0 | 22.17 | 22.29 | 22.28 | 23.50 |
| | | 1 | 38 | 22.40 | 22.86 | 22.14 | |
| | | 1 | 74 | 22.31 | 22.34 | 22.47 | |
| | | 36 | 0 | 21.82 | 21.73 | 21.69 | |
| | | 36 | 18 | 21.43 | 21.80 | 21.48 | 22.50 |
| | | 36 | 39 | 21.38 | 21.80 | 21.23 | |
| | | 75 | 0 | 21.63 | 21.73 | 21.60 | 22.50 |
| | 16QAM | 1 | 0 | 21.78 | 21.83 | 21.55 | |
| | | 1 | 38 | 21.82 | 22.23 | 21.58 | 22.50 |
| | | 1 | 74 | 21.82 | 21.81 | 21.85 | |
| | | 36 | 0 | 20.84 | 20.81 | 20.78 | |
| | | 36 | 18 | 20.57 | 20.85 | 20.65 | 21.50 |
| | | 36 | 39 | 20.45 | 20.84 | 20.34 | |
| | | 75 | 0 | 20.63 | 20.78 | 20.73 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20850/2510 | 21100/2535 | 21350/2560 | |
| **20MHz** | QPSK | 1 | 0 | 22.14 | 22.25 | 22.25 | 23.50 |
| | | 1 | 50 | 22.39 | 22.82 | 22.12 | |
| | | 1 | 99 | 22.29 | 22.33 | 22.44 | |
| | | 50 | 0 | 21.79 | 21.68 | 21.65 | |
| | | 50 | 25 | 21.41 | 21.76 | 21.45 | 22.50 |
| | | 50 | 50 | 21.35 | 21.75 | 21.19 | |
| | | 100 | 0 | 21.60 | 21.68 | 21.56 | 22.50 |
| | 16QAM | 1 | 0 | 21.76 | 21.79 | 21.50 | |
| | | 1 | 50 | 21.78 | 22.21 | 21.54 | 22.50 |
| | | 1 | 99 | 21.80 | 21.78 | 21.83 | |
| | | 50 | 0 | 20.81 | 20.77 | 20.75 | |
| | | 50 | 25 | 20.54 | 20.83 | 20.62 | 21.50 |
| | | 50 | 50 | 20.42 | 20.79 | 20.30 | |
| | | 100 | 0 | 20.61 | 20.74 | 20.70 | 21.50 |

| LTE FDD Band 7 Sensor On | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 20775/2502.5 | 21100/2535 | 21425/2567.5 | |
| 5MHz | QPSK | 1 | 0 | 21.07 | 21.17 | 20.84 | 22.00 |
| | | 1 | 13 | 21.15 | 21.46 | 20.97 | |
| | | 1 | 24 | 21.11 | 21.14 | 21.17 | |
| | | 12 | 0 | 20.48 | 20.44 | 20.42 | 21.00 |
| | | 12 | 6 | 20.35 | 20.52 | 20.11 | |
| | | 12 | 13 | 20.32 | 20.56 | 20.25 | |
| | | 25 | 0 | 20.32 | 20.48 | 20.32 | 21.00 |
| | 16QAM | 1 | 0 | 20.52 | 20.55 | 20.37 | 21.00 |
| | | 1 | 13 | 20.58 | 20.78 | 20.21 | |
| | | 1 | 24 | 20.44 | 20.38 | 20.58 | |
| | | 12 | 0 | 19.57 | 19.38 | 19.44 | 20.00 |
| | | 12 | 6 | 19.23 | 19.49 | 19.27 | |
| | | 12 | 13 | 19.05 | 19.52 | 19.05 | |
| | | 25 | 0 | 19.30 | 19.36 | 19.37 | 20.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20800/2505 | 21100/2535 | 21400/2565 | |
| 10MHz | QPSK | 1 | 0 | 21.09 | 21.18 | 20.87 | 22.00 |
| | | 1 | 25 | 21.18 | 21.51 | 21.01 | |
| | | 1 | 49 | 21.13 | 21.18 | 21.20 | |
| | | 25 | 0 | 20.51 | 20.49 | 20.46 | 21.00 |
| | | 25 | 13 | 20.38 | 20.57 | 20.15 | |
| | | 25 | 25 | 20.34 | 20.60 | 20.30 | |
| | | 50 | 0 | 20.40 | 20.50 | 20.36 | 21.00 |
| | 16QAM | 1 | 0 | 20.54 | 20.58 | 20.39 | 21.00 |
| | | 1 | 25 | 20.61 | 20.82 | 20.24 | |
| | | 1 | 49 | 20.47 | 20.40 | 20.61 | |
| | | 25 | 0 | 19.60 | 19.43 | 19.48 | 20.00 |
| | | 25 | 13 | 19.25 | 19.53 | 19.30 | |
| | | 25 | 25 | 19.08 | 19.57 | 19.09 | |
| | | 50 | 0 | 19.33 | 19.41 | 19.41 | 20.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20825/2507.5 | 21100/2535 | 21375/2562.5 | |
| 15MHz | QPSK | 1 | 0 | 21.08 | 21.14 | 20.85 | 22.00 |
| | | 1 | 38 | 21.16 | 21.50 | 20.98 | |
| | | 1 | 74 | 21.10 | 21.13 | 21.16 | |
| | | 36 | 0 | 20.49 | 20.45 | 20.43 | 21.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 36 | 18 | 20.35 | 20.52 | 20.11 | |
| | | 36 | 39 | 20.31 | 20.57 | 20.26 | |
| | | 75 | 0 | 20.38 | 20.46 | 20.31 | 21.00 |
| | | 1 | 0 | 20.49 | 20.56 | 20.37 | |
| | | 1 | 38 | 20.59 | 20.79 | 20.22 | 21.00 |
| | | 1 | 74 | 20.44 | 20.36 | 20.58 | |
| | 16QAM | 36 | 0 | 19.57 | 19.41 | 19.45 | |
| | | 36 | 18 | 19.22 | 19.48 | 19.26 | 20.00 |
| | | 36 | 39 | 19.06 | 19.53 | 19.06 | |
| | | 75 | 0 | 19.30 | 19.36 | 19.37 | 20.00 |

| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 20850/2510 | 21100/2535 | 21350/2560 | |
| **20MHz** | QPSK | 1 | 0 | 21.05 | 21.10 | 20.82 | 22.00 |
| | | 1 | 50 | 21.15 | 21.46 | 20.96 | |
| | | 1 | 99 | 21.08 | 21.12 | 21.13 | |
| | | 50 | 0 | 20.46 | 20.40 | 20.39 | 21.00 |
| | | 50 | 25 | 20.33 | 20.48 | 20.08 | |
| | | 50 | 50 | 20.28 | 20.52 | 20.22 | |
| | | 100 | 0 | 20.35 | 20.41 | 20.27 | 21.00 |
| | 16QAM | 1 | 0 | 20.47 | 20.52 | 20.32 | 21.00 |
| | | 1 | 50 | 20.55 | 20.77 | 20.18 | |
| | | 1 | 99 | 20.42 | 20.33 | 20.56 | |
| | | 50 | 0 | 19.54 | 19.37 | 19.42 | 20.00 |
| | | 50 | 25 | 19.19 | 19.46 | 19.23 | |
| | | 50 | 50 | 19.23 | 19.48 | 19.12 | |
| | | 100 | 0 | 19.28 | 19.32 | 19.34 | 20.00 |

| **LTE FDD Band 12** | | | | **Conducted Power(dBm)** | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 23017/699.7 | 23095/707.5 | 23173/715.3 | |
| **1.4MHz** | QPSK | 1 | 0 | 22.05 | 22.68 | 22.29 | 23.50 |
| | | 1 | 2 | 22.51 | 22.55 | 22.78 | |
| | | 1 | 5 | 21.93 | 22.15 | 21.89 | |
| | | 3 | 0 | 22.27 | 22.41 | 22.46 | 23.50 |
| | | 3 | 2 | 22.43 | 22.41 | 22.70 | |
| | | 3 | 3 | 22.16 | 22.32 | 22.55 | |
| | | 6 | 0 | 21.23 | 21.39 | 21.65 | 22.50 |
| | 16QAM | 1 | 0 | 20.86 | 21.44 | 21.37 | 22.50 |
| | | 1 | 2 | 21.61 | 21.77 | 21.80 | |
| | | 1 | 5 | 21.01 | 21.38 | 20.96 | |
| | | 3 | 0 | 21.45 | 21.46 | 21.51 | 22.50 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 3 | 2 | 21.59 | 21.39 | 21.74 | |
| | | 3 | 3 | 21.22 | 21.34 | 21.55 | |
| | | 6 | 0 | 21.28 | 21.38 | 20.64 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23025/700.5 | 23095/707.5 | 23165/714.5 | |
| **3MHz** | QPSK | 1 | 0 | 22.07 | 22.72 | 22.32 | 23.50 |
| | | 1 | 7 | 22.54 | 22.60 | 22.82 | |
| | | 1 | 14 | 21.96 | 22.20 | 21.93 | |
| | | 8 | 0 | 21.37 | 21.53 | 21.59 | 22.50 |
| | | 8 | 4 | 21.55 | 21.51 | 21.82 | |
| | | 8 | 7 | 21.26 | 21.43 | 21.65 | |
| | | 15 | 0 | 21.26 | 21.43 | 21.68 | 22.50 |
| | 16QAM | 1 | 0 | 20.89 | 21.46 | 21.40 | 22.50 |
| | | 1 | 7 | 21.64 | 21.82 | 21.84 | |
| | | 1 | 14 | 21.03 | 21.42 | 20.99 | |
| | | 8 | 0 | 20.56 | 20.59 | 20.63 | 22.00 |
| | | 8 | 4 | 20.70 | 20.52 | 20.86 | |
| | | 8 | 7 | 20.32 | 20.46 | 20.68 | |
| | | 15 | 0 | 21.31 | 21.42 | 20.67 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23035/701.5 | 23095/707.5 | 23155/713.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.04 | 22.70 | 22.28 | 23.50 |
| | | 1 | 13 | 22.52 | 22.56 | 22.79 | |
| | | 1 | 24 | 21.93 | 22.15 | 21.89 | |
| | | 12 | 0 | 21.34 | 21.48 | 21.55 | 22.50 |
| | | 12 | 6 | 21.53 | 21.47 | 21.77 | |
| | | 12 | 13 | 21.24 | 21.41 | 21.61 | |
| | | 25 | 0 | 21.24 | 21.42 | 21.66 | 22.50 |
| | 16QAM | 1 | 0 | 20.86 | 21.42 | 21.37 | 22.50 |
| | | 1 | 13 | 21.61 | 21.80 | 21.81 | |
| | | 1 | 24 | 21.00 | 21.40 | 20.95 | |
| | | 12 | 0 | 20.54 | 20.55 | 20.60 | 22.00 |
| | | 12 | 6 | 20.67 | 20.47 | 20.82 | |
| | | 12 | 13 | 20.29 | 20.41 | 20.64 | |
| | | 25 | 0 | 21.29 | 21.38 | 20.62 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23060/704 | 23095/707.5 | 23130/711 | |
| **10MHz** | QPSK | 1 | 0 | 22.02 | 22.63 | 22.26 | 23.50 |
| | | 1 | 25 | 22.52 | 22.56 | 22.78 | |
| | | 1 | 49 | 21.90 | 22.13 | 21.85 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 25 | 0 | 21.32 | 21.44 | 21.52 | |
| | | 25 | 13 | 21.51 | 21.43 | 21.74 | 22.50 |
| | | 25 | 25 | 21.20 | 21.37 | 21.58 | |
| | | 50 | 0 | 21.27 | 21.35 | 21.61 | 22.50 |
| | 16QAM | 1 | 0 | 20.81 | 21.39 | 21.32 | |
| | | 1 | 25 | 21.58 | 21.79 | 21.78 | 22.50 |
| | | 1 | 49 | 20.98 | 21.35 | 20.93 | |
| | | 25 | 0 | 20.51 | 20.54 | 20.58 | |
| | | 25 | 13 | 20.63 | 20.44 | 20.78 | 22.00 |
| | | 25 | 25 | 20.27 | 20.37 | 20.61 | |
| | | 50 | 0 | 21.27 | 21.34 | 20.59 | 22.00 |

| LTE FDD Band 17 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 23755/706.5 | 23790/710 | 23825/713.5 | |
| 5MHz | QPSK | 1 | 0 | 22.01 | 22.08 | 22.05 | |
| | | 1 | 13 | 22.69 | 22.72 | 22.57 | 23.50 |
| | | 1 | 24 | 22.18 | 22.02 | 21.81 | |
| | | 12 | 0 | 21.29 | 21.40 | 21.49 | |
| | | 12 | 6 | 21.62 | 21.68 | 21.75 | 22.50 |
| | | 12 | 13 | 21.50 | 21.49 | 21.47 | |
| | | 25 | 0 | 21.33 | 21.50 | 21.53 | 22.50 |
| | 16QAM | 1 | 0 | 21.30 | 21.22 | 21.26 | |
| | | 1 | 13 | 21.94 | 21.86 | 21.79 | 22.50 |
| | | 1 | 24 | 21.37 | 21.28 | 21.00 | |
| | | 12 | 0 | 20.37 | 20.38 | 20.46 | |
| | | 12 | 6 | 20.65 | 20.68 | 20.70 | 21.50 |
| | | 12 | 13 | 20.48 | 20.48 | 20.44 | |
| | | 25 | 0 | 20.40 | 20.46 | 20.46 | 21.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23780/709 | 23790/710 | 23800/711 | |
| 10MHz | QPSK | 1 | 0 | 21.99 | 22.01 | 22.03 | |
| | | 1 | 25 | 22.69 | 22.72 | 22.56 | 23.50 |
| | | 1 | 49 | 22.15 | 22.00 | 21.77 | |
| | | 25 | 0 | 21.27 | 21.36 | 21.46 | |
| | | 25 | 13 | 21.60 | 21.64 | 21.72 | 22.50 |
| | | 25 | 25 | 21.46 | 21.45 | 21.44 | |
| | | 50 | 0 | 21.36 | 21.43 | 21.48 | 22.50 |
| | 16QAM | 1 | 0 | 21.25 | 21.19 | 21.21 | |
| | | 1 | 25 | 21.91 | 21.85 | 21.76 | 22.50 |
| | | 1 | 49 | 21.35 | 21.23 | 20.98 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 25 | 0 | 20.34 | 20.37 | 20.44 | 21.50 |
| | | 25 | 13 | 20.61 | 20.65 | 20.66 | |
| | | 25 | 25 | 20.46 | 20.44 | 20.41 | |
| | | 50 | 0 | 20.38 | 20.42 | 20.43 | 21.50 |

| LTE FDD Band 26 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 26697/814.7 | 26865/831.5 | 27033/848.3 | |
| 1.4MHz | QPSK | 1 | 0 | 21.60 | 22.02 | 21.79 | 23.30 |
| | | 1 | 2 | 22.11 | 22.30 | 22.47 | |
| | | 1 | 5 | 21.64 | 21.34 | 21.44 | |
| | | 3 | 0 | 21.91 | 22.37 | 21.88 | 23.30 |
| | | 3 | 2 | 21.92 | 22.27 | 22.30 | |
| | | 3 | 3 | 22.06 | 21.92 | 22.23 | |
| | | 6 | 0 | 20.79 | 21.20 | 21.14 | 22.30 |
| | 16QAM | 1 | 0 | 20.95 | 21.18 | 21.02 | 22.30 |
| | | 1 | 2 | 21.56 | 21.58 | 21.71 | |
| | | 1 | 5 | 20.91 | 20.60 | 20.70 | |
| | | 3 | 0 | 20.88 | 21.24 | 20.87 | 22.30 |
| | | 3 | 2 | 20.92 | 21.17 | 21.18 | |
| | | 3 | 3 | 20.93 | 20.90 | 21.13 | |
| | | 6 | 0 | 19.78 | 20.11 | 20.04 | 21.30 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26705/815.5 | 26865/831.5 | 27025/847.5 | |
| 3MHz | QPSK | 1 | 0 | 21.62 | 22.06 | 21.82 | 23.30 |
| | | 1 | 7 | 22.14 | 22.35 | 22.51 | |
| | | 1 | 14 | 21.67 | 21.39 | 21.48 | |
| | | 8 | 0 | 21.01 | 21.49 | 21.01 | 22.30 |
| | | 8 | 4 | 21.04 | 21.37 | 21.42 | |
| | | 8 | 7 | 21.16 | 21.03 | 21.33 | |
| | | 15 | 0 | 20.82 | 21.24 | 21.17 | 22.30 |
| | 16QAM | 1 | 0 | 20.98 | 21.20 | 21.05 | 22.30 |
| | | 1 | 7 | 21.59 | 21.63 | 21.75 | |
| | | 1 | 14 | 20.93 | 20.64 | 20.73 | |
| | | 8 | 0 | 19.99 | 20.37 | 19.99 | 21.30 |
| | | 8 | 4 | 20.03 | 20.30 | 20.30 | |
| | | 8 | 7 | 20.03 | 20.02 | 20.26 | |
| | | 15 | 0 | 19.81 | 20.15 | 20.07 | 21.30 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 26715/816.5 | 26865/831.5 | 27015/846.5 | |
| 5MHz | QPSK | 1 | 0 | 21.59 | 22.04 | 21.78 | 23.30 |
| | | 1 | 13 | 22.12 | 22.31 | 22.48 | |
| | | 1 | 24 | 21.64 | 21.34 | 21.44 | |
| | | 12 | 0 | 20.98 | 21.44 | 20.97 | 22.30 |
| | | 12 | 6 | 21.02 | 21.33 | 21.37 | |
| | | 12 | 13 | 21.14 | 21.01 | 21.29 | |
| | | 25 | 0 | 20.80 | 21.23 | 21.15 | 22.30 |
| | 16QAM | 1 | 0 | 20.95 | 21.16 | 21.02 | 22.30 |
| | | 1 | 13 | 21.56 | 21.61 | 21.72 | |
| | | 1 | 24 | 20.90 | 20.62 | 20.69 | |
| | | 12 | 0 | 19.97 | 20.33 | 19.96 | 21.30 |
| | | 12 | 6 | 20.00 | 20.25 | 20.26 | |
| | | 12 | 13 | 20.00 | 19.97 | 20.22 | |
| | | 25 | 0 | 19.79 | 20.11 | 20.02 | 21.30 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 26750/820 | 26865/831.5 | 26990/844 | |
| 10MHz | QPSK | 1 | 0 | 21.61 | 22.05 | 21.81 | 23.30 |
| | | 1 | 25 | 22.15 | 22.36 | 22.52 | |
| | | 1 | 49 | 21.66 | 21.38 | 21.47 | |
| | | 25 | 0 | 21.01 | 21.49 | 21.01 | 22.30 |
| | | 25 | 13 | 21.05 | 21.38 | 21.41 | |
| | | 25 | 25 | 21.16 | 21.05 | 21.34 | |
| | | 50 | 0 | 20.88 | 21.25 | 21.19 | 22.30 |
| | 16QAM | 1 | 0 | 20.97 | 21.19 | 21.04 | 22.30 |
| | | 1 | 25 | 21.59 | 21.65 | 21.75 | |
| | | 1 | 49 | 20.93 | 20.64 | 20.72 | |
| | | 25 | 0 | 20.00 | 20.38 | 20.00 | 21.30 |
| | | 25 | 13 | 20.02 | 20.29 | 20.29 | |
| | | 25 | 25 | 20.03 | 20.02 | 20.26 | |
| | | 50 | 0 | 19.82 | 20.16 | 20.06 | 21.30 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 26775/822.5 | 26865/831.5 | 26965/841.5 | |
| 15MHz | QPSK | 1 | 0 | 21.57 | 21.97 | 21.76 | 23.30 |
| | | 1 | 38 | 22.12 | 22.31 | 22.47 | |
| | | 1 | 74 | 21.61 | 21.32 | 21.40 | |
| | | 36 | 0 | 20.96 | 21.40 | 20.94 | 22.30 |
| | | 36 | 18 | 21.00 | 21.29 | 21.34 | |
| | | 36 | 39 | 21.10 | 20.97 | 21.26 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 75 | 0 | 20.83 | 21.16 | 21.10 | 22.30 |
| | 16QAM | 1 | 0 | 20.90 | 21.13 | 20.97 | 22.30 |
| | | 1 | 38 | 21.53 | 21.60 | 21.69 | |
| | | 1 | 74 | 20.88 | 20.57 | 20.67 | |
| | | 36 | 0 | 19.94 | 20.32 | 19.94 | 21.30 |
| | | 36 | 18 | 19.96 | 20.22 | 20.22 | |
| | | 36 | 39 | 19.98 | 19.93 | 20.19 | |
| | | 75 | 0 | 19.77 | 20.07 | 19.99 | 21.30 |

| LTE TDD Band 38 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 37775/2572.5 | 38000/2595 | 38225/2617.5 | |
| 5MHz | QPSK | 1 | 0 | 22.06 | 22.33 | 22.52 | 23.50 |
| | | 1 | 13 | 22.29 | 22.74 | 22.82 | |
| | | 1 | 24 | 22.18 | 22.61 | 22.28 | |
| | | 12 | 0 | 21.44 | 21.56 | 21.81 | 22.50 |
| | | 12 | 6 | 21.38 | 21.76 | 21.88 | |
| | | 12 | 13 | 21.32 | 21.69 | 21.74 | |
| | | 25 | 0 | 21.27 | 21.67 | 21.82 | 22.50 |
| | 16QAM | 1 | 0 | 21.12 | 21.33 | 21.57 | 22.80 |
| | | 1 | 13 | 21.51 | 21.73 | 21.98 | |
| | | 1 | 24 | 21.23 | 21.60 | 21.39 | |
| | | 12 | 0 | 20.50 | 20.48 | 20.77 | 21.50 |
| | | 12 | 6 | 20.44 | 20.66 | 20.87 | |
| | | 12 | 13 | 20.33 | 20.62 | 20.72 | |
| | | 25 | 0 | 20.33 | 20.56 | 20.75 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37800/2575 | 38000/2595 | 38200/2615 | |
| 10MHz | QPSK | 1 | 0 | 22.08 | 22.34 | 22.55 | 23.50 |
| | | 1 | 25 | 22.32 | 22.79 | 22.86 | |
| | | 1 | 49 | 22.20 | 22.65 | 22.31 | |
| | | 25 | 0 | 21.47 | 21.61 | 21.85 | 22.50 |
| | | 25 | 13 | 21.41 | 21.81 | 21.92 | |
| | | 25 | 25 | 21.34 | 21.73 | 21.79 | |
| | | 50 | 0 | 21.35 | 21.69 | 21.86 | 22.50 |
| | 16QAM | 1 | 0 | 21.14 | 21.36 | 21.59 | 22.80 |
| | | 1 | 25 | 21.54 | 21.77 | 22.01 | |
| | | 1 | 49 | 21.26 | 21.62 | 21.42 | |
| | | 25 | 0 | 20.53 | 20.53 | 20.81 | 21.50 |
| | | 25 | 13 | 20.46 | 20.70 | 20.90 | |
| | | 25 | 25 | 20.36 | 20.67 | 20.76 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 50 | 0 | 20.36 | 20.61 | 20.79 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37825/2577.5 | 38000/2595 | 38175/2612.5 | |
| **15MHz** | QPSK | 1 | 0 | 22.07 | 22.30 | 22.53 | 23.50 |
| | | 1 | 38 | 22.30 | 22.78 | 22.83 | |
| | | 1 | 74 | 22.17 | 22.60 | 22.27 | |
| | | 36 | 0 | 21.45 | 21.57 | 21.82 | 22.50 |
| | | 36 | 18 | 21.38 | 21.76 | 21.88 | |
| | | 36 | 39 | 21.31 | 21.70 | 21.75 | |
| | | 75 | 0 | 21.33 | 21.65 | 21.81 | 22.50 |
| | 16QAM | 1 | 0 | 21.09 | 21.34 | 21.57 | 22.80 |
| | | 1 | 38 | 21.52 | 21.74 | 21.99 | |
| | | 1 | 74 | 21.23 | 21.58 | 21.39 | |
| | | 36 | 0 | 20.50 | 20.51 | 20.78 | 21.50 |
| | | 36 | 18 | 20.43 | 20.65 | 20.86 | |
| | | 36 | 39 | 20.34 | 20.63 | 20.73 | |
| | | 75 | 0 | 20.33 | 20.56 | 20.75 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37850/2580 | 38000/2595 | 38150/2610 | |
| **20MHz** | QPSK | 1 | 0 | 22.04 | 22.26 | 22.50 | 23.50 |
| | | 1 | 50 | 22.29 | 22.74 | 22.81 | |
| | | 1 | 99 | 22.15 | 22.59 | 22.24 | |
| | | 50 | 0 | 21.42 | 21.52 | 21.78 | 22.50 |
| | | 50 | 25 | 21.36 | 21.72 | 21.85 | |
| | | 50 | 50 | 21.28 | 21.65 | 21.71 | |
| | | 100 | 0 | 21.30 | 21.60 | 21.77 | 22.50 |
| | 16QAM | 1 | 0 | 21.07 | 21.30 | 21.52 | 22.80 |
| | | 1 | 50 | 21.48 | 21.72 | 21.95 | |
| | | 1 | 99 | 21.21 | 21.55 | 21.37 | |
| | | 50 | 0 | 20.47 | 20.47 | 20.75 | 21.50 |
| | | 50 | 25 | 20.40 | 20.63 | 20.83 | |
| | | 50 | 50 | 20.31 | 20.58 | 20.69 | |
| | | 100 | 0 | 20.31 | 20.52 | 20.72 | 21.50 |

| **LTE TDD Band 41** | | | | **Conducted Power(dBm)** | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 40265/2557.5 | 40620/2593 | 41215/2652.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.86 | 22.11 | 22.21 | 23.80 |
| | | 1 | 13 | 22.78 | 22.51 | 22.87 | |
| | | 1 | 24 | 22.27 | 22.47 | 22.97 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 0 | 21.42 | 21.56 | 21.91 | |
| | | 12 | 6 | 21.52 | 21.47 | 21.92 | 22.80 |
| | | 12 | 13 | 21.31 | 21.32 | 21.85 | |
| | | 25 | 0 | 21.27 | 21.41 | 21.77 | 22.80 |
| | | 1 | 0 | 22.14 | 21.84 | 21.77 | |
| | | 1 | 13 | 21.97 | 21.75 | 21.56 | 23.00 |
| | | 1 | 24 | 21.65 | 21.55 | 21.67 | |
| | 16QAM | 12 | 0 | 20.43 | 20.30 | 20.85 | |
| | | 12 | 6 | 20.49 | 20.20 | 20.81 | 21.50 |
| | | 12 | 13 | 20.32 | 20.15 | 20.68 | |
| | | 25 | 0 | 20.39 | 20.14 | 20.70 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40290/2560 | 40620/2593 | 41190/2650 | |
| **10MHz** | QPSK | 1 | 0 | 22.88 | 22.12 | 22.24 | |
| | | 1 | 25 | 22.81 | 22.56 | 22.91 | 23.80 |
| | | 1 | 49 | 22.29 | 22.51 | 23.00 | |
| | | 25 | 0 | 21.45 | 21.61 | 21.95 | |
| | | 25 | 13 | 21.55 | 21.52 | 21.96 | 22.80 |
| | | 25 | 25 | 21.33 | 21.36 | 21.90 | |
| | | 50 | 0 | 21.35 | 21.43 | 21.81 | 22.80 |
| | 16QAM | 1 | 0 | 22.16 | 21.87 | 21.79 | |
| | | 1 | 25 | 22.00 | 21.79 | 21.59 | 23.00 |
| | | 1 | 49 | 21.68 | 21.57 | 21.70 | |
| | | 25 | 0 | 20.46 | 20.35 | 20.89 | |
| | | 25 | 13 | 20.51 | 20.24 | 20.84 | 21.50 |
| | | 25 | 25 | 20.35 | 20.20 | 20.72 | |
| | | 50 | 0 | 20.42 | 20.19 | 20.74 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40315/2562.5 | 40620/2593 | 41165/2647.5 | |
| **15MHz** | QPSK | 1 | 0 | 22.87 | 22.08 | 22.22 | |
| | | 1 | 38 | 22.79 | 22.55 | 22.88 | 23.80 |
| | | 1 | 74 | 22.26 | 22.46 | 22.96 | |
| | | 36 | 0 | 21.43 | 21.57 | 21.92 | |
| | | 36 | 18 | 21.52 | 21.47 | 21.92 | 22.80 |
| | | 36 | 39 | 21.30 | 21.33 | 21.86 | |
| | | 75 | 0 | 21.33 | 21.39 | 21.76 | 22.80 |
| | 16QAM | 1 | 0 | 22.11 | 21.85 | 21.77 | |
| | | 1 | 38 | 21.98 | 21.76 | 21.57 | 23.00 |
| | | 1 | 74 | 21.65 | 21.53 | 21.67 | |
| | | 36 | 0 | 20.43 | 20.33 | 20.86 | 21.50 |
| | | 36 | 18 | 20.48 | 20.19 | 20.80 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 36 | 39 | 20.33 | 20.16 | 20.69 | |
| | | 75 | 0 | 20.39 | 20.14 | 20.70 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40340/2565 | 40620/2593 | 41140/2645 | |
| **20MHz** | QPSK | 1 | 0 | 22.84 | 22.04 | 22.19 | 23.80 |
| | | 1 | 50 | 22.78 | 22.51 | 22.86 | |
| | | 1 | 99 | 22.24 | 22.45 | 22.93 | |
| | | 50 | 0 | 21.40 | 21.52 | 21.88 | 22.80 |
| | | 50 | 25 | 21.50 | 21.43 | 21.89 | |
| | | 50 | 50 | 21.27 | 21.28 | 21.82 | |
| | | 100 | 0 | 21.30 | 21.34 | 21.72 | 22.80 |
| | 16QAM | 1 | 0 | 22.09 | 21.81 | 21.72 | 23.00 |
| | | 1 | 50 | 21.94 | 21.74 | 21.53 | |
| | | 1 | 99 | 21.63 | 21.50 | 21.65 | |
| | | 50 | 0 | 20.40 | 20.29 | 20.83 | 21.50 |
| | | 50 | 25 | 20.45 | 20.17 | 20.77 | |
| | | 50 | 50 | 20.30 | 20.11 | 20.65 | |
| | | 100 | 0 | 20.37 | 20.10 | 20.67 | 21.50 |

| DL LTE CA Class | PCC | | | | | | | | SCC | | | Power | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PCC Band | PCC Bandwidth (MHz) | PCC UL RB size | PCC UL RB offset | PCC DL RB size | PCC DL RB offset | PCC UL Channel | PCC DL Channel | SCC Band | SCC Bandwidth (MHz) | SCC DL Channel | Rel 8 LTE Tx Power (dBm) | Rel 10 DL LTE CA Tx Power (dBm) | Tune-up |
| CA_2C | 2 | 5 | 1 | 13 | 25 | 0 | 18808 | 808 | 2 | 20 | 925 | 23.24 | 23.31 | 24.00 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18806 | 806 | 2 | 20 | 950 | 23.48 | 23.42 | 24.00 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18803 | 803 | 2 | 20 | 974 | 23.44 | 23.44 | 24.00 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18801 | 801 | 2 | 20 | 999 | 23.45 | 23.45 | 24.00 |
| CA_5B | 5 | 5 | 1 | 13 | 25 | 0 | 20528 | 2528 | 5 | 10 | 2600 | 23.10 | 23.10 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20501 | 2501 | 5 | 10 | 2600 | 23.16 | 23.11 | 23.50 |
| CA_7C | 7 | 10 | 1 | 25 | 50 | 0 | 21006 | 3006 | 7 | 20 | 3150 | 22.90 | 22.90 | 23.50 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21003 | 3003 | 7 | 20 | 3174 | 22.86 | 22.86 | 23.50 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21001 | 3001 | 7 | 20 | 3199 | 22.83 | 22.83 | 23.50 |
| CA_12B | 12 | 5 | 1 | 13 | 25 | 0 | 23058 | 5058 | 12 | 10 | 5130 | 22.74 | 22.72 | 23.50 |
| CA_38C | 38 | 15 | 1 | 38 | 75 | 0 | 38025 | 38025 | 38 | 15 | 38175 | 22.63 | 22.59 | 23.50 |
| | 38 | 20 | 1 | 50 | 100 | 0 | 37952 | 37952 | 38 | 20 | 38150 | 22.71 | 22.68 | 23.50 |
| CA_41C | 41 | 5 | 1 | 24 | 25 | 0 | 41023 | 41023 | 41 | 20 | 41140 | 22.89 | 22.88 | 23.80 |
| | 41 | 10 | 1 | 49 | 50 | 0 | 40996 | 40996 | 41 | 20 | 41140 | 22.77 | 22.78 | 23.80 |
| | 41 | 15 | 1 | 74 | 75 | 0 | 40969 | 40969 | 41 | 20 | 41140 | 22.90 | 22.83 | 23.80 |
| | 41 | 20 | 1 | 99 | 100 | 0 | 40942 | 40942 | 41 | 20 | 41140 | 22.99 | 22.89 | 23.80 |
| CA_1A-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 1 | 20 | 500 | 23.14 | 23.15 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 1 | 20 | 500 | 23.21 | 23.17 | 23.50 |
| CA_1A-26A | 26 | 5 | 1 | 13 | 25 | 0 | 27015 | 9015 | 1 | 20 | 500 | 22.87 | 22.84 | 23.30 |
| | 26 | 10 | 1 | 25 | 50 | 0 | 26990 | 8990 | 1 | 20 | 500 | 23.21 | 23.19 | 23.30 |
| | 26 | 15 | 1 | 38 | 75 | 0 | 26965 | 8965 | 1 | 20 | 500 | 22.54 | 22.55 | 23.30 |
| CA_2A-5A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 5 | 10 | 2525 | 23.23 | 23.29 | 24.00 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 5 | 10 | 2525 | 23.46 | 23.39 | 24.00 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 5 | 10 | 2525 | 23.41 | 23.40 | 24.00 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 5 | 10 | 2525 | 23.41 | 23.40 | 24.00 |
| | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 2 | 20 | 1100 | 23.06 | 23.06 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 2 | 20 | 1100 | 23.12 | 23.07 | 23.50 |
| CA_2A-12A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 12 | 10 | 5095 | 23.21 | 23.27 | 24.00 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 12 | 10 | 5095 | 23.44 | 23.37 | 24.00 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 12 | 10 | 5095 | 23.39 | 23.38 | 24.00 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 12 | 10 | 5095 | 23.39 | 23.38 | 24.00 |
| | 12 | 3 | 1 | 7 | 15 | 0 | 23165 | 5165 | 2 | 20 | 1100 | 22.69 | 22.66 | 23.50 |
| | 12 | 5 | 1 | 13 | 25 | 0 | 23155 | 5155 | 2 | 20 | 1100 | 22.57 | 22.52 | 23.50 |
| | 12 | 10 | 1 | 25 | 50 | 0 | 23130 | 5130 | 2 | 20 | 1100 | 22.64 | 22.60 | 23.50 |
| CA_2A-17A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 17 | 10 | 5790 | 23.17 | 23.23 | 24.00 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 17 | 10 | 5790 | 23.40 | 23.33 | 24.00 |
| | 17 | 5 | 1 | 13 | 25 | 0 | 23790 | 5790 | 2 | 10 | 1100 | 22.73 | 22.71 | 23.50 |
| | 17 | 10 | 1 | 25 | 50 | 0 | 23790 | 5790 | 2 | 10 | 1100 | 22.74 | 22.72 | 23.50 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CA_2A-28A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 28 | 20 | 9460 | 23.19 | 23.25 | 24.00 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 28 | 20 | 9460 | 23.42 | 23.35 | 24.00 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 28 | 20 | 9460 | 23.37 | 23.36 | 24.00 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 28 | 20 | 9460 | 23.30 | 23.28 | 24.00 |
| CA_2A-29A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 29 | 10 | 9715 | 23.16 | 23.22 | 24.00 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 29 | 10 | 9715 | 23.39 | 23.32 | 24.00 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 29 | 10 | 9715 | 23.34 | 23.33 | 24.00 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 29 | 10 | 9715 | 23.34 | 23.33 | 24.00 |
| CA_3A-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 3 | 20 | 1850 | 23.10 | 23.12 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 3 | 20 | 1850 | 23.20 | 23.12 | 23.50 |
| CA_3A-7A | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 3 | 20 | 1575 | 23.11 | 23.09 | 23.50 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 3 | 20 | 1575 | 23.21 | 23.12 | 23.50 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 3 | 20 | 1575 | 23.16 | 23.22 | 23.50 |
| CA_3A-26A | 26 | 5 | 1 | 13 | 25 | 0 | 27015 | 9015 | 3 | 20 | 1850 | 22.92 | 22.90 | 23.30 |
| | 26 | 10 | 1 | 25 | 50 | 0 | 26990 | 8990 | 3 | 20 | 1850 | 23.02 | 22.99 | 23.30 |
| | 26 | 15 | 1 | 38 | 75 | 0 | 26965 | 8965 | 3 | 20 | 1850 | 22.92 | 22.95 | 23.30 |
| CA_4A-5A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 5 | 10 | 2600 | 23.06 | 23.12 | 24.00 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 5 | 10 | 2600 | 22.98 | 22.96 | 24.00 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 5 | 10 | 2600 | 23.09 | 23.07 | 24.00 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 5 | 10 | 2600 | 23.14 | 23.05 | 24.00 |
| | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 4 | 20 | 2300 | 23.03 | 23.03 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 4 | 20 | 2300 | 23.09 | 23.04 | 23.50 |
| CA_4A-12A | 4 | 1.4 | 1 | 5 | 6 | 0 | 20393 | 2393 | 12 | 10 | 5130 | 22.93 | 22.95 | 24.00 |
| | 4 | 3 | 1 | 14 | 15 | 0 | 20385 | 2385 | 12 | 10 | 5130 | 23.03 | 22.98 | 24.00 |
| | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 12 | 10 | 5130 | 23.02 | 23.08 | 24.00 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 12 | 10 | 5130 | 22.94 | 22.92 | 24.00 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 12 | 10 | 5130 | 23.05 | 23.03 | 24.00 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 12 | 10 | 5130 | 23.10 | 23.01 | 24.00 |
| CA_4A-17A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 17 | 10 | 5800 | 23.01 | 23.04 | 24.00 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 17 | 10 | 5800 | 23.12 | 23.08 | 24.00 |
| CA_4A-28A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 28 | 20 | 9560 | 23.12 | 23.19 | 24.00 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 28 | 20 | 9560 | 23.05 | 23.04 | 24.00 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 28 | 20 | 9560 | 23.17 | 23.16 | 24.00 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 28 | 20 | 9560 | 23.23 | 23.15 | 24.00 |
| CA_4A-29A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 29 | 10 | 9720 | 22.93 | 23.01 | 24.00 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 29 | 10 | 9720 | 23.11 | 23.08 | 24.00 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 29 | 10 | 9720 | 23.17 | 23.01 | 24.00 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 29 | 10 | 9720 | 23.29 | 23.31 | 24.00 |
| CA_5A-7A | 5 | 1.4 | 1 | 2 | 6 | 0 | 20643 | 2643 | 7 | 20 | 3350 | 22.89 | 22.91 | 23.50 |
| | 5 | 3 | 1 | 7 | 15 | 0 | 20635 | 2635 | 7 | 20 | 3350 | 22.81 | 22.85 | 23.50 |
| | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 7 | 20 | 3350 | 23.03 | 23.08 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 7 | 20 | 3350 | 23.13 | 23.15 | 23.50 |
| | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 5 | 10 | 2525 | 22.99 | 23.01 | 23.50 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 5 | 10 | 2525 | 22.82 | 22.92 | 23.50 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 5 | 10 | 2525 | 22.91 | 22.97 | 23.50 |
| CA_7A-8A | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 8 | 10 | 3625 | 23.02 | 23.08 | 23.50 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 8 | 10 | 3625 | 23.07 | 23.08 | 23.50 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 8 | 10 | 3625 | 23.07 | 23.09 | 23.50 |
| CA_7A-20A | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 20 | 20 | 6300 | 23.07 | 23.14 | 23.50 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 20 | 20 | 6300 | 23.13 | 23.15 | 23.50 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 20 | 20 | 6300 | 23.14 | 23.17 | 23.50 |
| CA_7A-28A | 7 | 5 | 1 | 13 | 25 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 23.08 | 23.25 | 23.50 |
| | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 23.15 | 23.17 | 23.50 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 23.16 | 23.18 | 23.50 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 23.19 | 23.31 | 23.50 |
| CA_39A -41A | 41 | 20 | 1 | 99 | 100 | 0 | 41140 | 41140 | 39 | 20 | 38550 | 22.94 | 22.87 | 23.80 |

| DL LTE CA Class | PCC | | | | | | | | SCC1 | | | SCC2 | | | Power | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PCC Band | PCC Bandwidth (MHz) | PCC UL RB size | PCC UL RB offset | PCC DL RB size | PCC DL RB offset | PCC UL Channel | PCC DL Channel | SCC1 Band | SCC1 Bandwidth (MHz) | SCC1 DL Channel | SCC2 Band | SCC2 Bandwidth (MHz) | SCC2 DL Channel | Rel 8 LTE Tx Power (dBm) | Rel 10 DL LTE CA Tx Power (dBm) | Tune-up |
| CA_2C-29A | 2 | 5 | 1 | 13 | 25 | 0 | 18808 | 808 | 2 | 20 | 925 | 29 | 10 | 9715 | 23.14 | 23.20 | 24.00 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18806 | 806 | 2 | 20 | 950 | 29 | 10 | 9715 | 23.37 | 23.30 | 24.00 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18803 | 803 | 2 | 20 | 974 | 29 | 10 | 9715 | 23.32 | 23.31 | 24.00 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18801 | 801 | 2 | 20 | 999 | 29 | 10 | 9715 | 23.32 | 23.31 | 24.00 |
| CA_3C-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 3 | 20 | 1652 | 3 | 20 | 1850 | 23.00 | 23.00 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 3 | 20 | 1652 | 3 | 20 | 1850 | 23.06 | 23.01 | 23.50 |
| CA_3C-7A | 7 | 5 | 1 | 13 | 25 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 23.14 | 23.08 | 23.50 |
| | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 23.07 | 23.02 | 23.50 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 23.21 | 23.15 | 23.50 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 23.28 | 23.24 | 23.50 |
| CA_4A-12B | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 12 | 5 | 5058 | 12 | 10 | 5130 | 23.00 | 23.06 | 24.00 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 12 | 5 | 5058 | 12 | 10 | 5130 | 22.92 | 22.90 | 24.00 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 12 | 5 | 5058 | 12 | 10 | 5130 | 23.03 | 23.01 | 24.00 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 12 | 5 | 5058 | 12 | 10 | 5130 | 23.08 | 22.99 | 24.00 |
| CA_39A-41C | 41 | 20 | 1 | 99 | 100 | 0 | 40942 | 40942 | 41 | 20 | 41140 | 39 | 20 | 38550 | 22.80 | 22.72 | 23.80 |
| CA_39C-41A | 41 | 20 | 1 | 99 | 100 | 0 | 41140 | 41140 | 39 | 15 | 38379 | 39 | 20 | 38550 | 22.79 | 22.71 | 23.80 |
| CA_1A-3A-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 1 | 20 | 500 | 3 | 20 | 1850 | 23.10 | 23.10 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 1 | 20 | 500 | 3 | 20 | 1850 | 23.15 | 23.05 | 23.50 |
| CA_1A-3A-26A | 26 | 5 | 1 | 13 | 25 | 0 | 27015 | 9015 | 1 | 20 | 500 | 3 | 20 | 1850 | 22.91 | 22.79 | 23.30 |
| | 26 | 10 | 1 | 25 | 50 | 0 | 26990 | 8990 | 1 | 20 | 500 | 3 | 20 | 1850 | 23.09 | 22.94 | 23.30 |

**Second – Antenna**

| LTE FDD Band 2 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 18607/1850.7 | 18900/1880 | 19193/1909.3 | |
| 1.4MHz | QPSK | 1 | 0 | 18.10 | 19.81 | 18.39 | 20.50 |
| | | 1 | 2 | 19.25 | 19.82 | 19.81 | |
| | | 1 | 5 | 18.98 | 18.36 | 18.54 | |
| | | 3 | 0 | 18.59 | 19.82 | 19.36 | 20.50 |
| | | 3 | 2 | 20.09 | 19.38 | 20.20 | |
| | | 3 | 3 | 19.90 | 18.53 | 19.62 | |
| | | 6 | 0 | 17.93 | 18.44 | 18.39 | 19.50 |
| | 16QAM | 1 | 0 | 17.78 | 19.46 | 18.07 | 19.50 |
| | | 1 | 2 | 18.92 | 19.23 | 19.46 | |
| | | 1 | 5 | 18.83 | 17.62 | 18.18 | |
| | | 3 | 0 | 18.25 | 19.43 | 19.01 | 19.50 |
| | | 3 | 2 | 19.56 | 18.99 | 19.51 | |
| | | 3 | 3 | 19.53 | 18.20 | 19.23 | |
| | | 6 | 0 | 17.64 | 18.11 | 18.07 | 19.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18615/1851.5 | 18900/1880 | 19185/1908.5 | |
| 3MHz | QPSK | 1 | 0 | 18.12 | 19.85 | 18.42 | 20.50 |
| | | 1 | 7 | 19.28 | 19.87 | 19.85 | |
| | | 1 | 14 | 19.01 | 18.41 | 18.58 | |
| | | 8 | 0 | 17.69 | 18.94 | 18.49 | 19.50 |
| | | 8 | 4 | 19.21 | 18.48 | 19.32 | |
| | | 8 | 7 | 19.00 | 17.64 | 18.72 | |
| | | 15 | 0 | 17.96 | 18.48 | 18.42 | 19.50 |
| | 16QAM | 1 | 0 | 17.81 | 19.48 | 18.10 | 19.50 |
| | | 1 | 7 | 18.95 | 19.28 | 19.50 | |
| | | 1 | 14 | 18.85 | 17.66 | 18.21 | |
| | | 8 | 0 | 17.36 | 18.56 | 18.13 | 19.00 |
| | | 8 | 4 | 18.67 | 18.12 | 18.63 | |
| | | 8 | 7 | 18.63 | 17.32 | 18.36 | |
| | | 15 | 0 | 17.67 | 18.15 | 18.10 | 19.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18625/1852.5 | 18900/1880 | 19175/1907.5 | |
| 5MHz | QPSK | 1 | 0 | 18.09 | 19.83 | 18.38 | 20.50 |
| | | 1 | 13 | 19.26 | 19.83 | 19.82 | |
| | | 1 | 24 | 18.98 | 18.36 | 18.54 | |
| | | 12 | 0 | 17.66 | 18.89 | 18.45 | 19.50 |
| | | 12 | 6 | 19.19 | 18.44 | 19.27 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 13 | 18.98 | 17.62 | 18.68 | |
| | | 25 | 0 | 17.94 | 18.47 | 18.40 | 19.50 |
| | | 1 | 0 | 17.78 | 19.44 | 18.07 | |
| | | 1 | 13 | 18.92 | 19.26 | 19.47 | 19.50 |
| | | 1 | 24 | 18.82 | 17.64 | 18.17 | |
| | 16QAM | 12 | 0 | 17.34 | 18.52 | 18.10 | |
| | | 12 | 6 | 18.64 | 18.07 | 18.59 | 19.00 |
| | | 12 | 13 | 18.60 | 17.27 | 18.32 | |
| | | 25 | 0 | 17.65 | 18.11 | 18.05 | 19.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18650/1855 | 18900/1880 | 19150/1905 | |
| **10MHz** | QPSK | 1 | 0 | 18.11 | 19.84 | 18.41 | |
| | | 1 | 25 | 19.29 | 19.88 | 19.86 | 20.50 |
| | | 1 | 49 | 19.00 | 18.40 | 18.57 | |
| | | 25 | 0 | 17.69 | 18.94 | 18.49 | |
| | | 25 | 13 | 19.22 | 18.49 | 19.31 | 19.50 |
| | | 25 | 25 | 19.00 | 17.66 | 18.73 | |
| | | 50 | 0 | 18.02 | 18.49 | 18.44 | 19.50 |
| | 16QAM | 1 | 0 | 17.80 | 19.47 | 18.09 | |
| | | 1 | 25 | 18.95 | 19.30 | 19.50 | 19.50 |
| | | 1 | 49 | 18.85 | 17.66 | 18.20 | |
| | | 25 | 0 | 17.37 | 18.57 | 18.14 | |
| | | 25 | 13 | 18.66 | 18.11 | 18.62 | 19.00 |
| | | 25 | 25 | 18.63 | 17.32 | 18.36 | |
| | | 50 | 0 | 17.68 | 18.16 | 18.09 | 19.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18675/1857.5 | 18900/1880 | 19125/1902.5 | |
| **15MHz** | QPSK | 1 | 0 | 18.10 | 19.80 | 18.39 | |
| | | 1 | 38 | 19.27 | 19.87 | 19.83 | 20.50 |
| | | 1 | 74 | 18.97 | 18.35 | 18.53 | |
| | | 36 | 0 | 17.67 | 18.90 | 18.46 | |
| | | 36 | 18 | 19.19 | 18.44 | 19.27 | 19.50 |
| | | 36 | 39 | 18.97 | 17.63 | 18.69 | |
| | | 75 | 0 | 18.00 | 18.45 | 18.39 | 19.50 |
| | 16QAM | 1 | 0 | 17.75 | 19.45 | 18.07 | |
| | | 1 | 38 | 18.93 | 19.27 | 19.48 | 19.50 |
| | | 1 | 74 | 18.82 | 17.62 | 18.17 | |
| | | 36 | 0 | 17.34 | 18.55 | 18.11 | |
| | | 36 | 18 | 18.63 | 18.06 | 18.58 | 19.00 |
| | | 36 | 39 | 18.61 | 17.28 | 18.33 | |
| | | 75 | 0 | 17.65 | 18.11 | 18.05 | 19.00 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 18700/1860 | 18900/1880 | 19100/1900 | |
| 20MHz | QPSK | 1 | 0 | 18.07 | 19.76 | 18.36 | 20.50 |
| | | 1 | 50 | 19.26 | 19.83 | 19.81 | |
| | | 1 | 99 | 18.95 | 18.34 | 18.50 | |
| | | 50 | 0 | 17.64 | 18.85 | 18.42 | 19.50 |
| | | 50 | 25 | 19.17 | 18.40 | 19.24 | |
| | | 50 | 50 | 18.94 | 17.58 | 18.65 | |
| | | 100 | 0 | 17.97 | 18.40 | 18.35 | 19.50 |
| | 16QAM | 1 | 0 | 17.73 | 19.41 | 18.02 | 19.50 |
| | | 1 | 50 | 18.89 | 19.25 | 19.44 | |
| | | 1 | 99 | 18.80 | 17.59 | 18.15 | |
| | | 50 | 0 | 17.31 | 18.51 | 18.08 | 19.00 |
| | | 50 | 25 | 18.60 | 18.04 | 18.55 | |
| | | 50 | 50 | 18.58 | 17.23 | 18.29 | |
| | | 100 | 0 | 17.63 | 18.07 | 18.02 | 19.00 |

| LTE FDD Band 2 For Simultaneous Transmission | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 18607/1850.7 | 18900/1880 | 19193/1909.3 | |
| 1.4MHz | QPSK | 1 | 0 | 17.61 | 19.21 | 17.61 | 19.50 |
| | | 1 | 2 | 18.80 | 19.18 | 19.09 | |
| | | 1 | 5 | 18.76 | 17.55 | 18.02 | |
| | | 3 | 0 | 17.90 | 19.14 | 18.65 | 19.50 |
| | | 3 | 2 | 19.43 | 18.65 | 19.51 | |
| | | 3 | 3 | 19.21 | 17.88 | 18.94 | |
| | | 6 | 0 | 17.27 | 17.71 | 17.71 | 19.00 |
| | 16QAM | 1 | 0 | 17.08 | 18.74 | 17.36 | 19.00 |
| | | 1 | 2 | 18.28 | 18.55 | 18.77 | |
| | | 1 | 5 | 18.10 | 16.98 | 17.50 | |
| | | 3 | 0 | 17.53 | 18.71 | 18.36 | 19.00 |
| | | 3 | 2 | 18.83 | 18.30 | 18.83 | |
| | | 3 | 3 | 18.88 | 17.50 | 18.59 | |
| | | 6 | 0 | 16.94 | 17.45 | 17.36 | 18.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18615/1851.5 | 18900/1880 | 19185/1908.5 | |
| 3MHz | QPSK | 1 | 0 | 17.63 | 19.25 | 17.64 | 19.50 |
| | | 1 | 7 | 18.83 | 19.23 | 19.13 | |
| | | 1 | 14 | 18.79 | 17.60 | 18.06 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8 | 0 | 17.00 | 18.26 | 17.78 | |
| | | 8 | 4 | 18.55 | 17.75 | 18.63 | 19.00 |
| | | 8 | 7 | 18.31 | 16.99 | 18.04 | |
| | | 15 | 0 | 17.30 | 17.75 | 17.74 | 19.00 |
| | | 1 | 0 | 17.11 | 18.76 | 17.39 | |
| | | 1 | 7 | 18.31 | 18.60 | 18.81 | 19.00 |
| | | 1 | 14 | 18.12 | 17.02 | 17.53 | |
| | 16QAM | 8 | 0 | 16.64 | 17.84 | 17.48 | |
| | | 8 | 4 | 17.94 | 17.43 | 17.95 | 18.50 |
| | | 8 | 7 | 17.98 | 16.62 | 17.72 | |
| | | 15 | 0 | 16.97 | 17.49 | 17.39 | 18.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18625/1852.5 | 18900/1880 | 19175/1907.5 | |
| **5MHz** | | 1 | 0 | 17.60 | 19.23 | 17.60 | |
| | | 1 | 13 | 18.81 | 19.19 | 19.10 | 19.50 |
| | | 1 | 24 | 18.76 | 17.55 | 18.02 | |
| | QPSK | 12 | 0 | 16.97 | 18.21 | 17.74 | |
| | | 12 | 6 | 18.53 | 17.71 | 18.58 | 19.00 |
| | | 12 | 13 | 18.29 | 16.97 | 18.00 | |
| | | 25 | 0 | 17.28 | 17.74 | 17.72 | 19.00 |
| | | 1 | 0 | 17.08 | 18.72 | 17.36 | |
| | | 1 | 13 | 18.28 | 18.58 | 18.78 | 19.00 |
| | | 1 | 24 | 18.09 | 17.00 | 17.49 | |
| | 16QAM | 12 | 0 | 16.62 | 17.80 | 17.45 | |
| | | 12 | 6 | 17.91 | 17.38 | 17.91 | 18.50 |
| | | 12 | 13 | 17.95 | 16.57 | 17.68 | |
| | | 25 | 0 | 16.95 | 17.45 | 17.34 | 18.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18650/1855 | 18900/1880 | 19150/1905 | |
| **10MHz** | | 1 | 0 | 17.62 | 19.24 | 17.63 | |
| | | 1 | 25 | 18.84 | 19.24 | 19.14 | 19.50 |
| | | 1 | 49 | 18.78 | 17.59 | 18.05 | |
| | QPSK | 25 | 0 | 17.00 | 18.26 | 17.78 | |
| | | 25 | 13 | 18.56 | 17.76 | 18.62 | 19.00 |
| | | 25 | 25 | 18.31 | 17.01 | 18.05 | |
| | | 50 | 0 | 17.36 | 17.76 | 17.76 | 19.00 |
| | | 1 | 0 | 17.10 | 18.75 | 17.38 | |
| | | 1 | 25 | 18.31 | 18.62 | 18.81 | 19.00 |
| | 16QAM | 1 | 49 | 18.12 | 17.02 | 17.52 | |
| | | 25 | 0 | 16.65 | 17.85 | 17.49 | 18.50 |
| | | 25 | 13 | 17.93 | 17.42 | 17.94 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 25 | 25 | 17.98 | 16.62 | 17.72 | |
| | | 50 | 0 | 16.98 | 17.50 | 17.38 | 18.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18675/1857.5 | 18900/1880 | 19125/1902.5 | |
| **15MHz** | QPSK | 1 | 0 | 17.61 | 19.20 | 17.61 | 19.50 |
| | | 1 | 38 | 18.82 | 19.23 | 19.11 | |
| | | 1 | 74 | 18.75 | 17.54 | 18.01 | |
| | | 36 | 0 | 16.98 | 18.22 | 17.75 | 19.00 |
| | | 36 | 18 | 18.53 | 17.71 | 18.58 | |
| | | 36 | 39 | 18.28 | 16.98 | 18.01 | |
| | | 75 | 0 | 17.34 | 17.72 | 17.71 | 19.00 |
| | 16QAM | 1 | 0 | 17.05 | 18.73 | 17.36 | 19.00 |
| | | 1 | 38 | 18.29 | 18.59 | 18.79 | |
| | | 1 | 74 | 18.09 | 16.98 | 17.49 | |
| | | 36 | 0 | 16.62 | 17.83 | 17.46 | 18.50 |
| | | 36 | 18 | 17.90 | 17.37 | 17.90 | |
| | | 36 | 39 | 17.96 | 16.58 | 17.69 | |
| | | 75 | 0 | 16.95 | 17.45 | 17.34 | 18.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 18700/1860 | 18900/1880 | 19100/1900 | |
| **20MHz** | QPSK | 1 | 0 | 17.58 | 19.16 | 17.58 | 19.50 |
| | | 1 | 50 | 18.81 | 19.19 | 19.09 | |
| | | 1 | 99 | 18.73 | 17.53 | 17.98 | |
| | | 50 | 0 | 16.95 | 18.17 | 17.71 | 19.00 |
| | | 50 | 25 | 18.51 | 17.67 | 18.55 | |
| | | 50 | 50 | 18.25 | 16.93 | 17.97 | |
| | | 100 | 0 | 17.31 | 17.67 | 17.67 | 19.00 |
| | 16QAM | 1 | 0 | 17.03 | 18.69 | 17.31 | 19.00 |
| | | 1 | 50 | 18.25 | 18.57 | 18.75 | |
| | | 1 | 99 | 18.07 | 16.95 | 17.47 | |
| | | 50 | 0 | 16.59 | 17.79 | 17.43 | 18.50 |
| | | 50 | 25 | 17.87 | 17.35 | 17.87 | |
| | | 50 | 50 | 17.93 | 16.53 | 17.65 | |
| | | 100 | 0 | 16.93 | 17.41 | 17.31 | 18.50 |

| **LTE FDD Band 4** | | | | **Conducted Power(dBm)** | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 19957/1710.7 | 20175/1732.5 | 20393/1754.3 | |
| **1.4MHz** | QPSK | 1 | 0 | 19.74 | 19.54 | 19.35 | 20.70 |
| | | 1 | 2 | 19.84 | 19.09 | 20.05 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 5 | 18.91 | 19.40 | 20.28 | |
| | | 3 | 0 | 19.68 | 20.18 | 19.39 | 20.70 |
| | | 3 | 2 | 19.73 | 19.34 | 20.13 | |
| | | 3 | 3 | 19.80 | 19.38 | 20.16 | |
| | | 6 | 0 | 19.02 | 19.48 | 19.32 | 20.00 |
| | 16QAM | 1 | 0 | 19.06 | 18.84 | 18.67 | 20.00 |
| | | 1 | 2 | 19.18 | 18.38 | 19.37 | |
| | | 1 | 5 | 18.21 | 18.71 | 19.57 | |
| | | 3 | 0 | 18.97 | 19.43 | 18.68 | 20.00 |
| | | 3 | 2 | 19.07 | 18.61 | 19.43 | |
| | | 3 | 3 | 19.09 | 18.70 | 19.43 | |
| | | 6 | 0 | 18.37 | 18.78 | 18.63 | 19.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 19965/1711.5 | 20175/1732.5 | 20385/1753.5 | |
| **3MHz** | QPSK | 1 | 0 | 19.76 | 19.58 | 19.38 | 20.70 |
| | | 1 | 13 | 19.87 | 19.14 | 20.09 | |
| | | 1 | 24 | 18.94 | 19.45 | 20.32 | |
| | | 12 | 0 | 18.78 | 19.30 | 18.52 | 20.00 |
| | | 12 | 6 | 18.85 | 18.44 | 19.25 | |
| | | 12 | 13 | 18.90 | 18.49 | 19.26 | |
| | | 25 | 0 | 19.05 | 19.52 | 19.35 | 20.00 |
| | 16QAM | 1 | 0 | 19.09 | 18.86 | 18.70 | 20.00 |
| | | 1 | 13 | 19.21 | 18.43 | 19.41 | |
| | | 1 | 24 | 18.23 | 18.75 | 19.60 | |
| | | 12 | 0 | 18.08 | 18.56 | 17.80 | 19.20 |
| | | 12 | 6 | 18.18 | 17.74 | 18.55 | |
| | | 12 | 13 | 18.19 | 17.82 | 18.56 | |
| | | 25 | 0 | 18.40 | 18.82 | 18.66 | 19.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 19975/1712.5 | 20175/1732.5 | 20375/1752.5 | |
| **5MHz** | QPSK | 1 | 0 | 19.73 | 19.56 | 19.34 | 20.70 |
| | | 1 | 13 | 19.85 | 19.10 | 20.06 | |
| | | 1 | 24 | 18.91 | 19.40 | 20.28 | |
| | | 12 | 0 | 18.75 | 19.25 | 18.48 | 20.00 |
| | | 12 | 6 | 18.83 | 18.40 | 19.20 | |
| | | 12 | 13 | 18.88 | 18.47 | 19.22 | |
| | | 25 | 0 | 19.03 | 19.51 | 19.33 | 20.00 |
| | 16QAM | 1 | 0 | 19.06 | 18.82 | 18.67 | 20.00 |
| | | 1 | 13 | 19.18 | 18.41 | 19.38 | |
| | | 1 | 24 | 18.20 | 18.73 | 19.56 | |
| | | 12 | 0 | 18.06 | 18.52 | 17.77 | 19.20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 6 | 18.15 | 17.69 | 18.51 | |
| | | 12 | 13 | 18.16 | 17.77 | 18.52 | |
| | | 25 | 0 | 18.38 | 18.78 | 18.61 | 19.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20000/1715 | 20175/1732.5 | 20350/1750 | |
| **10MHz** | QPSK | 1 | 0 | 19.75 | 19.57 | 19.37 | 20.70 |
| | | 1 | 25 | 19.88 | 19.15 | 20.10 | |
| | | 1 | 49 | 18.93 | 19.44 | 20.31 | |
| | | 25 | 0 | 18.78 | 19.30 | 18.52 | 20.00 |
| | | 25 | 13 | 18.86 | 18.45 | 19.24 | |
| | | 25 | 25 | 18.90 | 18.51 | 19.27 | |
| | | 50 | 0 | 19.11 | 19.53 | 19.37 | 20.00 |
| | 16QAM | 1 | 0 | 19.08 | 18.85 | 18.69 | 20.00 |
| | | 1 | 25 | 19.21 | 18.45 | 19.41 | |
| | | 1 | 49 | 18.23 | 18.75 | 19.59 | |
| | | 25 | 0 | 18.09 | 18.57 | 17.81 | 19.20 |
| | | 25 | 13 | 18.17 | 17.73 | 18.54 | |
| | | 25 | 25 | 18.19 | 17.82 | 18.56 | |
| | | 50 | 0 | 18.41 | 18.83 | 18.65 | 19.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20025/1717.5 | 20175/1732.5 | 20325/1747.5 | |
| **15MHz** | QPSK | 1 | 0 | 19.74 | 19.53 | 19.35 | 20.70 |
| | | 1 | 38 | 19.86 | 19.14 | 20.07 | |
| | | 1 | 74 | 18.90 | 19.39 | 20.27 | |
| | | 36 | 0 | 18.76 | 19.26 | 18.49 | 20.00 |
| | | 36 | 18 | 18.83 | 18.40 | 19.20 | |
| | | 36 | 39 | 18.87 | 18.48 | 19.23 | |
| | | 75 | 0 | 19.09 | 19.49 | 19.32 | 20.00 |
| | 16QAM | 1 | 0 | 19.03 | 18.83 | 18.67 | 20.00 |
| | | 1 | 38 | 19.19 | 18.42 | 19.39 | |
| | | 1 | 74 | 18.20 | 18.71 | 19.56 | |
| | | 36 | 0 | 18.06 | 18.55 | 17.78 | 19.20 |
| | | 36 | 18 | 18.14 | 17.68 | 18.50 | |
| | | 36 | 39 | 18.17 | 17.78 | 18.53 | |
| | | 75 | 0 | 18.38 | 18.78 | 18.61 | 19.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20050/1720 | 20175/1732.5 | 20300/1745 | |
| **20MHz** | QPSK | 1 | 0 | 19.71 | 19.49 | 19.32 | 20.70 |
| | | 1 | 50 | 19.85 | 19.10 | 20.05 | |
| | | 1 | 99 | 18.88 | 19.38 | 20.24 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 50 | 0 | 18.73 | 19.21 | 18.45 | |
| | | 50 | 25 | 18.81 | 18.36 | 19.17 | 20.00 |
| | | 50 | 50 | 18.84 | 18.43 | 19.19 | |
| | | 100 | 0 | 19.06 | 19.44 | 19.28 | 20.00 |
| | 16QAM | 1 | 0 | 19.01 | 18.79 | 18.62 | |
| | | 1 | 50 | 19.15 | 18.40 | 19.35 | 20.00 |
| | | 1 | 99 | 18.18 | 18.68 | 19.54 | |
| | | 50 | 0 | 18.03 | 18.51 | 17.75 | |
| | | 50 | 25 | 18.11 | 17.66 | 18.47 | 19.20 |
| | | 50 | 50 | 18.14 | 17.73 | 18.49 | |
| | | 100 | 0 | 18.36 | 18.74 | 18.58 | 19.20 |

| LTE FDD Band 5 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 20407/824.7 | 20525/836.5 | 20643/848.3 | |
| 1.4MHz | QPSK | 1 | 0 | 21.78 | 22.61 | 22.48 | 23.50 |
| | | 1 | 2 | 22.46 | 22.71 | 22.91 | |
| | | 1 | 5 | 22.46 | 22.03 | 22.73 | |
| | | 3 | 0 | 22.53 | 22.88 | 22.44 | 23.50 |
| | | 3 | 2 | 22.69 | 22.80 | 22.70 | |
| | | 3 | 3 | 22.71 | 22.48 | 22.60 | |
| | | 6 | 0 | 22.01 | 21.97 | 21.62 | 22.50 |
| | 16QAM | 1 | 0 | 20.84 | 21.61 | 21.51 | 22.50 |
| | | 1 | 2 | 21.48 | 21.88 | 21.73 | |
| | | 1 | 5 | 21.51 | 21.07 | 21.72 | |
| | | 3 | 0 | 21.58 | 21.77 | 21.76 | 22.50 |
| | | 3 | 2 | 21.75 | 21.91 | 21.51 | |
| | | 3 | 3 | 21.76 | 21.55 | 22.21 | |
| | | 6 | 0 | 20.84 | 21.32 | 20.68 | 22.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20415/825.5 | 20525/836.5 | 20635/847.5 | |
| 3MHz | QPSK | 1 | 0 | 21.80 | 22.65 | 22.51 | 23.50 |
| | | 1 | 13 | 22.49 | 22.76 | 22.95 | |
| | | 1 | 24 | 22.49 | 22.08 | 22.77 | |
| | | 12 | 0 | 21.63 | 22.00 | 21.57 | 22.50 |
| | | 12 | 6 | 21.81 | 21.90 | 21.82 | |
| | | 12 | 13 | 21.81 | 21.59 | 21.70 | |
| | | 25 | 0 | 22.04 | 22.01 | 21.65 | 22.50 |
| | 16QAM | 1 | 0 | 20.87 | 21.63 | 21.54 | 22.50 |
| | | 1 | 13 | 21.51 | 21.93 | 21.77 | |
| | | 1 | 24 | 21.53 | 21.11 | 21.75 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 0 | 20.69 | 20.90 | 20.88 | 22.00 |
| | | 12 | 6 | 20.86 | 21.04 | 20.63 | |
| | | 12 | 13 | 20.86 | 20.67 | 21.34 | |
| | | 25 | 0 | 20.87 | 21.36 | 20.71 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20425/826.5 | 20525/836.5 | 20625/846.5 | |
| **5MHz** | QPSK | 1 | 0 | 21.77 | 22.63 | 22.47 | 23.50 |
| | | 1 | 13 | 22.47 | 22.72 | 22.92 | |
| | | 1 | 24 | 22.46 | 22.03 | 22.73 | |
| | | 12 | 0 | 21.60 | 21.95 | 21.53 | 22.50 |
| | | 12 | 6 | 21.79 | 21.86 | 21.77 | |
| | | 12 | 13 | 21.79 | 21.57 | 21.66 | |
| | | 25 | 0 | 22.02 | 22.00 | 21.63 | 22.50 |
| | 16QAM | 1 | 0 | 20.84 | 21.59 | 21.51 | 22.50 |
| | | 1 | 13 | 21.48 | 21.91 | 21.74 | |
| | | 1 | 24 | 21.50 | 21.09 | 21.71 | |
| | | 12 | 0 | 20.67 | 20.86 | 20.85 | 22.00 |
| | | 12 | 6 | 20.83 | 20.99 | 20.59 | |
| | | 12 | 13 | 20.83 | 20.62 | 21.30 | |
| | | 25 | 0 | 20.85 | 21.32 | 20.66 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20450/829 | 20525/836.5 | 20600/844 | |
| **10MHz** | QPSK | 1 | 0 | 21.75 | 22.56 | 22.45 | 23.50 |
| | | 1 | 25 | 22.47 | 22.72 | 22.91 | |
| | | 1 | 49 | 22.43 | 22.01 | 22.69 | |
| | | 25 | 0 | 21.58 | 21.71 | 21.50 | 22.50 |
| | | 25 | 13 | 21.77 | 21.62 | 21.74 | |
| | | 25 | 25 | 21.75 | 21.53 | 21.63 | |
| | | 50 | 0 | 22.05 | 21.93 | 21.58 | 22.50 |
| | 16QAM | 1 | 0 | 20.79 | 21.56 | 21.46 | 22.50 |
| | | 1 | 25 | 21.45 | 21.90 | 21.71 | |
| | | 1 | 49 | 21.48 | 21.04 | 21.69 | |
| | | 25 | 0 | 20.64 | 20.85 | 20.83 | 22.00 |
| | | 25 | 13 | 20.79 | 20.96 | 20.55 | |
| | | 25 | 25 | 20.81 | 20.58 | 21.27 | |
| | | 50 | 0 | 20.83 | 21.28 | 20.63 | 22.00 |

| LTE FDD Band 5 For Simultaneous Transmission | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 20407/824.7 | 20525/836.5 | 20643/848.3 | |
| 1.4MHz | QPSK | 1 | 0 | 21.17 | 22.10 | 21.76 | 23.00 |
| | | 1 | 2 | 21.95 | 22.25 | 22.35 | |
| | | 1 | 5 | 21.90 | 21.90 | 22.09 | |
| | | 3 | 0 | 21.97 | 22.25 | 21.80 | 23.00 |
| | | 3 | 2 | 22.12 | 22.18 | 22.10 | |
| | | 3 | 3 | 22.12 | 21.87 | 21.99 | |
| | | 6 | 0 | 21.42 | 21.36 | 21.06 | 22.00 |
| | 16QAM | 1 | 0 | 20.29 | 21.03 | 20.93 | 22.00 |
| | | 1 | 2 | 20.89 | 21.24 | 21.10 | |
| | | 1 | 5 | 20.95 | 20.47 | 21.17 | |
| | | 3 | 0 | 20.98 | 21.18 | 21.15 | 22.00 |
| | | 3 | 2 | 21.20 | 21.33 | 20.92 | |
| | | 3 | 3 | 21.13 | 20.99 | 21.64 | |
| | | 6 | 0 | 20.23 | 20.76 | 20.07 | 21.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20415/825.5 | 20525/836.5 | 20635/847.5 | |
| 3MHz | QPSK | 1 | 0 | 21.19 | 22.14 | 21.79 | 23.00 |
| | | 1 | 13 | 21.98 | 22.30 | 22.39 | |
| | | 1 | 24 | 21.93 | 21.95 | 22.13 | |
| | | 12 | 0 | 21.07 | 21.37 | 20.93 | 22.00 |
| | | 12 | 6 | 21.24 | 21.28 | 21.22 | |
| | | 12 | 13 | 21.22 | 20.98 | 21.09 | |
| | | 25 | 0 | 21.45 | 21.40 | 21.09 | 22.00 |
| | 16QAM | 1 | 0 | 20.32 | 21.05 | 20.96 | 22.00 |
| | | 1 | 13 | 20.92 | 21.29 | 21.14 | |
| | | 1 | 24 | 20.97 | 20.51 | 21.20 | |
| | | 12 | 0 | 20.09 | 20.31 | 20.27 | 21.50 |
| | | 12 | 6 | 20.31 | 20.46 | 20.04 | |
| | | 12 | 13 | 20.23 | 20.11 | 20.77 | |
| | | 25 | 0 | 20.26 | 20.80 | 20.10 | 21.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20425/826.5 | 20525/836.5 | 20625/846.5 | |
| 5MHz | QPSK | 1 | 0 | 21.16 | 22.12 | 21.75 | 23.00 |
| | | 1 | 13 | 21.96 | 22.26 | 22.36 | |
| | | 1 | 24 | 21.90 | 21.90 | 22.09 | |
| | | 12 | 0 | 21.04 | 21.32 | 20.89 | 22.00 |
| | | 12 | 6 | 21.22 | 21.24 | 21.17 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 13 | 21.20 | 20.96 | 21.05 | |
| | | 25 | 0 | 21.43 | 21.39 | 21.07 | 22.00 |
| | | 1 | 0 | 20.29 | 21.01 | 20.93 | |
| | | 1 | 13 | 20.89 | 21.27 | 21.11 | 22.00 |
| | | 1 | 24 | 20.94 | 20.49 | 21.16 | |
| | 16QAM | 12 | 0 | 20.07 | 20.27 | 20.24 | |
| | | 12 | 6 | 20.28 | 20.41 | 20.00 | 21.50 |
| | | 12 | 13 | 20.20 | 20.06 | 20.73 | |
| | | 25 | 0 | 20.24 | 20.76 | 20.05 | 21.50 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 20450/829 | 20525/836.5 | 20600/844 | |
| 10MHz | QPSK | 1 | 0 | 21.14 | 22.05 | 21.73 | 23.00 |
| | | 1 | 25 | 21.96 | 22.26 | 22.35 | |
| | | 1 | 49 | 21.87 | 21.88 | 22.05 | |
| | | 25 | 0 | 21.02 | 21.18 | 20.86 | 22.00 |
| | | 25 | 13 | 21.20 | 21.12 | 21.14 | |
| | | 25 | 25 | 21.16 | 20.92 | 21.02 | |
| | | 50 | 0 | 21.46 | 21.32 | 21.02 | 22.00 |
| | 16QAM | 1 | 0 | 20.24 | 20.98 | 20.88 | 22.00 |
| | | 1 | 25 | 20.86 | 21.26 | 21.08 | |
| | | 1 | 49 | 20.92 | 20.44 | 21.14 | |
| | | 25 | 0 | 20.04 | 20.26 | 20.22 | 21.50 |
| | | 25 | 13 | 20.24 | 20.38 | 19.96 | |
| | | 25 | 25 | 20.18 | 20.02 | 20.70 | |
| | | 50 | 0 | 20.22 | 20.72 | 20.02 | 21.50 |

| LTE FDD Band 7 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 20775/2502.5 | 21100/2535 | 21425/2567.5 | |
| 5MHz | QPSK | 1 | 0 | 18.05 | 17.78 | 17.30 | 18.80 |
| | | 1 | 13 | 17.53 | 18.13 | 17.43 | |
| | | 1 | 24 | 17.41 | 17.50 | 17.68 | |
| | | 12 | 0 | 16.97 | 16.71 | 16.71 | 17.80 |
| | | 12 | 6 | 16.80 | 16.94 | 16.64 | |
| | | 12 | 13 | 16.55 | 16.91 | 16.58 | |
| | | 25 | 0 | 16.62 | 16.89 | 16.80 | 17.80 |
| | 16QAM | 1 | 0 | 17.72 | 17.39 | 16.99 | 18.50 |
| | | 1 | 13 | 17.21 | 17.78 | 17.10 | |
| | | 1 | 24 | 17.05 | 17.18 | 17.31 | |
| | | 12 | 0 | 16.64 | 16.35 | 16.37 | 17.20 |
| | | 12 | 6 | 16.49 | 16.59 | 16.32 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 13 | 16.20 | 16.57 | 16.25 | |
| | | 25 | 0 | 16.34 | 16.53 | 16.45 | 17.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20800/2505 | 21100/2535 | 21400/2565 | |
| **10MHz** | QPSK | 1 | 0 | 18.07 | 17.79 | 17.33 | 18.80 |
| | | 1 | 25 | 17.56 | 18.18 | 17.47 | |
| | | 1 | 49 | 17.43 | 17.54 | 17.71 | |
| | | 25 | 0 | 17.00 | 16.76 | 16.75 | 17.80 |
| | | 25 | 13 | 16.83 | 16.99 | 16.68 | |
| | | 25 | 25 | 16.57 | 16.95 | 16.63 | |
| | | 50 | 0 | 16.70 | 16.91 | 16.84 | 17.80 |
| | 16QAM | 1 | 0 | 17.74 | 17.42 | 17.01 | 18.50 |
| | | 1 | 25 | 17.24 | 17.82 | 17.13 | |
| | | 1 | 49 | 17.08 | 17.20 | 17.34 | |
| | | 25 | 0 | 16.67 | 16.40 | 16.41 | 17.20 |
| | | 25 | 13 | 16.51 | 16.63 | 16.35 | |
| | | 25 | 25 | 16.23 | 16.62 | 16.29 | |
| | | 50 | 0 | 16.37 | 16.58 | 16.49 | 17.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20825/2507.5 | 21100/2535 | 21375/2562.5 | |
| **15MHz** | QPSK | 1 | 0 | 18.06 | 17.75 | 17.31 | 18.80 |
| | | 1 | 38 | 17.54 | 18.17 | 17.44 | |
| | | 1 | 74 | 17.40 | 17.49 | 17.67 | |
| | | 36 | 0 | 16.98 | 16.72 | 16.72 | 17.80 |
| | | 36 | 18 | 16.80 | 16.94 | 16.64 | |
| | | 36 | 39 | 16.54 | 16.92 | 16.59 | |
| | | 75 | 0 | 16.68 | 16.87 | 16.79 | 17.80 |
| | 16QAM | 1 | 0 | 17.69 | 17.40 | 16.99 | 18.50 |
| | | 1 | 38 | 17.22 | 17.79 | 17.11 | |
| | | 1 | 74 | 17.05 | 17.16 | 17.31 | |
| | | 36 | 0 | 16.64 | 16.38 | 16.38 | 17.20 |
| | | 36 | 18 | 16.48 | 16.58 | 16.31 | |
| | | 36 | 39 | 16.21 | 16.58 | 16.26 | |
| | | 75 | 0 | 16.34 | 16.53 | 16.45 | 17.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 20850/2510 | 21100/2535 | 21350/2560 | |
| **20MHz** | QPSK | 1 | 0 | 17.81 | 17.71 | 17.28 | 18.80 |
| | | 1 | 50 | 17.86 | 18.13 | 17.42 | |
| | | 1 | 99 | 17.38 | 17.48 | 17.64 | |
| | | 50 | 0 | 16.95 | 16.67 | 16.68 | 17.80 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 50 | 25 | 16.78 | 16.90 | 16.61 | |
| | | 50 | 50 | 16.51 | 16.87 | 16.55 | |
| | | 100 | 0 | 16.65 | 16.82 | 16.75 | 17.80 |
| | 16QAM | 1 | 0 | 17.67 | 17.36 | 16.94 | 18.50 |
| | | 1 | 50 | 17.18 | 17.77 | 17.07 | |
| | | 1 | 99 | 17.03 | 17.13 | 17.29 | |
| | | 50 | 0 | 16.61 | 16.34 | 16.35 | 17.20 |
| | | 50 | 25 | 16.45 | 16.56 | 16.28 | |
| | | 50 | 50 | 16.18 | 16.53 | 16.22 | |
| | | 100 | 0 | 16.32 | 16.49 | 16.42 | 17.20 |

| LTE FDD Band 12 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 23017/699.7 | 23095/707.5 | 23173/715.3 | |
| 1.4MHz | QPSK | 1 | 0 | 23.11 | 23.20 | 22.45 | 24.00 |
| | | 1 | 2 | 23.11 | 22.86 | 23.47 | |
| | | 1 | 5 | 22.64 | 23.13 | 22.51 | |
| | | 3 | 0 | 22.91 | 22.93 | 23.08 | 24.00 |
| | | 3 | 2 | 23.05 | 22.49 | 24.04 | |
| | | 3 | 3 | 22.48 | 22.86 | 24.00 | |
| | | 6 | 0 | 21.85 | 21.47 | 22.56 | 23.40 |
| | 16QAM | 1 | 0 | 21.92 | 21.99 | 21.26 | 23.00 |
| | | 1 | 2 | 21.94 | 21.64 | 22.28 | |
| | | 1 | 5 | 21.43 | 21.93 | 21.29 | |
| | | 3 | 0 | 21.69 | 21.67 | 21.86 | 23.00 |
| | | 3 | 2 | 21.88 | 21.25 | 22.83 | |
| | | 3 | 3 | 21.26 | 21.67 | 22.76 | |
| | | 6 | 0 | 20.69 | 20.26 | 21.36 | 22.20 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23025/700.5 | 23095/707.5 | 23165/714.5 | |
| 3MHz | QPSK | 1 | 0 | 23.13 | 23.24 | 22.48 | 24.00 |
| | | 1 | 7 | 23.14 | 22.91 | 23.51 | |
| | | 1 | 14 | 22.67 | 23.18 | 22.55 | |
| | | 8 | 0 | 22.01 | 22.05 | 22.21 | 23.40 |
| | | 8 | 4 | 22.17 | 21.59 | 23.16 | |
| | | 8 | 7 | 21.58 | 21.97 | 23.10 | |
| | | 15 | 0 | 21.88 | 21.51 | 22.59 | 23.40 |
| | 16QAM | 1 | 0 | 21.95 | 22.01 | 21.29 | 23.00 |
| | | 1 | 7 | 21.97 | 21.69 | 22.32 | |
| | | 1 | 14 | 21.45 | 21.97 | 21.32 | |
| | | 8 | 0 | 20.80 | 20.80 | 20.98 | 22.20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 8 | 4 | 20.99 | 20.38 | 21.95 | |
| | | 8 | 7 | 20.36 | 20.79 | 21.89 | |
| | | 15 | 0 | 20.72 | 20.30 | 21.39 | 22.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23035/701.5 | 23095/707.5 | 23155/713.5 | |
| **5MHz** | QPSK | 1 | 0 | 23.10 | 23.22 | 22.44 | 24.00 |
| | | 1 | 13 | 23.12 | 22.87 | 23.48 | |
| | | 1 | 24 | 22.64 | 23.13 | 22.51 | |
| | | 12 | 0 | 21.98 | 22.00 | 22.17 | 23.40 |
| | | 12 | 6 | 22.15 | 21.55 | 23.11 | |
| | | 12 | 13 | 21.56 | 21.95 | 23.06 | |
| | | 25 | 0 | 21.86 | 21.50 | 22.57 | 23.40 |
| | 16QAM | 1 | 0 | 21.92 | 21.97 | 21.26 | 23.00 |
| | | 1 | 13 | 21.94 | 21.67 | 22.29 | |
| | | 1 | 24 | 21.42 | 21.95 | 21.28 | |
| | | 12 | 0 | 20.78 | 20.76 | 20.95 | 22.20 |
| | | 12 | 6 | 20.96 | 20.33 | 21.91 | |
| | | 12 | 13 | 20.33 | 20.74 | 21.85 | |
| | | 25 | 0 | 20.70 | 20.26 | 21.34 | 22.20 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23060/704 | 23095/707.5 | 23130/711 | |
| **10MHz** | QPSK | 1 | 0 | 23.08 | 23.15 | 22.42 | 24.00 |
| | | 1 | 25 | 23.12 | 22.87 | 23.47 | |
| | | 1 | 49 | 22.61 | 23.11 | 22.47 | |
| | | 25 | 0 | 21.96 | 21.96 | 22.14 | 23.40 |
| | | 25 | 13 | 22.13 | 21.51 | 23.08 | |
| | | 25 | 25 | 21.52 | 21.91 | 23.03 | |
| | | 50 | 0 | 21.89 | 21.43 | 22.52 | 23.40 |
| | 16QAM | 1 | 0 | 21.87 | 21.94 | 21.21 | 23.00 |
| | | 1 | 25 | 21.91 | 21.66 | 22.26 | |
| | | 1 | 49 | 21.40 | 21.90 | 21.26 | |
| | | 25 | 0 | 20.75 | 20.75 | 20.93 | 22.20 |
| | | 25 | 13 | 20.92 | 20.30 | 21.87 | |
| | | 25 | 25 | 20.31 | 20.70 | 21.82 | |
| | | 50 | 0 | 20.68 | 20.22 | 21.31 | 22.20 |

| LTE FDD Band 12 For Simultaneous Transmission | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 23017/699.7 | 23095/707.5 | 23173/715.3 | |
| 1.4MHz | QPSK | 1 | 0 | 22.28 | 22.32 | 21.85 | 23.50 |
| | | 1 | 2 | 22.30 | 21.62 | 22.68 | |
| | | 1 | 5 | 21.75 | 22.17 | 22.13 | |
| | | 3 | 0 | 22.15 | 22.17 | 22.30 | 23.50 |
| | | 3 | 2 | 22.26 | 21.68 | 23.30 | |
| | | 3 | 3 | 21.68 | 22.05 | 23.21 | |
| | | 6 | 0 | 21.12 | 20.68 | 21.76 | 22.50 |
| | 16QAM | 1 | 0 | 21.17 | 21.21 | 20.45 | 22.40 |
| | | 1 | 2 | 21.13 | 20.88 | 21.52 | |
| | | 1 | 5 | 20.61 | 21.11 | 20.53 | |
| | | 3 | 0 | 20.92 | 20.90 | 21.07 | 22.40 |
| | | 3 | 2 | 21.08 | 20.43 | 22.08 | |
| | | 3 | 3 | 20.45 | 20.85 | 21.96 | |
| | | 6 | 0 | 19.95 | 19.46 | 20.55 | 21.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23025/700.5 | 23095/707.5 | 23165/714.5 | |
| 3MHz | QPSK | 1 | 0 | 22.30 | 22.36 | 21.88 | 23.50 |
| | | 1 | 7 | 22.33 | 21.67 | 22.72 | |
| | | 1 | 14 | 21.78 | 22.22 | 22.17 | |
| | | 8 | 0 | 21.25 | 21.29 | 21.43 | 22.50 |
| | | 8 | 4 | 21.38 | 20.78 | 22.42 | |
| | | 8 | 7 | 20.78 | 21.16 | 22.31 | |
| | | 15 | 0 | 21.15 | 20.72 | 21.79 | 22.50 |
| | 16QAM | 1 | 0 | 21.20 | 21.23 | 20.48 | 22.40 |
| | | 1 | 7 | 21.16 | 20.93 | 21.56 | |
| | | 1 | 14 | 20.63 | 21.15 | 20.56 | |
| | | 8 | 0 | 20.03 | 20.03 | 20.19 | 21.50 |
| | | 8 | 4 | 20.19 | 19.56 | 21.20 | |
| | | 8 | 7 | 19.55 | 19.97 | 21.09 | |
| | | 15 | 0 | 19.98 | 19.50 | 20.58 | 21.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23035/701.5 | 23095/707.5 | 23155/713.5 | |
| 5MHz | QPSK | 1 | 0 | 22.27 | 22.34 | 21.84 | 23.50 |
| | | 1 | 13 | 22.31 | 21.63 | 22.69 | |
| | | 1 | 24 | 21.75 | 22.17 | 22.13 | |
| | | 12 | 0 | 21.22 | 21.24 | 21.39 | 22.50 |
| | | 12 | 6 | 21.36 | 20.74 | 22.37 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 13 | 20.76 | 21.14 | 22.27 | |
| | | 25 | 0 | 21.13 | 20.71 | 21.77 | 22.50 |
| | 16QAM | 1 | 0 | 21.17 | 21.19 | 20.45 | 22.40 |
| | | 1 | 13 | 21.13 | 20.91 | 21.53 | |
| | | 1 | 24 | 20.60 | 21.13 | 20.52 | |
| | | 12 | 0 | 20.01 | 19.99 | 20.16 | 21.50 |
| | | 12 | 6 | 20.16 | 19.51 | 21.16 | |
| | | 12 | 13 | 19.52 | 19.92 | 21.05 | |
| | | 25 | 0 | 19.96 | 19.46 | 20.53 | 21.50 |

| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 23060/704 | 23095/707.5 | 23130/711 | |
| **10MHz** | QPSK | 1 | 0 | 22.25 | 22.27 | 21.82 | 23.50 |
| | | 1 | 25 | 22.31 | 21.63 | 22.68 | |
| | | 1 | 49 | 21.72 | 22.15 | 22.09 | |
| | | 25 | 0 | 21.20 | 21.20 | 21.36 | 22.50 |
| | | 25 | 13 | 21.34 | 20.70 | 22.34 | |
| | | 25 | 25 | 20.72 | 21.10 | 22.24 | |
| | | 50 | 0 | 21.16 | 20.64 | 21.72 | 22.50 |
| | 16QAM | 1 | 0 | 21.12 | 21.16 | 20.40 | 22.40 |
| | | 1 | 25 | 21.10 | 20.90 | 21.50 | |
| | | 1 | 49 | 20.58 | 21.08 | 20.50 | |
| | | 25 | 0 | 19.98 | 19.98 | 20.14 | 21.50 |
| | | 25 | 13 | 20.12 | 19.48 | 21.12 | |
| | | 25 | 25 | 19.50 | 19.88 | 21.02 | |
| | | 50 | 0 | 19.94 | 19.42 | 20.50 | 21.50 |

| **LTE FDD Band 17** | | | | **Conducted Power(dBm)** | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 23755/706.5 | 23790/710 | 23825/713.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.32 | 22.57 | 22.66 | 23.80 |
| | | 1 | 13 | 23.38 | 23.42 | 23.38 | |
| | | 1 | 24 | 23.28 | 23.08 | 22.66 | |
| | | 12 | 0 | 22.01 | 22.07 | 22.12 | 23.00 |
| | | 12 | 6 | 22.26 | 22.44 | 22.58 | |
| | | 12 | 13 | 22.21 | 22.42 | 22.48 | |
| | | 25 | 0 | 22.28 | 22.43 | 22.42 | 23.00 |
| | 16QAM | 1 | 0 | 21.65 | 21.83 | 21.99 | 23.00 |
| | | 1 | 13 | 22.71 | 22.73 | 22.70 | |
| | | 1 | 24 | 22.57 | 22.41 | 21.94 | |
| | | 12 | 0 | 21.32 | 21.34 | 21.41 | 22.50 |
| | | 12 | 6 | 21.58 | 21.73 | 21.89 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 13 | 21.49 | 21.72 | 21.78 | |
| | | 25 | 0 | 21.63 | 21.70 | 21.70 | 22.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23780/709 | 23790/710 | 23800/711 | |
| **10MHz** | QPSK | 1 | 0 | 22.30 | 22.50 | 22.64 | 23.80 |
| | | 1 | 25 | 23.38 | 23.42 | 23.37 | |
| | | 1 | 49 | 23.25 | 23.06 | 22.62 | |
| | | 25 | 0 | 21.99 | 22.03 | 22.09 | 23.00 |
| | | 25 | 13 | 22.24 | 22.40 | 22.55 | |
| | | 25 | 25 | 22.17 | 22.38 | 22.45 | |
| | | 50 | 0 | 22.31 | 22.36 | 22.38 | 23.00 |
| | 16QAM | 1 | 0 | 21.60 | 21.80 | 21.94 | 23.00 |
| | | 1 | 25 | 22.68 | 22.72 | 22.67 | |
| | | 1 | 49 | 22.55 | 22.36 | 21.92 | |
| | | 25 | 0 | 21.29 | 21.33 | 21.39 | 22.50 |
| | | 25 | 13 | 21.54 | 21.70 | 21.85 | |
| | | 25 | 25 | 21.47 | 21.68 | 21.75 | |
| | | 50 | 0 | 21.61 | 21.66 | 21.67 | 22.50 |

| **LTE FDD Band 17 For Simultaneous Transmission** | | | | **Conducted Power(dBm)** | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 23755/706.5 | 23790/710 | 23825/713.5 | |
| **5MHz** | QPSK | 1 | 0 | 21.08 | 21.14 | 21.31 | 23.00 |
| | | 1 | 13 | 22.37 | 22.48 | 22.35 | |
| | | 1 | 24 | 21.99 | 21.69 | 21.56 | |
| | | 12 | 0 | 21.09 | 21.09 | 21.20 | 22.00 |
| | | 12 | 6 | 21.29 | 21.43 | 21.62 | |
| | | 12 | 13 | 21.27 | 21.39 | 21.52 | |
| | | 25 | 0 | 21.28 | 21.48 | 21.50 | 22.00 |
| | 16QAM | 1 | 0 | 20.64 | 20.82 | 21.02 | 22.00 |
| | | 1 | 13 | 21.78 | 21.74 | 21.76 | |
| | | 1 | 24 | 21.61 | 21.46 | 20.95 | |
| | | 12 | 0 | 20.40 | 20.36 | 20.49 | 21.50 |
| | | 12 | 6 | 20.61 | 20.72 | 20.93 | |
| | | 12 | 13 | 20.55 | 20.79 | 20.82 | |
| | | 25 | 0 | 20.63 | 20.75 | 20.76 | 21.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 23780/709 | 23790/710 | 23800/711 | |
| **10MHz** | QPSK | 1 | 0 | 21.06 | 21.07 | 21.29 | 23.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 25 | 22.37 | 22.48 | 22.34 | |
| | | 1 | 49 | 21.96 | 21.67 | 21.52 | |
| | | 25 | 0 | 21.07 | 21.05 | 21.17 | |
| | | 25 | 13 | 21.27 | 21.39 | 21.59 | 22.00 |
| | | 25 | 25 | 21.23 | 21.35 | 21.49 | |
| | | 50 | 0 | 21.31 | 21.41 | 21.45 | 22.00 |
| | 16QAM | 1 | 0 | 20.59 | 20.79 | 20.97 | |
| | | 1 | 25 | 21.75 | 21.73 | 21.73 | 22.00 |
| | | 1 | 49 | 21.59 | 21.41 | 20.93 | |
| | | 25 | 0 | 20.37 | 20.35 | 20.47 | |
| | | 25 | 13 | 20.57 | 20.69 | 20.89 | 21.50 |
| | | 25 | 25 | 20.53 | 20.75 | 20.79 | |
| | | 50 | 0 | 20.61 | 20.71 | 20.73 | 21.50 |

| LTE FDD Band 26 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 26697/814.7 | 26865/831.5 | 27033/848.3 | |
| 1.4MHz | QPSK | 1 | 0 | 22.74 | 22.12 | 23.01 | 24.00 |
| | | 1 | 2 | 22.89 | 23.02 | 23.20 | |
| | | 1 | 5 | 22.03 | 22.47 | 22.55 | |
| | | 3 | 0 | 23.52 | 24.08 | 23.91 | 24.00 |
| | | 3 | 2 | 23.33 | 24.01 | 24.05 | |
| | | 3 | 3 | 23.66 | 23.94 | 23.68 | |
| | | 6 | 0 | 22.37 | 22.97 | 22.87 | 24.00 |
| | 16QAM | 1 | 0 | 22.17 | 21.40 | 22.31 | 23.00 |
| | | 1 | 2 | 22.19 | 22.35 | 22.54 | |
| | | 1 | 5 | 21.31 | 21.80 | 21.81 | |
| | | 3 | 0 | 22.83 | 23.30 | 23.32 | 23.00 |
| | | 3 | 2 | 22.77 | 23.40 | 23.33 | |
| | | 3 | 3 | 22.97 | 23.23 | 22.99 | |
| | | 6 | 0 | 21.69 | 22.39 | 22.16 | 23.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26705/815.5 | 26865/831.5 | 27025/847.5 | |
| 3MHz | QPSK | 1 | 0 | 22.76 | 22.16 | 23.04 | 24.00 |
| | | 1 | 13 | 22.92 | 23.07 | 23.24 | |
| | | 1 | 24 | 22.06 | 22.52 | 22.59 | |
| | | 12 | 0 | 22.62 | 23.20 | 23.04 | 24.00 |
| | | 12 | 6 | 22.45 | 23.11 | 23.17 | |
| | | 12 | 13 | 22.76 | 23.05 | 22.78 | |
| | | 25 | 0 | 22.40 | 23.01 | 22.90 | 24.00 |
| | 16QAM | 1 | 0 | 22.20 | 21.42 | 22.34 | 23.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 13 | 22.22 | 22.40 | 22.58 | |
| | | 1 | 24 | 21.33 | 21.84 | 21.84 | |
| | | 12 | 0 | 21.94 | 22.43 | 22.44 | |
| | | 12 | 6 | 21.88 | 22.53 | 22.45 | 23.00 |
| | | 12 | 13 | 22.07 | 22.35 | 22.12 | |
| | | 25 | 0 | 21.72 | 22.43 | 22.19 | 23.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26715/816.5 | 26865/831.5 | 27015/846.5 | |
| **5MHz** | QPSK | 1 | 0 | 22.73 | 22.14 | 23.00 | 24.00 |
| | | 1 | 13 | 22.90 | 23.03 | 23.21 | |
| | | 1 | 24 | 22.03 | 22.47 | 22.55 | |
| | | 12 | 0 | 22.59 | 23.15 | 23.00 | |
| | | 12 | 6 | 22.43 | 23.07 | 23.12 | 24.00 |
| | | 12 | 13 | 22.74 | 23.03 | 22.74 | |
| | | 25 | 0 | 22.38 | 23.00 | 22.88 | 24.00 |
| | 16QAM | 1 | 0 | 22.17 | 21.38 | 22.31 | |
| | | 1 | 13 | 22.19 | 22.38 | 22.55 | 23.00 |
| | | 1 | 24 | 21.30 | 21.82 | 21.80 | |
| | | 12 | 0 | 21.92 | 22.39 | 22.41 | |
| | | 12 | 6 | 21.85 | 22.48 | 22.41 | 23.00 |
| | | 12 | 13 | 22.04 | 22.30 | 22.08 | |
| | | 25 | 0 | 21.70 | 22.39 | 22.14 | 23.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26750/820 | 26865/831.5 | 26990/844 | |
| **10MHz** | QPSK | 1 | 0 | 22.75 | 22.15 | 23.03 | |
| | | 1 | 25 | 22.93 | 23.08 | 23.25 | 24.00 |
| | | 1 | 49 | 22.05 | 22.51 | 22.58 | |
| | | 25 | 0 | 22.62 | 23.20 | 23.04 | |
| | | 25 | 13 | 22.46 | 23.12 | 23.16 | 24.00 |
| | | 25 | 25 | 22.76 | 23.07 | 22.79 | |
| | | 50 | 0 | 22.46 | 23.02 | 22.92 | 24.00 |
| | 16QAM | 1 | 0 | 22.19 | 21.41 | 22.33 | |
| | | 1 | 25 | 22.22 | 22.42 | 22.58 | 23.00 |
| | | 1 | 49 | 21.33 | 21.84 | 21.83 | |
| | | 25 | 0 | 21.95 | 22.44 | 22.45 | |
| | | 25 | 13 | 21.87 | 22.52 | 22.44 | 23.00 |
| | | 25 | 25 | 22.07 | 22.35 | 22.12 | |
| | | 50 | 0 | 21.73 | 22.44 | 22.18 | 23.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26775/822.5 | 26865/831.5 | 26965/841.5 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15MHz | QPSK | 1 | 0 | 22.71 | 22.07 | 22.98 | 24.00 |
| | | 1 | 38 | 22.90 | 23.03 | 23.20 | |
| | | 1 | 74 | 22.00 | 22.45 | 22.51 | |
| | | 36 | 0 | 22.57 | 23.11 | 22.97 | 24.00 |
| | | 36 | 18 | 22.41 | 23.03 | 23.09 | |
| | | 36 | 39 | 22.70 | 22.99 | 22.71 | |
| | | 75 | 0 | 22.41 | 22.93 | 22.83 | 24.00 |
| | 16QAM | 1 | 0 | 22.12 | 21.35 | 22.26 | 23.00 |
| | | 1 | 38 | 22.16 | 22.37 | 22.52 | |
| | | 1 | 74 | 21.28 | 21.77 | 21.78 | |
| | | 36 | 0 | 21.89 | 22.38 | 22.39 | 23.00 |
| | | 36 | 18 | 21.81 | 22.45 | 22.37 | |
| | | 36 | 39 | 22.02 | 22.26 | 22.05 | |
| | | 75 | 0 | 21.68 | 22.35 | 22.11 | 23.00 |

| LTE FDD Band 26 For Simultaneous Transmission | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 26697/814.7 | 26865/831.5 | 27033/848.3 | |
| 1.4MHz | QPSK | 1 | 0 | 21.57 | 21.31 | 22.14 | 23.00 |
| | | 1 | 2 | 21.74 | 22.23 | 22.31 | |
| | | 1 | 5 | 21.31 | 21.65 | 21.78 | |
| | | 3 | 0 | 22.40 | 22.96 | 22.79 | 23.00 |
| | | 3 | 2 | 22.21 | 22.89 | 22.93 | |
| | | 3 | 3 | 22.54 | 22.82 | 22.56 | |
| | | 6 | 0 | 21.25 | 21.85 | 21.75 | 22.50 |
| | 16QAM | 1 | 0 | 21.25 | 20.48 | 21.39 | 22.00 |
| | | 1 | 2 | 21.27 | 21.43 | 21.62 | |
| | | 1 | 5 | 20.39 | 20.88 | 20.89 | |
| | | 3 | 0 | 21.91 | 22.38 | 22.40 | 22.00 |
| | | 3 | 2 | 21.85 | 22.48 | 22.41 | |
| | | 3 | 3 | 22.05 | 22.31 | 22.07 | |
| | | 6 | 0 | 20.77 | 21.47 | 21.24 | 22.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26705/815.5 | 26865/831.5 | 27025/847.5 | |
| 3MHz | QPSK | 1 | 0 | 21.59 | 21.35 | 22.17 | 23.00 |
| | | 1 | 13 | 21.77 | 22.28 | 22.35 | |
| | | 1 | 24 | 21.34 | 21.70 | 21.82 | |
| | | 12 | 0 | 21.50 | 22.08 | 21.92 | 22.50 |
| | | 12 | 6 | 21.33 | 21.99 | 22.05 | |
| | | 12 | 13 | 21.64 | 21.93 | 21.66 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 25 | 0 | 21.28 | 21.89 | 21.78 | 22.50 |
| | 16QAM | 1 | 0 | 21.28 | 20.50 | 21.42 | 22.00 |
| | | 1 | 13 | 21.30 | 21.48 | 21.66 | |
| | | 1 | 24 | 20.41 | 20.92 | 20.92 | |
| | | 12 | 0 | 21.02 | 21.51 | 21.52 | 22.00 |
| | | 12 | 6 | 20.96 | 21.61 | 21.53 | |
| | | 12 | 13 | 21.15 | 21.43 | 21.20 | |
| | | 25 | 0 | 20.80 | 21.51 | 21.27 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26715/816.5 | 26865/831.5 | 27015/846.5 | |
| **5MHz** | QPSK | 1 | 0 | 21.56 | 21.33 | 22.13 | 23.00 |
| | | 1 | 13 | 21.75 | 22.24 | 22.32 | |
| | | 1 | 24 | 21.31 | 21.65 | 21.78 | |
| | | 12 | 0 | 21.47 | 22.03 | 21.88 | 22.50 |
| | | 12 | 6 | 21.31 | 21.95 | 22.00 | |
| | | 12 | 13 | 21.62 | 21.91 | 21.62 | |
| | | 25 | 0 | 21.26 | 21.88 | 21.76 | 22.50 |
| | 16QAM | 1 | 0 | 21.25 | 20.46 | 21.39 | 22.00 |
| | | 1 | 13 | 21.27 | 21.46 | 21.63 | |
| | | 1 | 24 | 20.38 | 20.90 | 20.88 | |
| | | 12 | 0 | 21.00 | 21.47 | 21.49 | 22.00 |
| | | 12 | 6 | 20.93 | 21.56 | 21.49 | |
| | | 12 | 13 | 21.12 | 21.38 | 21.16 | |
| | | 25 | 0 | 20.78 | 21.47 | 21.22 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 26750/820 | 26865/831.5 | 26990/844 | |
| **10MHz** | QPSK | 1 | 0 | 21.58 | 21.34 | 22.16 | 23.00 |
| | | 1 | 25 | 21.78 | 22.29 | 22.36 | |
| | | 1 | 49 | 21.33 | 21.69 | 21.81 | |
| | | 25 | 0 | 21.50 | 22.08 | 21.92 | 22.50 |
| | | 25 | 13 | 21.34 | 22.00 | 22.04 | |
| | | 25 | 25 | 21.64 | 21.95 | 21.67 | |
| | | 50 | 0 | 21.34 | 21.90 | 21.80 | 22.50 |
| | 16QAM | 1 | 0 | 21.27 | 20.49 | 21.41 | 22.00 |
| | | 1 | 25 | 21.30 | 21.50 | 21.66 | |
| | | 1 | 49 | 20.41 | 20.92 | 20.91 | |
| | | 25 | 0 | 21.03 | 21.52 | 21.53 | 22.00 |
| | | 25 | 13 | 20.95 | 21.60 | 21.52 | |
| | | 25 | 25 | 21.15 | 21.43 | 21.20 | |
| | | 50 | 0 | 20.81 | 21.52 | 21.26 | 22.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up |

| | | | | 26775/822.5 | 26865/831.5 | 26965/841.5 | Limit (dBm) |
|---|---|---|---|---|---|---|---|
| 15MHz | QPSK | 1 | 0 | 21.54 | 21.26 | 22.11 | 23.00 |
| | | 1 | 38 | 21.75 | 22.24 | 22.31 | |
| | | 1 | 74 | 21.28 | 21.63 | 21.74 | |
| | | 36 | 0 | 21.45 | 21.99 | 21.85 | 22.50 |
| | | 36 | 18 | 21.29 | 21.91 | 21.97 | |
| | | 36 | 39 | 21.58 | 21.87 | 21.59 | |
| | | 75 | 0 | 21.29 | 21.81 | 21.71 | 22.50 |
| | 16QAM | 1 | 0 | 21.20 | 20.43 | 21.34 | 22.00 |
| | | 1 | 38 | 21.24 | 21.45 | 21.60 | |
| | | 1 | 74 | 20.36 | 20.85 | 20.86 | |
| | | 36 | 0 | 20.97 | 21.46 | 21.47 | 22.00 |
| | | 36 | 18 | 20.89 | 21.53 | 21.45 | |
| | | 36 | 39 | 21.10 | 21.34 | 21.13 | |
| | | 75 | 0 | 20.76 | 21.43 | 21.19 | 22.00 |

| LTE TDD Band 38 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 37775/2572.5 | 38000/2595 | 38225/2617.5 | |
| 5MHz | QPSK | 1 | 0 | 17.73 | 18.26 | 18.36 | 19.00 |
| | | 1 | 13 | 18.24 | 18.54 | 18.56 | |
| | | 1 | 24 | 18.16 | 18.40 | 18.05 | |
| | | 12 | 0 | 17.04 | 17.38 | 17.51 | 18.00 |
| | | 12 | 6 | 17.10 | 17.57 | 17.62 | |
| | | 12 | 13 | 17.13 | 17.45 | 17.47 | |
| | | 25 | 0 | 16.95 | 17.43 | 17.52 | 18.00 |
| | 16QAM | 1 | 0 | 16.91 | 17.35 | 17.51 | 18.00 |
| | | 1 | 13 | 17.40 | 17.66 | 17.69 | |
| | | 1 | 24 | 17.28 | 17.55 | 17.17 | |
| | | 12 | 0 | 16.23 | 16.52 | 16.66 | 17.50 |
| | | 12 | 6 | 16.30 | 16.72 | 16.79 | |
| | | 12 | 13 | 16.29 | 16.62 | 16.65 | |
| | | 25 | 0 | 16.19 | 16.57 | 16.66 | 17.50 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37800/2575 | 38000/2595 | 38200/2615 | |
| 10MHz | QPSK | 1 | 0 | 17.75 | 18.27 | 18.39 | 19.00 |
| | | 1 | 25 | 18.27 | 18.59 | 18.60 | |
| | | 1 | 49 | 18.18 | 18.44 | 18.08 | |
| | | 25 | 0 | 17.07 | 17.43 | 17.55 | 18.00 |
| | | 25 | 13 | 17.13 | 17.62 | 17.66 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 25 | 25 | 17.15 | 17.49 | 17.52 | |
| | | 50 | 0 | 17.03 | 17.45 | 17.56 | 18.00 |
| | | 1 | 0 | 16.93 | 17.38 | 17.53 | |
| | | 1 | 25 | 17.43 | 17.70 | 17.72 | 18.00 |
| | | 1 | 49 | 17.31 | 17.57 | 17.20 | |
| | 16QAM | 25 | 0 | 16.26 | 16.57 | 16.70 | |
| | | 25 | 13 | 16.32 | 16.76 | 16.82 | 17.50 |
| | | 25 | 25 | 16.32 | 16.67 | 16.69 | |
| | | 50 | 0 | 16.22 | 16.62 | 16.70 | 17.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37825/2577.5 | 38000/2595 | 38175/2612.5 | |
| **15MHz** | QPSK | 1 | 0 | 17.74 | 18.23 | 18.37 | |
| | | 1 | 38 | 18.25 | 18.58 | 18.57 | 19.00 |
| | | 1 | 74 | 18.15 | 18.39 | 18.04 | |
| | | 36 | 0 | 17.05 | 17.39 | 17.52 | |
| | | 36 | 18 | 17.10 | 17.57 | 17.62 | 18.00 |
| | | 36 | 39 | 17.12 | 17.46 | 17.48 | |
| | | 75 | 0 | 17.01 | 17.41 | 17.51 | 18.00 |
| | 16QAM | 1 | 0 | 16.88 | 17.36 | 17.51 | |
| | | 1 | 38 | 17.41 | 17.67 | 17.70 | 18.00 |
| | | 1 | 74 | 17.28 | 17.53 | 17.17 | |
| | | 36 | 0 | 16.23 | 16.55 | 16.67 | |
| | | 36 | 18 | 16.29 | 16.71 | 16.78 | 17.50 |
| | | 36 | 39 | 16.30 | 16.63 | 16.66 | |
| | | 75 | 0 | 16.19 | 16.57 | 16.66 | 17.50 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37850/2580 | 38000/2595 | 38150/2610 | |
| **20MHz** | QPSK | 1 | 0 | 17.71 | 18.19 | 18.34 | |
| | | 1 | 50 | 18.24 | 18.54 | 18.55 | 19.00 |
| | | 1 | 99 | 18.13 | 18.38 | 18.01 | |
| | | 50 | 0 | 17.14 | 17.34 | 17.48 | |
| | | 50 | 25 | 17.08 | 17.53 | 17.59 | 18.00 |
| | | 50 | 50 | 17.09 | 17.41 | 17.44 | |
| | | 100 | 0 | 16.98 | 17.36 | 17.47 | 18.00 |
| | 16QAM | 1 | 0 | 16.86 | 17.32 | 17.46 | |
| | | 1 | 50 | 17.37 | 17.65 | 17.66 | 18.00 |
| | | 1 | 99 | 17.26 | 17.50 | 17.15 | |
| | | 50 | 0 | 16.20 | 16.51 | 16.64 | |
| | | 50 | 25 | 16.26 | 16.69 | 16.75 | 17.50 |
| | | 50 | 50 | 16.27 | 16.58 | 16.62 | |
| | | 100 | 0 | 16.17 | 16.53 | 16.63 | 17.50 |

| LTE TDD Band 38 For Simultaneous Transmission | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 37775/2572.5 | 38000/2595 | 38225/2617.5 | |
| 5MHz | QPSK | 1 | 0 | 16.49 | 17.04 | 17.21 | 18.00 |
| | | 1 | 13 | 17.04 | 17.39 | 17.43 | |
| | | 1 | 24 | 17.02 | 17.17 | 17.03 | |
| | | 12 | 0 | 15.80 | 16.14 | 16.34 | 17.00 |
| | | 12 | 6 | 15.73 | 16.30 | 16.47 | |
| | | 12 | 13 | 15.67 | 16.22 | 15.33 | |
| | | 25 | 0 | 15.71 | 16.20 | 16.35 | 17.00 |
| | 16QAM | 1 | 0 | 15.65 | 16.16 | 16.37 | 17.00 |
| | | 1 | 13 | 16.19 | 16.52 | 16.63 | |
| | | 1 | 24 | 16.16 | 16.26 | 16.15 | |
| | | 12 | 0 | 14.94 | 15.24 | 15.48 | 16.00 |
| | | 12 | 6 | 15.04 | 15.41 | 15.65 | |
| | | 12 | 13 | 15.06 | 15.40 | 14.48 | |
| | | 25 | 0 | 14.87 | 15.31 | 15.53 | 16.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37800/2575 | 38000/2595 | 38200/2615 | |
| 10MHz | QPSK | 1 | 0 | 16.46 | 17.02 | 17.17 | 18.00 |
| | | 1 | 25 | 17.02 | 17.35 | 17.40 | |
| | | 1 | 49 | 16.99 | 17.12 | 16.99 | |
| | | 25 | 0 | 15.77 | 16.09 | 16.30 | 17.00 |
| | | 25 | 13 | 15.71 | 16.26 | 16.42 | |
| | | 25 | 25 | 15.65 | 16.20 | 15.29 | |
| | | 50 | 0 | 15.69 | 16.19 | 16.33 | 17.00 |
| | 16QAM | 1 | 0 | 15.62 | 16.12 | 16.34 | 17.00 |
| | | 1 | 25 | 16.16 | 16.50 | 16.60 | |
| | | 1 | 49 | 16.13 | 16.24 | 16.11 | |
| | | 25 | 0 | 14.92 | 15.20 | 15.45 | 16.00 |
| | | 25 | 13 | 15.01 | 15.36 | 15.61 | |
| | | 25 | 25 | 15.03 | 15.35 | 14.44 | |
| | | 50 | 0 | 14.85 | 15.27 | 15.48 | 16.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 37825/2577.5 | 38000/2595 | 38175/2612.5 | |
| 15MHz | QPSK | 1 | 0 | 16.48 | 17.03 | 17.20 | 18.00 |
| | | 1 | 38 | 17.05 | 17.40 | 17.44 | |
| | | 1 | 74 | 17.01 | 17.16 | 17.02 | |
| | | 36 | 0 | 15.80 | 16.14 | 16.34 | 17.00 |
| | | 36 | 18 | 15.74 | 16.31 | 16.46 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 36 | 39 | 15.67 | 16.24 | 15.34 | |
| | | 75 | 0 | 15.77 | 16.21 | 16.37 | 17.00 |
| | | 1 | 0 | 15.64 | 16.15 | 16.36 | |
| | | 1 | 38 | 16.19 | 16.54 | 16.63 | 17.00 |
| | | 1 | 74 | 16.16 | 16.26 | 16.14 | |
| | 16QAM | 36 | 0 | 14.95 | 15.25 | 15.49 | |
| | | 36 | 18 | 15.03 | 15.40 | 15.64 | 16.00 |
| | | 36 | 39 | 15.06 | 15.40 | 14.48 | |
| | | 75 | 0 | 14.88 | 15.32 | 15.52 | 16.00 |

| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| | | | | 37850/2580 | 38000/2595 | 38150/2610 | |
| 20MHz | QPSK | 1 | 0 | 16.44 | 16.95 | 17.15 | 18.00 |
| | | 1 | 50 | 17.02 | 17.35 | 17.39 | |
| | | 1 | 99 | 16.96 | 17.10 | 16.95 | |
| | | 50 | 0 | 15.75 | 16.05 | 16.27 | 17.00 |
| | | 50 | 25 | 15.69 | 16.22 | 16.39 | |
| | | 50 | 50 | 15.61 | 16.16 | 15.26 | |
| | | 100 | 0 | 15.72 | 16.12 | 16.28 | 17.00 |
| | 16QAM | 1 | 0 | 15.57 | 16.09 | 16.29 | 17.00 |
| | | 1 | 50 | 16.13 | 16.49 | 16.57 | |
| | | 1 | 99 | 16.11 | 16.19 | 16.09 | |
| | | 50 | 0 | 14.89 | 15.19 | 15.43 | 16.00 |
| | | 50 | 25 | 14.97 | 15.33 | 15.57 | |
| | | 50 | 50 | 15.01 | 15.31 | 14.41 | |
| | | 100 | 0 | 14.83 | 15.23 | 15.45 | 16.00 |

| LTE TDD Band 41 | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 40265/2557.5 | 40620/2593 | 41215/2652.5 | |
| 5MHz | QPSK | 1 | 0 | 17.06 | 17.18 | 16.91 | 18.00 |
| | | 1 | 13 | 16.92 | 17.41 | 17.21 | |
| | | 1 | 24 | 16.93 | 17.37 | 17.53 | |
| | | 12 | 0 | 15.94 | 16.43 | 16.17 | 17.00 |
| | | 12 | 6 | 15.96 | 16.31 | 16.45 | |
| | | 12 | 13 | 15.80 | 16.37 | 16.00 | |
| | | 25 | 0 | 15.78 | 16.26 | 16.29 | 17.00 |
| | 16QAM | 1 | 0 | 16.92 | 16.97 | 16.77 | 18.00 |
| | | 1 | 13 | 16.78 | 17.24 | 17.05 | |
| | | 1 | 24 | 16.75 | 17.22 | 17.33 | |
| | | 12 | 0 | 15.79 | 16.23 | 16.00 | 17.00 |
| | | 12 | 6 | 15.82 | 16.13 | 16.29 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 12 | 13 | 15.62 | 16.20 | 15.84 | |
| | | 25 | 0 | 15.67 | 16.06 | 16.10 | 17.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40290/2560 | 40620/2593 | 41190/2650 | |
| **10MHz** | QPSK | 1 | 0 | 17.08 | 17.19 | 16.94 | 18.00 |
| | | 1 | 25 | 16.95 | 17.46 | 17.25 | |
| | | 1 | 49 | 16.95 | 17.41 | 17.56 | |
| | | 25 | 0 | 15.97 | 16.48 | 16.21 | 17.00 |
| | | 25 | 13 | 15.99 | 16.36 | 16.49 | |
| | | 25 | 25 | 15.82 | 16.41 | 16.05 | |
| | | 50 | 0 | 15.86 | 16.28 | 16.33 | 17.00 |
| | 16QAM | 1 | 0 | 16.94 | 17.00 | 16.79 | 18.00 |
| | | 1 | 25 | 16.81 | 17.28 | 17.08 | |
| | | 1 | 49 | 16.78 | 17.24 | 17.36 | |
| | | 25 | 0 | 15.82 | 16.28 | 16.04 | 17.00 |
| | | 25 | 13 | 15.84 | 16.17 | 16.32 | |
| | | 25 | 25 | 15.65 | 16.25 | 15.88 | |
| | | 50 | 0 | 15.70 | 16.11 | 16.14 | 17.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40315/2562.5 | 40620/2593 | 41165/2647.5 | |
| **15MHz** | QPSK | 1 | 0 | 17.07 | 17.15 | 16.92 | 18.00 |
| | | 1 | 38 | 16.93 | 17.45 | 17.22 | |
| | | 1 | 74 | 16.92 | 17.36 | 17.52 | |
| | | 36 | 0 | 15.95 | 16.44 | 16.18 | 17.00 |
| | | 36 | 18 | 15.96 | 16.31 | 16.45 | |
| | | 36 | 39 | 15.79 | 16.38 | 16.01 | |
| | | 75 | 0 | 15.84 | 16.24 | 16.28 | 17.00 |
| | 16QAM | 1 | 0 | 16.89 | 16.98 | 16.77 | 18.00 |
| | | 1 | 38 | 16.79 | 17.25 | 17.06 | |
| | | 1 | 74 | 16.75 | 17.20 | 17.33 | |
| | | 36 | 0 | 15.79 | 16.26 | 16.01 | 17.00 |
| | | 36 | 18 | 15.81 | 16.12 | 16.28 | |
| | | 36 | 39 | 15.63 | 16.21 | 15.85 | |
| | | 75 | 0 | 15.67 | 16.06 | 16.10 | 17.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40340/2565 | 40620/2593 | 41140/2645 | |
| **20MHz** | QPSK | 1 | 0 | 17.04 | 17.11 | 16.89 | 18.00 |
| | | 1 | 50 | 16.92 | 17.41 | 17.20 | |
| | | 1 | 99 | 16.90 | 17.35 | 17.49 | |
| | | 50 | 0 | 15.92 | 16.39 | 16.14 | 17.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 50 | 25 | 15.94 | 16.27 | 16.42 | |
| | | 50 | 50 | 15.76 | 16.33 | 15.97 | |
| | | 100 | 0 | 15.81 | 16.19 | 16.24 | 17.00 |
| | 16QAM | 1 | 0 | 16.87 | 16.94 | 16.72 | 18.00 |
| | | 1 | 50 | 16.75 | 17.23 | 17.02 | |
| | | 1 | 99 | 16.73 | 17.17 | 17.31 | |
| | | 50 | 0 | 15.76 | 16.22 | 15.98 | 17.00 |
| | | 50 | 25 | 15.78 | 16.10 | 16.25 | |
| | | 50 | 50 | 15.60 | 16.16 | 15.81 | |
| | | 100 | 0 | 15.65 | 16.02 | 16.07 | 17.00 |

| LTE TDD Band 41 For Simultaneous Transmission | | | | Conducted Power(dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|---|---|---|
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | |
| | | | | 40265/2557.5 | 40620/2593 | 41215/2652.5 | |
| 5MHz | QPSK | 1 | 0 | 15.90 | 16.15 | 15.99 | 17.00 |
| | | 1 | 13 | 15.86 | 16.35 | 16.34 | |
| | | 1 | 24 | 15.82 | 16.31 | 16.45 | |
| | | 12 | 0 | 14.94 | 15.37 | 15.31 | 16.00 |
| | | 12 | 6 | 14.96 | 15.28 | 15.33 | |
| | | 12 | 13 | 14.81 | 15.35 | 15.24 | |
| | | 25 | 0 | 14.76 | 15.19 | 15.25 | 16.00 |
| | 16QAM | 1 | 0 | 14.69 | 14.99 | 14.89 | 16.00 |
| | | 1 | 13 | 15.01 | 15.51 | 15.19 | |
| | | 1 | 24 | 14.70 | 15.43 | 15.24 | |
| | | 12 | 0 | 13.85 | 14.17 | 14.18 | 15.00 |
| | | 12 | 6 | 13.82 | 14.27 | 14.14 | |
| | | 12 | 13 | 13.66 | 14.28 | 14.05 | |
| | | 25 | 0 | 13.70 | 14.18 | 14.03 | 15.00 |
| Bandwidth | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40290/2560 | 40620/2593 | 41190/2650 | |
| 10MHz | QPSK | 1 | 0 | 15.92 | 16.16 | 16.02 | 17.00 |
| | | 1 | 25 | 15.89 | 16.40 | 16.38 | |
| | | 1 | 49 | 15.84 | 16.35 | 16.48 | |
| | | 25 | 0 | 14.97 | 15.42 | 15.35 | 16.00 |
| | | 25 | 13 | 14.99 | 15.33 | 15.37 | |
| | | 25 | 25 | 14.83 | 15.39 | 15.29 | |
| | | 50 | 0 | 14.84 | 15.21 | 15.29 | 16.00 |
| | 16QAM | 1 | 0 | 14.71 | 15.02 | 14.91 | 16.00 |
| | | 1 | 25 | 15.04 | 15.55 | 15.22 | |
| | | 1 | 49 | 14.73 | 15.45 | 15.27 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | 25 | 0 | 13.88 | 14.22 | 14.22 | 15.00 |
| | | 25 | 13 | 13.84 | 14.31 | 14.17 | |
| | | 25 | 25 | 13.69 | 14.33 | 14.09 | |
| | | 50 | 0 | 13.73 | 14.23 | 14.07 | 15.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40315/2562.5 | 40620/2593 | 41165/2647.5 | |
| **15MHz** | QPSK | 1 | 0 | 15.91 | 16.12 | 16.00 | 17.00 |
| | | 1 | 38 | 15.87 | 16.39 | 16.35 | |
| | | 1 | 74 | 15.81 | 16.30 | 16.44 | |
| | | 36 | 0 | 14.95 | 15.38 | 15.32 | 16.00 |
| | | 36 | 18 | 14.96 | 15.28 | 15.33 | |
| | | 36 | 39 | 14.80 | 15.36 | 15.25 | |
| | | 75 | 0 | 14.82 | 15.17 | 15.24 | 16.00 |
| | 16QAM | 1 | 0 | 14.66 | 15.00 | 14.89 | 16.00 |
| | | 1 | 38 | 15.02 | 15.52 | 15.20 | |
| | | 1 | 74 | 14.70 | 15.41 | 15.24 | |
| | | 36 | 0 | 13.85 | 14.20 | 14.19 | 15.00 |
| | | 36 | 18 | 13.81 | 14.26 | 14.13 | |
| | | 36 | 39 | 13.67 | 14.29 | 14.06 | |
| | | 75 | 0 | 13.70 | 14.18 | 14.03 | 15.00 |
| **Bandwidth** | Modulation | RB size | RB offset | Channel/Frequency (MHz) | | | Tune-up Limit (dBm) |
| | | | | 40340/2565 | 40620/2593 | 41140/2645 | |
| **20MHz** | QPSK | 1 | 0 | 15.88 | 16.08 | 15.97 | 17.00 |
| | | 1 | 50 | 15.86 | 16.35 | 16.33 | |
| | | 1 | 99 | 15.79 | 16.29 | 16.41 | |
| | | 50 | 0 | 14.92 | 15.33 | 15.28 | 16.00 |
| | | 50 | 25 | 14.94 | 15.24 | 15.30 | |
| | | 50 | 50 | 14.77 | 15.31 | 15.21 | |
| | | 100 | 0 | 14.79 | 15.12 | 15.20 | 16.00 |
| | 16QAM | 1 | 0 | 14.64 | 14.96 | 14.84 | 16.00 |
| | | 1 | 50 | 14.98 | 15.50 | 15.16 | |
| | | 1 | 99 | 14.68 | 15.38 | 15.22 | |
| | | 50 | 0 | 13.82 | 14.16 | 14.16 | 15.00 |
| | | 50 | 25 | 13.78 | 14.24 | 14.10 | |
| | | 50 | 50 | 13.64 | 14.24 | 14.02 | |
| | | 100 | 0 | 13.68 | 14.14 | 14.00 | 15.00 |

| DL LTE CA Class | PCC | | | | | | | | SCC | | | Power | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PCC Band | PCC Bandwidth (MHz) | PCC UL RB size | PCC UL RB offset | PCC DL RB size | PCC DL RB offset | PCC UL Channel | PCC DL Channel | SCC Band | SCC Bandwidth (MHz) | SCC DL Channel | Rel 8 LTE Tx Power (dBm) | Rel 10 DL LTE CA Tx Power (dBm) | Tune-up |
| CA_2C | 2 | 5 | 1 | 13 | 25 | 0 | 18808 | 808 | 2 | 20 | 925 | 19.64 | 19.67 | 20.50 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18806 | 806 | 2 | 20 | 950 | 19.76 | 19.79 | 20.50 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18803 | 803 | 2 | 20 | 974 | 19.88 | 19.87 | 20.50 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18801 | 801 | 2 | 20 | 999 | 19.88 | 19.92 | 20.50 |
| CA_5B | 5 | 5 | 1 | 13 | 25 | 0 | 20528 | 2528 | 5 | 10 | 2600 | 22.77 | 22.69 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20501 | 2501 | 5 | 10 | 2600 | 22.68 | 22.66 | 23.50 |
| CA_7C | 7 | 10 | 1 | 25 | 50 | 0 | 21006 | 3006 | 7 | 20 | 3150 | 17.93 | 17.94 | 18.80 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21003 | 3003 | 7 | 20 | 3174 | 17.84 | 17.85 | 18.80 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21001 | 3001 | 7 | 20 | 3199 | 17.84 | 17.92 | 18.80 |
| CA_12B | 12 | 5 | 1 | 13 | 25 | 0 | 23058 | 5058 | 12 | 10 | 5130 | 23.09 | 23.08 | 24.00 |
| CA_38C | 38 | 15 | 1 | 38 | 75 | 0 | 38025 | 38025 | 38 | 15 | 38175 | 18.46 | 18.41 | 19.00 |
| | 38 | 20 | 1 | 50 | 100 | 0 | 37952 | 37952 | 38 | 20 | 38150 | 18.54 | 18.42 | 19.00 |
| CA_41C | 41 | 5 | 1 | 24 | 25 | 0 | 41023 | 41023 | 41 | 20 | 41140 | 17.66 | 17.59 | 18.00 |
| | 41 | 10 | 1 | 49 | 50 | 0 | 40996 | 40996 | 41 | 20 | 41140 | 17.61 | 17.62 | 18.00 |
| | 41 | 15 | 1 | 74 | 75 | 0 | 40969 | 40969 | 41 | 20 | 41140 | 17.59 | 17.54 | 18.00 |
| | 41 | 20 | 1 | 99 | 100 | 0 | 40942 | 40942 | 41 | 20 | 41140 | 17.64 | 17.60 | 18.00 |
| CA_1A-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 1 | 20 | 500 | 21.84 | 21.88 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 1 | 20 | 500 | 22.74 | 22.76 | 23.50 |
| CA_1A-26A | 26 | 5 | 1 | 13 | 25 | 0 | 27015 | 9015 | 1 | 20 | 500 | 23.18 | 23.26 | 24.00 |
| | 26 | 10 | 1 | 25 | 50 | 0 | 26990 | 8990 | 1 | 20 | 500 | 23.21 | 23.17 | 24.00 |
| | 26 | 15 | 1 | 38 | 75 | 0 | 26965 | 8965 | 1 | 20 | 500 | 22.80 | 22.77 | 24.00 |
| CA_2A-5A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 5 | 10 | 2525 | 19.71 | 19.74 | 20.50 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 5 | 10 | 2525 | 19.68 | 19.72 | 20.50 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 5 | 10 | 2525 | 19.62 | 19.66 | 20.50 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 5 | 10 | 2525 | 19.44 | 19.48 | 20.50 |
| | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 2 | 20 | 1100 | 22.63 | 22.71 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 2 | 20 | 1100 | 22.56 | 22.67 | 23.50 |
| CA_2A-12A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 12 | 10 | 5095 | 19.70 | 19.72 | 20.50 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 12 | 10 | 5095 | 19.66 | 19.69 | 20.50 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 12 | 10 | 5095 | 19.59 | 19.62 | 20.50 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 12 | 10 | 5095 | 19.40 | 19.43 | 20.50 |
| | 12 | 3 | 1 | 7 | 15 | 0 | 23165 | 5165 | 2 | 20 | 1100 | 22.96 | 23.02 | 24.00 |
| | 12 | 5 | 1 | 13 | 25 | 0 | 23155 | 5155 | 2 | 20 | 1100 | 23.07 | 23.12 | 24.00 |
| | 12 | 10 | 1 | 25 | 50 | 0 | 23130 | 5130 | 2 | 20 | 1100 | 23.07 | 23.11 | 24.00 |
| CA_2A-17A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 17 | 10 | 5790 | 19.56 | 19.59 | 20.50 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 17 | 10 | 5790 | 19.37 | 19.40 | 20.50 |
| | 17 | 5 | 1 | 13 | 25 | 0 | 23790 | 5790 | 2 | 10 | 1100 | 23.12 | 23.06 | 23.80 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 17 | 10 | 1 | 25 | 50 | 0 | 23790 | 5790 | 2 | 10 | 1100 | 23.05 | 23.05 | 23.80 |
| CA_2A-28A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 28 | 20 | 9460 | 19.69 | 19.71 | 20.50 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 28 | 20 | 9460 | 19.65 | 19.68 | 20.50 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 28 | 20 | 9460 | 19.58 | 19.61 | 20.50 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 28 | 20 | 9460 | 19.39 | 19.42 | 20.50 |
| CA_2A-29A | 2 | 5 | 1 | 13 | 25 | 0 | 18900 | 900 | 29 | 10 | 9715 | 19.68 | 19.70 | 20.50 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18900 | 900 | 29 | 10 | 9715 | 19.64 | 19.67 | 20.50 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18900 | 900 | 29 | 10 | 9715 | 19.57 | 19.60 | 20.50 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18900 | 900 | 29 | 10 | 9715 | 19.38 | 19.41 | 20.50 |
| CA_3A-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 3 | 20 | 1850 | 21.89 | 21.96 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 3 | 20 | 1850 | 22.80 | 22.76 | 23.50 |
| CA_3A-7A | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 3 | 20 | 1575 | 17.92 | 17.85 | 18.80 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 3 | 20 | 1575 | 17.89 | 17.88 | 18.80 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 3 | 20 | 1575 | 18.07 | 18.04 | 18.80 |
| CA_3A-26A | 26 | 5 | 1 | 13 | 25 | 0 | 27015 | 9015 | 3 | 20 | 1850 | 23.18 | 23.26 | 24.00 |
| | 26 | 10 | 1 | 25 | 50 | 0 | 26990 | 8990 | 3 | 20 | 1850 | 23.21 | 23.17 | 24.00 |
| | 26 | 15 | 1 | 38 | 75 | 0 | 26965 | 8965 | 3 | 20 | 1850 | 22.80 | 22.77 | 24.00 |
| CA_4A-5A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 5 | 10 | 2600 | 19.56 | 19.58 | 20.70 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 5 | 10 | 2600 | 19.59 | 19.55 | 20.70 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 5 | 10 | 2600 | 19.30 | 19.43 | 20.70 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 5 | 10 | 2600 | 19.63 | 19.67 | 20.70 |
| | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 4 | 20 | 2300 | 22.73 | 22.64 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 4 | 20 | 2300 | 22.63 | 22.60 | 23.50 |
| CA_4A-12A | 4 | 1.4 | 1 | 5 | 6 | 0 | 20393 | 2393 | 12 | 10 | 5130 | 19.54 | 19.56 | 20.70 |
| | 4 | 3 | 1 | 14 | 15 | 0 | 20385 | 2385 | 12 | 10 | 5130 | 19.57 | 19.53 | 20.70 |
| | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 12 | 10 | 5130 | 19.28 | 19.41 | 20.70 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 12 | 10 | 5130 | 19.61 | 19.65 | 20.70 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 12 | 10 | 5130 | 19.73 | 19.75 | 20.70 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 12 | 10 | 5130 | 19.89 | 19.94 | 20.70 |
| CA_4A-17A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 17 | 10 | 5800 | 19.61 | 19.64 | 20.70 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 17 | 10 | 5800 | 19.65 | 19.62 | 20.70 |
| CA_4A-28A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 28 | 20 | 9560 | 19.37 | 19.51 | 20.70 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 28 | 20 | 9560 | 19.71 | 19.76 | 20.70 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 28 | 20 | 9560 | 19.84 | 19.87 | 20.70 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 28 | 20 | 9560 | 20.01 | 20.07 | 20.70 |
| CA_4A-29A | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 29 | 10 | 9720 | 19.51 | 19.62 | 20.70 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 29 | 10 | 9720 | 19.69 | 19.66 | 20.70 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 29 | 10 | 9720 | 19.79 | 19.82 | 20.70 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 29 | 10 | 9720 | 19.88 | 19.92 | 20.70 |
| CA_5A-7A | 5 | 1.4 | 1 | 2 | 6 | 0 | 20643 | 2643 | 7 | 20 | 3350 | 22.21 | 22.17 | 23.50 |
| | 5 | 3 | 1 | 7 | 15 | 0 | 20635 | 2635 | 7 | 20 | 3350 | 22.05 | 22.06 | 23.50 |
| | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 7 | 20 | 3350 | 21.95 | 21.99 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 7 | 20 | 3350 | 22.84 | 22.82 | 23.50 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 5 | 10 | 2525 | 17.93 | 18.01 | 18.80 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 5 | 10 | 2525 | 18.01 | 18.12 | 18.80 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 5 | 10 | 2525 | 17.96 | 18.06 | 18.80 |
| CA_7A-8A | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 8 | 10 | 3625 | 17.84 | 17.94 | 18.80 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 8 | 10 | 3625 | 17.72 | 17.79 | 18.80 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 8 | 10 | 3625 | 17.76 | 17.87 | 18.80 |
| CA_7A-20A | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 20 | 20 | 6300 | 17.86 | 17.98 | 18.80 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 20 | 20 | 6300 | 17.91 | 17.99 | 18.80 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 20 | 20 | 6300 | 18.04 | 18.15 | 18.80 |
| CA_7A-28A | 7 | 5 | 1 | 13 | 25 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 17.87 | 17.98 | 18.80 |
| | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 17.76 | 17.84 | 18.80 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 17.81 | 17.93 | 18.80 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 28 | 15 | 9435 | 17.86 | 18.02 | 18.80 |
| CA_39A -41A | 41 | 20 | 1 | 99 | 100 | 0 | 41140 | 41140 | 39 | 20 | 38550 | 17.65 | 17.63 | 18.00 |

| DL LTE CA Class | PCC | | | | | | | | SCC1 | | | SCC2 | | | Power | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PCC Band | PCC Bandwidth (MHz) | PCC UL RB size | PCC UL RB offset | PCC DL RB size | PCC DL RB offset | PCC UL Channel | PCC DL Channel | SCC1 Band | SCC1 Bandwidth (MHz) | SCC1 DL Channel | SCC2 Band | SCC2 Bandwidth (MHz) | SCC2 DL Channel | Rel 8 LTE Tx Power (dBm) | Rel 10 DL LTE CA Tx Power (dBm) | Tune-up |
| CA_2C-29A | 2 | 5 | 1 | 13 | 25 | 0 | 18808 | 808 | 2 | 20 | 925 | 29 | 10 | 9715 | 19.64 | 19.66 | 20.50 |
| | 2 | 10 | 1 | 25 | 50 | 0 | 18806 | 806 | 2 | 20 | 950 | 29 | 10 | 9715 | 19.60 | 19.63 | 20.50 |
| | 2 | 15 | 1 | 38 | 75 | 0 | 18803 | 803 | 2 | 20 | 974 | 29 | 10 | 9715 | 19.53 | 19.56 | 20.50 |
| | 2 | 20 | 1 | 50 | 100 | 0 | 18801 | 801 | 2 | 20 | 999 | 29 | 10 | 9715 | 19.34 | 19.37 | 20.50 |
| CA_3C-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 3 | 20 | 1652 | 3 | 20 | 1850 | 22.70 | 22.61 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 3 | 20 | 1652 | 3 | 20 | 1850 | 22.60 | 22.57 | 23.50 |
| CA_3C-7A | 7 | 5 | 1 | 13 | 25 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 17.80 | 17.84 | 18.80 |
| | 7 | 10 | 1 | 25 | 50 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 17.77 | 17.93 | 18.80 |
| | 7 | 15 | 1 | 38 | 75 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 17.87 | 18.02 | 18.80 |
| | 7 | 20 | 1 | 50 | 100 | 0 | 21100 | 3100 | 3 | 20 | 3001 | 3 | 20 | 3199 | 17.95 | 17.99 | 18.80 |
| CA_4A-12B | 4 | 5 | 1 | 24 | 25 | 0 | 20375 | 2375 | 12 | 5 | 5058 | 12 | 10 | 5130 | 19.50 | 19.52 | 20.70 |
| | 4 | 10 | 1 | 49 | 50 | 0 | 20350 | 2350 | 12 | 5 | 5058 | 12 | 10 | 5130 | 19.53 | 19.49 | 20.70 |
| | 4 | 15 | 1 | 74 | 75 | 0 | 20325 | 2325 | 12 | 5 | 5058 | 12 | 10 | 5130 | 19.24 | 19.37 | 20.70 |
| | 4 | 20 | 1 | 99 | 100 | 0 | 20300 | 2300 | 12 | 5 | 5058 | 12 | 10 | 5130 | 19.57 | 19.61 | 20.70 |
| CA_39A-41C | 41 | 20 | 1 | 99 | 100 | 0 | 40942 | 40942 | 41 | 20 | 41140 | 39 | 20 | 38550 | 17.57 | 17.54 | 18.00 |
| CA_39C-41A | 41 | 20 | 1 | 99 | 100 | 0 | 41140 | 41140 | 39 | 15 | 38379 | 39 | 20 | 38550 | 17.56 | 17.53 | 18.00 |
| CA_1A-3A-5A | 5 | 5 | 1 | 13 | 25 | 0 | 20625 | 2625 | 1 | 20 | 500 | 3 | 20 | 1850 | 22.45 | 22.49 | 23.50 |
| | 5 | 10 | 1 | 25 | 50 | 0 | 20600 | 2600 | 1 | 20 | 500 | 3 | 20 | 1850 | 22.68 | 22.66 | 23.50 |
| CA_1A-3A-26A | 26 | 5 | 1 | 13 | 25 | 0 | 27015 | 9015 | 1 | 20 | 500 | 3 | 20 | 1850 | 23.12 | 23.11 | 24.00 |
| | 26 | 10 | 1 | 25 | 50 | 0 | 26990 | 8990 | 1 | 20 | 500 | 3 | 20 | 1850 | 23.14 | 23.13 | 24.00 |

## 9.4 WLAN Mode

**Full Power**

| Wi-Fi 2.4G | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) for Data Rates (bps) | Tune-up Limit (dBm) | Tx power setting level |
|---|---|---|---|---|---|---|
| Mode | | | | 1M | | |
| 802.11b | Ant 1 | 1 | 2412 | 15.36 | 17.00 | 16.00 |
| | | 6 | 2437 | 15.65 | 17.00 | 16.00 |
| | | 11 | 2462 | 15.69 | 17.00 | 16.00 |
| | Ant 2 | 1 | 2412 | 12.49 | 14.00 | 13.50 |
| | | 6 | 2437 | 12.74 | 14.00 | 13.50 |
| | | 11 | 2462 | 12.57 | 14.00 | 13.50 |
| Mode | Antenna | Channel | Frequency (MHz) | MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11g | Ant 1 | 1 | 2412 | 13.94 | 15.50 | 15.00 |
| | | 6 | 2437 | 14.11 | 15.50 | 15.00 |
| | | 11 | 2462 | 14.07 | 15.50 | 15.00 |
| | Ant 2 | 1 | 2412 | 11.28 | 13.00 | 12.50 |
| | | 6 | 2437 | 11.53 | 13.00 | 12.50 |
| | | 11 | 2462 | 11.57 | 13.00 | 12.50 |
| Mode | Antenna | Channel | Frequency (MHz) | MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n (HT20) | Ant 1 | 1 | 2412 | 13.09 | 14.50 | 14.00 |
| | | 6 | 2437 | 13.26 | 14.50 | 14.00 |
| | | 11 | 2462 | 13.10 | 14.50 | 14.00 |
| | Ant 2 | 1 | 2412 | 10.17 | 12.00 | 11.50 |
| | | 6 | 2437 | 10.49 | 12.00 | 11.50 |
| | | 11 | 2462 | 10.39 | 12.00 | 11.50 |
| Mode | Antenna | Channel | Frequency (MHz) | 6M | Tune-up Limit (dBm) | Tx power setting level |
| 802.11g CDD | Sum | 1 | 2412 | 16.07 | 16.50 | 15 for Ant 1, 12.5 for Ant 2 |
| | | 6 | 2437 | 16.23 | 16.50 | |
| | | 11 | 2462 | 16.29 | 16.50 | |
| Mode | Antenna | Channel | Frequency (MHz) | MCS8 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n (HT20) MIMO | Sum | 1 | 2412 | 14.95 | 15.50 | 14 for Ant 1, 11.5 for Ant 2 |
| | | 6 | 2437 | 15.16 | 15.50 | |
| | | 11 | 2462 | 15.02 | 15.50 | |
| Note. 1. SAR is not required for OFDM 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. | | | | | | |

**Simultaneous Transmission (Power Reduce)**

| Wi-Fi 2.4G Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) for Data Rates (bps) 1M | Tune-up Limit (dBm) | Tx power setting level |
|---|---|---|---|---|---|---|
| 802.11b | Ant 1 | 1 | 2412 | 12.32 | 13.00 | 13.00 |
| | | 6 | 2437 | 12.60 | 13.00 | 13.00 |
| | | 11 | 2462 | 12.65 | 13.00 | 13.00 |
| Mode | Antenna | Channel | Frequency (MHz) | MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11g | Ant 1 | 1 | 2412 | 10.78 | 12.50 | 12.00 |
| | | 6 | 2437 | 11.08 | 12.50 | 12.00 |
| | | 11 | 2462 | 10.90 | 12.50 | 12.00 |
| Mode | Antenna | Channel | Frequency (MHz) | MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n (HT20) | Ant 1 | 1 | 2412 | 9.99 | 11.50 | 11.00 |
| | | 6 | 2437 | 10.34 | 11.50 | 11.00 |
| | | 11 | 2462 | 10.05 | 11.50 | 11.00 |
| Note. 1. SAR is not required for OFDM 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. | | | | | | |

**Full Power**

| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) Data Rate (bps) 6M | Tune-up Limit (dBm) | Tx power setting level |
|---|---|---|---|---|---|---|
| 802.11a (5GHz) | Ant 1 | 36 | 5180 | 12.49 | 13.50 | 12.50 |
| | | 40 | 5200 | 12.02 | 13.50 | 12.50 |
| | | 44 | 5220 | 12.08 | 13.50 | 12.50 |
| | | 48 | 5240 | 12.33 | 13.50 | 12.50 |
| | | 52 | 5260 | 12.61 | 13.50 | 12.50 |
| | | 56 | 5280 | 12.52 | 13.50 | 12.50 |
| | | 60 | 5300 | 12.60 | 13.50 | 12.50 |
| | | 64 | 5320 | 12.68 | 13.50 | 12.50 |
| | | 100 | 5500 | 12.23 | 13.50 | 12.50 |
| | | 116 | 5580 | 12.16 | 13.50 | 12.50 |
| | | 132 | 5660 | 11.98 | 13.50 | 12.50 |
| | | 140 | 5700 | 12.18 | 13.50 | 12.50 |
| | | 149 | 5745 | 12.23 | 13.50 | 12.50 |
| | | 157 | 5785 | 12.29 | 13.50 | 12.50 |
| | | 165 | 5825 | 12.12 | 13.50 | 12.50 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Ant 2 | 36 | 5180 | 9.48 | 10.50 | 9.00 |
| | | 40 | 5200 | 9.36 | 10.50 | 9.00 |
| | | 44 | 5220 | 9.37 | 10.50 | 9.00 |
| | | 48 | 5240 | 9.19 | 10.50 | 9.00 |
| | | 52 | 5260 | 9.02 | 10.50 | 9.00 |
| | | 56 | 5280 | 8.75 | 10.50 | 9.00 |
| | | 60 | 5300 | 8.91 | 10.50 | 9.00 |
| | | 64 | 5320 | 8.76 | 10.50 | 8.00 |
| | | 100 | 5500 | 7.51 | 9.50 | 8.00 |
| | | 116 | 5580 | 8.61 | 9.50 | 8.00 |
| | | 132 | 5660 | 8.75 | 9.50 | 8.00 |
| | | 140 | 5700 | 8.67 | 9.50 | 8.00 |
| | | 149 | 5745 | 7.60 | 9.50 | 9.00 |
| | | 157 | 5785 | 8.74 | 9.50 | 9.00 |
| | | 165 | 5825 | 8.78 | 9.50 | 9.00 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n HT20 (5GHz) | Ant 1 | 36 | 5180 | 12.10 | 13.50 | 12.50 |
| | | 40 | 5200 | 11.91 | 13.50 | 12.50 |
| | | 44 | 5220 | 11.88 | 13.50 | 12.50 |
| | | 48 | 5240 | 12.05 | 13.50 | 12.50 |
| | | 52 | 5260 | 12.45 | 13.50 | 12.50 |
| | | 56 | 5280 | 12.48 | 13.50 | 12.50 |
| | | 60 | 5300 | 12.43 | 13.50 | 12.50 |
| | | 64 | 5320 | 12.37 | 13.50 | 12.50 |
| | | 100 | 5500 | 12.17 | 13.50 | 12.50 |
| | | 116 | 5580 | 12.06 | 13.50 | 12.50 |
| | | 132 | 5660 | 11.79 | 13.50 | 12.50 |
| | | 140 | 5700 | 11.95 | 13.50 | 12.50 |
| | | 149 | 5745 | 11.98 | 13.50 | 12.50 |
| | | 157 | 5785 | 11.94 | 13.50 | 12.50 |
| | | 165 | 5825 | 11.80 | 13.50 | 12.50 |
| | Ant 2 | 36 | 5180 | 9.09 | 10.50 | 9.00 |
| | | 40 | 5200 | 9.11 | 10.50 | 9.00 |
| | | 44 | 5220 | 9.06 | 10.50 | 9.00 |
| | | 48 | 5240 | 8.98 | 10.50 | 9.00 |
| | | 52 | 5260 | 8.88 | 10.50 | 9.00 |
| | | 56 | 5280 | 8.77 | 10.50 | 9.00 |
| | | 60 | 5300 | 8.81 | 10.50 | 9.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 64 | 5320 | 9.00 | 10.50 | 8.00 |
| | | 100 | 5500 | 7.55 | 9.50 | 8.00 |
| | | 116 | 5580 | 8.59 | 9.50 | 8.00 |
| | | 132 | 5660 | 8.61 | 9.50 | 8.00 |
| | | 140 | 5700 | 8.56 | 9.50 | 8.00 |
| | | 149 | 5745 | 7.54 | 9.50 | 9.00 |
| | | 157 | 5785 | 8.67 | 9.50 | 9.00 |
| | | 165 | 5825 | 8.63 | 9.50 | 9.00 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm)<br>Data Rate (bps)<br>MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n HT40 (5GHz) | Ant 1 | 38 | 5190 | 11.64 | 12.50 | 11.00 |
| | | 46 | 5230 | 11.62 | 12.50 | 11.00 |
| | | 54 | 5270 | 11.65 | 12.50 | 11.00 |
| | | 62 | 5310 | 11.67 | 12.50 | 11.00 |
| | | 102 | 5510 | 11.51 | 12.50 | 11.00 |
| | | 110 | 5550 | 11.57 | 12.50 | 11.00 |
| | | 118 | 5590 | 11.56 | 12.50 | 11.00 |
| | | 134 | 5670 | 11.44 | 12.50 | 11.00 |
| | | 151 | 5755 | 11.74 | 12.50 | 11.00 |
| | | 159 | 5795 | 11.71 | 12.50 | 11.00 |
| | Ant 2 | 38 | 5190 | 8.71 | 9.00 | 7.00 |
| | | 46 | 5230 | 8.90 | 9.00 | 7.00 |
| | | 54 | 5270 | 8.91 | 9.00 | 7.00 |
| | | 62 | 5310 | 8.84 | 9.00 | 7.00 |
| | | 102 | 5510 | 8.88 | 9.00 | 7.00 |
| | | 110 | 5550 | 8.82 | 9.00 | 7.00 |
| | | 118 | 5590 | 8.76 | 9.00 | 7.00 |
| | | 134 | 5670 | 8.70 | 9.00 | 7.00 |
| | | 151 | 5755 | 8.74 | 9.00 | 7.00 |
| | | 159 | 5795 | 8.87 | 9.00 | 7.00 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm)<br>Data Rate (bps)<br>MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11ac HT20 (5GHz) | Ant 1 | 36 | 5180 | 11.88 | 13.50 | 12.50 |
| | | 40 | 5200 | 11.96 | 13.50 | 12.50 |
| | | 44 | 5220 | 12.06 | 13.50 | 12.50 |
| | | 48 | 5240 | 12.03 | 13.50 | 12.50 |
| | | 52 | 5260 | 11.87 | 13.50 | 12.50 |
| | | 56 | 5280 | 12.06 | 13.50 | 12.50 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 60 | 5300 | 12.04 | 13.50 | 12.50 |
| | | 64 | 5320 | 12.01 | 13.50 | 12.50 |
| | | 100 | 5500 | 11.64 | 13.50 | 12.50 |
| | | 116 | 5580 | 11.51 | 13.50 | 12.50 |
| | | 132 | 5660 | 11.54 | 13.50 | 12.50 |
| | | 140 | 5700 | 11.55 | 13.50 | 12.50 |
| | | 149 | 5745 | 11.59 | 13.50 | 12.50 |
| | | 157 | 5785 | 11.65 | 13.50 | 12.50 |
| | | 165 | 5825 | 11.47 | 13.50 | 12.50 |
| | Ant 2 | 36 | 5180 | 9.93 | 10.50 | 9.00 |
| | | 40 | 5200 | 8.98 | 10.50 | 9.00 |
| | | 44 | 5220 | 8.99 | 10.50 | 9.00 |
| | | 48 | 5240 | 8.96 | 10.50 | 9.00 |
| | | 52 | 5260 | 9.04 | 10.50 | 9.00 |
| | | 56 | 5280 | 8.99 | 10.50 | 9.00 |
| | | 60 | 5300 | 8.94 | 10.50 | 9.00 |
| | | 64 | 5320 | 8.69 | 10.50 | 8.00 |
| | | 100 | 5500 | 7.58 | 9.50 | 8.00 |
| | | 116 | 5580 | 7.82 | 9.50 | 8.00 |
| | | 132 | 5660 | 8.45 | 9.50 | 8.00 |
| | | 140 | 5700 | 8.49 | 9.50 | 8.00 |
| | | 149 | 5745 | 7.57 | 9.50 | 9.00 |
| | | 157 | 5785 | 8.54 | 9.50 | 9.00 |
| | | 165 | 5825 | 8.57 | 9.50 | 9.00 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11ac HT40 (5GHz) | Ant 1 | 38 | 5190 | 11.74 | 12.50 | 11.00 |
| | | 46 | 5230 | 11.58 | 12.50 | 11.00 |
| | | 54 | 5270 | 11.82 | 12.50 | 11.00 |
| | | 62 | 5310 | 11.79 | 12.50 | 11.00 |
| | | 102 | 5510 | 11.60 | 12.50 | 11.00 |
| | | 110 | 5550 | 11.55 | 12.50 | 11.00 |
| | | 118 | 5590 | 11.73 | 12.50 | 11.00 |
| | | 134 | 5670 | 11.62 | 12.50 | 11.00 |
| | | 151 | 5755 | 11.69 | 12.50 | 11.00 |
| | | 159 | 5795 | 11.73 | 12.50 | 11.00 |
| | Ant 2 | 38 | 5190 | 8.44 | 9.00 | 7.00 |
| | | 46 | 5230 | 8.42 | 9.00 | 7.00 |
| | | 54 | 5270 | 8.71 | 9.00 | 7.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 62 | 5310 | 8.77 | 9.00 | 7.00 |
| | | 102 | 5510 | 8.48 | 9.00 | 7.00 |
| | | 110 | 5550 | 8.50 | 9.00 | 7.00 |
| | | 118 | 5590 | 8.47 | 9.00 | 7.00 |
| | | 134 | 5670 | 8.65 | 9.00 | 7.00 |
| | | 151 | 5755 | 8.60 | 9.00 | 7.00 |
| | | 159 | 5795 | 8.49 | 9.00 | 7.00 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11ac HT80 (5GHz) | Ant 1 | 42 | 5210 | 11.71 | 12.50 | 11.00 |
| | | 58 | 5290 | 11.83 | 12.50 | 11.00 |
| | | 106 | 5530 | 11.52 | 12.50 | 11.00 |
| | | 155 | 5775 | 11.54 | 12.50 | 11.00 |
| | Ant 2 | 42 | 5210 | 8.92 | 9.00 | 7.00 |
| | | 58 | 5290 | 8.21 | 9.00 | 7.00 |
| | | 106 | 5530 | 8.97 | 9.00 | 7.00 |
| | | 155 | 5775 | 8.86 | 9.00 | 7.00 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / 6M | Tune-up Limit (dBm) | Tx power setting level |
| 802.11a (5GHz) CDD | Sum | 36 | 5180 | 13.78 | 14.50 | 12.5 for Ant 1, 9 for Ant 2 |
| | | 40 | 5200 | 13.73 | 14.50 | |
| | | 44 | 5220 | 13.70 | 14.50 | |
| | | 48 | 5240 | 13.80 | 14.50 | |
| | | 52 | 5260 | 13.87 | 14.50 | |
| | | 56 | 5280 | 14.02 | 14.50 | |
| | | 60 | 5300 | 13.90 | 14.50 | |
| | | 64 | 5320 | 13.96 | 14.50 | 12.5 for Ant 1, 8 for Ant 2 |
| | | 100 | 5500 | 13.22 | 14.00 | |
| | | 116 | 5580 | 13.57 | 14.00 | |
| | | 132 | 5660 | 13.46 | 14.00 | |
| | | 140 | 5700 | 13.47 | 14.00 | |
| | | 149 | 5745 | 13.16 | 14.50 | 12.5 for Ant 1, 9 for Ant 2 |
| | | 157 | 5785 | 13.60 | 14.50 | |
| | | 165 | 5825 | 13.55 | 14.50 | |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / MCS8 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n | Sum | 36 | 5180 | 13.37 | 14.50 | 12.5 for Ant 1, |

| | | | | | | |
|---|---|---|---|---|---|---|
| HT20 (5GHz) MIMO | | 40 | 5200 | 13.34 | 14.50 | 9 for Ant 2 |
| | | 44 | 5220 | 13.43 | 14.50 | |
| | | 48 | 5240 | 13.48 | 14.50 | |
| | | 52 | 5260 | 13.51 | 14.50 | |
| | | 56 | 5280 | 13.57 | 14.50 | |
| | | 60 | 5300 | 13.58 | 14.50 | |
| | | 64 | 5320 | 13.52 | 14.50 | 12.5 for Ant 1, 8 for Ant 2 |
| | | 100 | 5500 | 12.72 | 14.00 | |
| | | 116 | 5580 | 13.21 | 14.00 | |
| | | 132 | 5660 | 13.19 | 14.00 | |
| | | 140 | 5700 | 13.12 | 14.00 | |
| | | 149 | 5745 | 12.91 | 14.50 | 12.5 for Ant 1, 9 for Ant 2 |
| | | 157 | 5785 | 13.35 | 14.50 | |
| | | 165 | 5825 | 13.20 | 14.50 | |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / MCS8 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n HT40 (5GHz) MIMO | Sum | 38 | 5190 | 12.92 | 14.00 | 11 for Ant 1, 7 for Ant 2 |
| | | 46 | 5230 | 12.86 | 14.00 | |
| | | 54 | 5270 | 12.91 | 14.00 | |
| | | 62 | 5310 | 13.15 | 14.00 | |
| | | 102 | 5510 | 12.85 | 13.50 | |
| | | 110 | 5550 | 12.87 | 13.50 | |
| | | 118 | 5590 | 12.94 | 13.50 | |
| | | 134 | 5670 | 12.89 | 13.50 | |
| | | 151 | 5755 | 12.96 | 14.00 | |
| | | 159 | 5795 | 12.90 | 14.00 | |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / 6M | Tune-up Limit (dBm) | Tx power setting level |
| 802.11ac HT20 (5GHz) MIMO | Sum | 36 | 5180 | 13.49 | 14.50 | 12.5 for Ant 1, 9 for Ant 2 |
| | | 40 | 5200 | 13.47 | 14.50 | |
| | | 44 | 5220 | 13.47 | 14.50 | |
| | | 48 | 5240 | 13.39 | 14.50 | |
| | | 52 | 5260 | 13.60 | 14.50 | |
| | | 56 | 5280 | 13.55 | 14.50 | |
| | | 60 | 5300 | 13.56 | 14.50 | |
| | | 64 | 5320 | 13.36 | 14.50 | 12.5 for Ant 1, 8 for Ant 2 |
| | | 100 | 5500 | 12.64 | 14.00 | |
| | | 116 | 5580 | 13.04 | 14.00 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 132 | 5660 | 13.04 | 14.00 | |
| | | 140 | 5700 | 13.01 | 14.00 | |
| | | 149 | 5745 | 12.72 | 14.50 | 12.5 for Ant 1, 9 for Ant 2 |
| | | 157 | 5785 | 13.18 | 14.50 | |
| | | 165 | 5825 | 13.02 | 14.50 | |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) Data Rate (bps) MCS8 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11ac HT40 (5GHz) MIMO | Sum | 38 | 5190 | 13.13 | 14.00 | 11 for Ant 1, 7 for Ant 2 |
| | | 46 | 5230 | 13.00 | 14.00 | |
| | | 54 | 5270 | 13.10 | 14.00 | |
| | | 62 | 5310 | 13.21 | 14.00 | |
| | | 102 | 5510 | 13.11 | 13.50 | |
| | | 110 | 5550 | 13.13 | 13.50 | |
| | | 118 | 5590 | 13.20 | 13.50 | |
| | | 134 | 5670 | 13.30 | 13.50 | |
| | | 151 | 5755 | 13.19 | 14.00 | |
| | | 159 | 5795 | 13.23 | 14.00 | |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) Data Rate (bps) MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11ac HT80 (5GHz) MIMO | Sum | 42 | 5210 | 13.20 | 14.00 | 11 for Ant 1, 7 for Ant 2 |
| | | 58 | 5290 | 13.12 | 14.00 | |
| | | 106 | 5530 | 13.13 | 13.50 | |
| | | 155 | 5775 | 13.00 | 14.00 | |
| Note. 1. 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, each band is tested independently for SAR. | | | | | | |

**Simultaneous Transmission (Power Reduce)**

| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) Data Rate (bps) 6M | Tune-up Limit (dBm) | Tx power setting level |
|---|---|---|---|---|---|---|
| 802.11a (5GHz) | Ant 1 | 36 | 5180 | 10.96 | 12.00 | 11.50 |
| | | 40 | 5200 | 11.14 | 12.00 | 11.50 |
| | | 44 | 5220 | 11.09 | 12.00 | 11.50 |
| | | 48 | 5240 | 11.38 | 12.00 | 11.50 |
| | | 52 | 5260 | 11.58 | 12.00 | 11.50 |
| | | 56 | 5280 | 11.55 | 12.00 | 11.50 |
| | | 60 | 5300 | 11.61 | 12.00 | 11.50 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 64 | 5320 | 11.64 | 12.00 | 11.50 |
| | | 100 | 5500 | 11.14 | 11.50 | 10.50 |
| | | 116 | 5580 | 11.01 | 11.50 | 10.50 |
| | | 132 | 5660 | 10.77 | 11.50 | 10.50 |
| | | 140 | 5700 | 10.86 | 11.50 | 10.50 |
| | | 149 | 5745 | 11.26 | 12.00 | 11.50 |
| | | 157 | 5785 | 11.28 | 12.00 | 11.50 |
| | | 165 | 5825 | 11.11 | 12.00 | 11.50 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n HT20 (5GHz) | Ant 1 | 36 | 5180 | 10.91 | 12.00 | 11.50 |
| | | 40 | 5200 | 11.18 | 12.00 | 11.50 |
| | | 44 | 5220 | 11.14 | 12.00 | 11.50 |
| | | 48 | 5240 | 11.20 | 12.00 | 11.50 |
| | | 52 | 5260 | 11.36 | 12.00 | 11.50 |
| | | 56 | 5280 | 11.41 | 12.00 | 11.50 |
| | | 60 | 5300 | 11.11 | 12.00 | 11.50 |
| | | 64 | 5320 | 11.33 | 12.00 | 11.50 |
| | | 100 | 5500 | 10.44 | 11.50 | 10.50 |
| | | 116 | 5580 | 10.01 | 11.50 | 10.50 |
| | | 132 | 5660 | 9.88 | 11.50 | 10.50 |
| | | 140 | 5700 | 10.13 | 11.50 | 10.50 |
| | | 149 | 5745 | 11.32 | 12.00 | 11.50 |
| | | 157 | 5785 | 11.03 | 12.00 | 11.50 |
| | | 165 | 5825 | 10.93 | 12.00 | 11.50 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) / Data Rate (bps) / MCS0 | Tune-up Limit (dBm) | Tx power setting level |
| 802.11n HT40 (5GHz) | Ant 1 | 38 | 5190 | 9.21 | 10.50 | 10.00 |
| | | 46 | 5230 | 9.08 | 10.50 | 10.00 |
| | | 54 | 5270 | 9.10 | 10.50 | 10.00 |
| | | 62 | 5310 | 9.11 | 10.50 | 10.00 |
| | | 102 | 5510 | 8.42 | 9.50 | 9.00 |
| | | 110 | 5550 | 8.45 | 9.50 | 9.00 |
| | | 118 | 5590 | 8.40 | 9.50 | 9.00 |
| | | 134 | 5670 | 8.12 | 9.50 | 9.00 |
| | | 151 | 5755 | 9.52 | 10.50 | 10.00 |
| | | 159 | 5795 | 9.48 | 10.50 | 10.00 |

| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) | Tune-up Limit (dBm) | Tx power setting level |
|---|---|---|---|---|---|---|
| | | | | Data Rate (bps) | | |
| | | | | MCS0 | | |
| 802.11ac HT20 (5GHz) | Ant 1 | 36 | 5180 | 10.76 | 12.00 | 11.50 |
| | | 40 | 5200 | 10.89 | 12.00 | 11.50 |
| | | 44 | 5220 | 11.02 | 12.00 | 11.50 |
| | | 48 | 5240 | 11.20 | 12.00 | 11.50 |
| | | 52 | 5260 | 11.17 | 12.00 | 11.50 |
| | | 56 | 5280 | 11.30 | 12.00 | 11.50 |
| | | 60 | 5300 | 11.31 | 12.00 | 11.50 |
| | | 64 | 5320 | 11.37 | 12.00 | 11.50 |
| | | 100 | 5500 | 10.09 | 11.50 | 10.50 |
| | | 116 | 5580 | 9.95 | 11.50 | 10.50 |
| | | 132 | 5660 | 9.94 | 11.50 | 10.50 |
| | | 140 | 5700 | 10.03 | 11.50 | 10.50 |
| | | 149 | 5745 | 11.26 | 12.00 | 11.50 |
| | | 157 | 5785 | 10.93 | 12.00 | 11.50 |
| | | 165 | 5825 | 10.88 | 12.00 | 11.50 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) | Tune-up Limit (dBm) | Tx power setting level |
| | | | | Data Rate (bps) | | |
| | | | | MCS0 | | |
| 802.11ac HT40 (5GHz) | Ant 1 | 38 | 5190 | 9.18 | 10.50 | 10.00 |
| | | 46 | 5230 | 9.12 | 10.50 | 10.00 |
| | | 54 | 5270 | 9.08 | 10.50 | 10.00 |
| | | 62 | 5310 | 9.27 | 10.50 | 10.00 |
| | | 102 | 5510 | 8.43 | 9.50 | 9.00 |
| | | 110 | 5550 | 8.35 | 9.50 | 9.00 |
| | | 118 | 5590 | 8.48 | 9.50 | 9.00 |
| | | 134 | 5670 | 8.37 | 9.50 | 9.00 |
| | | 151 | 5755 | 9.44 | 10.50 | 10.00 |
| | | 159 | 5795 | 9.31 | 10.50 | 10.00 |
| Mode | Antenna | Channel | Frequency (MHz) | Average Conducted Power (dBm) | Tune-up Limit (dBm) | Tx power setting level |
| | | | | Data Rate (bps) | | |
| | | | | MCS0 | | |
| 802.11ac HT80 (5GHz) | Ant 1 | 42 | 5210 | 9.13 | 10.50 | 10.00 |
| | | 58 | 5290 | 9.21 | 10.50 | 10.00 |
| | | 106 | 5530 | 7.94 | 9.50 | 9.00 |
| | | 155 | 5775 | 9.14 | 10.50 | 10.00 |

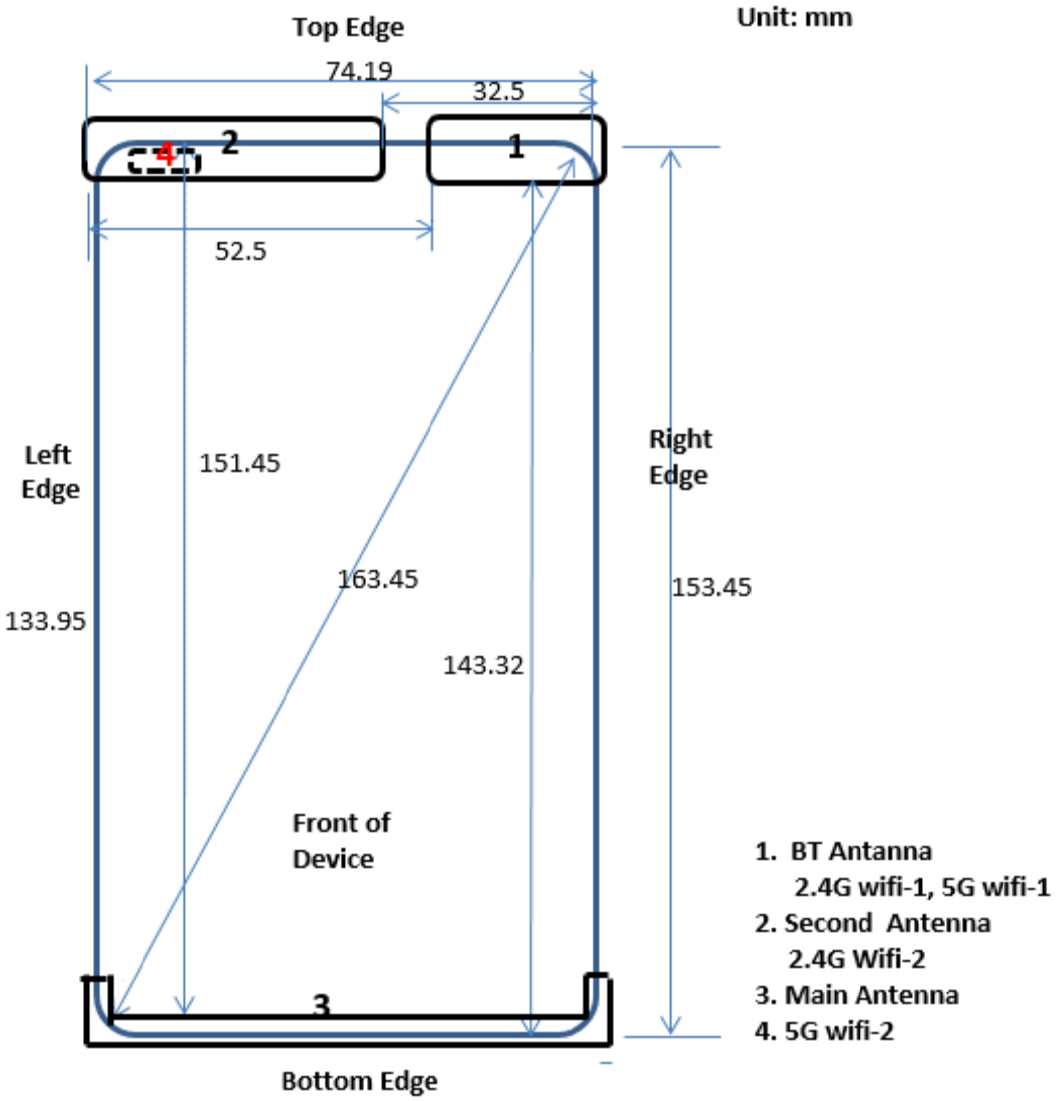
Note. 1. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

## 9.5 Bluetooth Mode

| BT | Average Conducted Power (dBm) | | | Tune-up Limit (dBm) |
|---|---|---|---|---|
| | Channel/Frequency(MHz) | | | |
| | Ch 0/2402 MHz | Ch 39/2441 MHz | Ch 78/2480 MHz | |
| GFSK | 9.81 | 10.76 | 9.01 | 11.00 |
| π/4DQPSK | 4.46 | 6.51 | 3.39 | 7.00 |
| 8DPSK | 4.44 | 6.49 | 3.41 | 7.00 |
| BT 4.2 | Ch 0/2402 MHz | Ch 19/2440 MHz | Ch 39/2480 MHz | Tune-up Limit (dBm) |
| GFSK | 0.63 | 1.93 | -0.66 | 3.00 |

# 10 Measured and Reported (Scaled) SAR Results

## 10.1 EUT Antenna Locations




| Overall (Length x Width): 153.45 mm x 74.19 mm<br>Overall Diagonal: 163.45 mm/Display Diagonal: 140mm | | | | | | |
|---|---|---|---|---|---|---|
| Distance of the Antenna to the EUT surface/edge | | | | | | |
| Antenna | Back Side | Front side | Left Edge | Right Edge | Top Edge | Bottom Edge |
| Main-Antenna | 0 | 0 | 0 | 0 | ＞25mm | 0 |
| Second-Antenna/2.4G Wi-Fi -2 | 0 | 0 | 0 | ＞25mm | 0 | ＞25mm |
| BT/Wi-Fi -1 Antenna | 0 | 0 | ＞25mm | 0 | 0 | ＞25mm |
| 5G Wi-Fi -2 | 0 | 0 | 0 | ＞25mm | 0 | ＞25mm |
| Hotspot mode, Positions for SAR tests | | | | | | |
| Mode | Back Side | Front side | Left Edge | Right Edge | Top Edge | Bottom Edge |
| Main-Antenna | | | | | | |
| GSM 850/1900 | Yes | Yes | Yes | Yes | N/A | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| UMTS Band II/IV/V | Yes | Yes | Yes | Yes | N/A | Yes |
| LTE 2/4/5/7/12/17/26/38/41 | Yes | Yes | Yes | Yes | N/A | Yes |
| Second-Antenna | | | | | | |
| GSM 850/1900 | Yes | Yes | Yes | N/A | Yes | N/A |
| UMTS Band II/IV/V | Yes | Yes | Yes | N/A | Yes | N/A |
| LTE 2/4/5/7/12/17/26/38/41 | Yes | Yes | Yes | N/A | Yes | N/A |
| BT/WI-FI Antenna | | | | | | |
| BT/2.4GHz Wi-Fi -1/5GHz Wi-Fi -1 | Yes | Yes | N/A | Yes | Yes | N/A |
| 2.4GHz Wi-Fi -2 | Yes | Yes | Yes | N/A | Yes | N/A |
| 5GHz Wi-Fi -2 | Yes | Yes | Yes | N/A | Yes | N/A |

Note: 1. Per KDB 941225 D06, when the overall device length and width are ≥ 9cm*5cm, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.

2. For smart phones with an overall diagonal dimension is 163.45mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension> 16.0 cm, 10-g extremity SAR must be tested as a phablet to determine SAR compliance.

## 10.2 Standalone SAR test exclusion considerations

Per KDB 447498 D01, the 1-g 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 10-g extremity SAR

- 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

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

| Bluetooth | | Distance (mm) | MAX Power (dBm) | Frequency (MHz) | Ratio | Evaluation |
|---|---|---|---|---|---|---|
| Body-worn | | 15 | 11.00 | 2480 | 1.32 | No |
| Product specific 10-g SAR | | 5 | 11.00 | 2480 | 3.97 | No |
| **Wi-Fi (2.4G)** | | **Distance (mm)** | **MAX Power (dBm)** | **Frequency (MHz)** | **Ratio** | **Evaluation** |
| Ant 1 | Head | 5 | 17.00 | 2462 | 15.73 | Yes |
| | Body-worn | 15 | 17.00 | 2462 | 5.24 | Yes |
| | Hotspot | 10 | 17.00 | 2462 | 7.87 | Yes |
| Ant 2 | Head | 5 | 14.00 | 2462 | 7.88 | Yes |
| | Body-worn | 15 | 14.00 | 2462 | 2.63 | No |
| | Hotspot | 10 | 14.00 | 2462 | 3.94 | Yes |
| MIMO | Head | 5 | 16.50 | 2462 | 14.02 | Yes |
| | Body-worn | 15 | 16.50 | 2462 | 4.67 | Yes |
| | Hotspot | 10 | 16.50 | 2462 | 7.00 | Yes |
| **Wi-Fi (5G, U-NII-2A)** | | **Distance (mm)** | **MAX Power (dBm)** | **Frequency (MHz)** | **Ratio** | **Evaluation** |
| Ant 1 | Head | 5 | 13.50 | 5350 | 10.36 | Yes |
| | Body-worn | 15 | 13.50 | 5350 | 3.45 | Yes |
| | Product specific 10-g SAR | 5 | 13.50 | 5350 | 25.90 | Yes |
| Ant 2 | Head | 5 | 10.50 | 5350 | 5.19 | Yes |
| | Body-worn | 15 | 10.50 | 5350 | 1.73 | No |
| | Product specific 10-g SAR | 5 | 10.50 | 5350 | 13.0 | Yes |
| MIMO | Head | 5 | 14.50 | 5350 | 13.04 | Yes |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Body-worn | 15 | 14.50 | 5350 | 4.35 | Yes |
| | Product specific 10-g SAR | 5 | 14.50 | 5350 | 13.04 | Yes |
| **Wi-Fi (5G, U-NII-1)** | | **Distance (mm)** | **MAX Power (dBm)** | **Frequency (MHz)** | **Ratio** | **Evaluation** |
| Ant 1 | Hotspot | 10 | 13.50 | 5350 | 5.18 | Yes |
| Ant 2 | Hotspot | 10 | 10.50 | 5350 | 2.60 | No |
| MIMO | Hotspot | 10 | 14.50 | 5350 | 6.52 | Yes |
| **Wi-Fi (5G, U-NII-2C)** | | **Distance (mm)** | **MAX Power (dBm)** | **Frequency (MHz)** | **Ratio** | **Evaluation** |
| Ant 1 | Head | 5 | 13.50 | 5700 | 10.69 | Yes |
| | Body-worn | 15 | 13.50 | 5700 | 3.56 | Yes |
| | Product specific 10-g SAR | 5 | 13.50 | 5700 | 10.69 | Yes |
| Ant 2 | Head | 5 | 9.50 | 5700 | 4.26 | Yes |
| | Body-worn | 15 | 9.50 | 5700 | 1.42 | No |
| | Product specific 10-g SAR | 5 | 9.50 | 5700 | 10.65 | Yes |
| MIMO | Head | 5 | 14.00 | 5700 | 11.99 | Yes |
| | Body-worn | 15 | 14.00 | 5700 | 4.00 | Yes |
| | Product specific 10-g SAR | 10 | 14.00 | 5700 | 30.0 | Yes |
| **Wi-Fi (5G, U-NII-3)** | | **Distance (mm)** | **MAX Power (dBm)** | **Frequency (MHz)** | **Ratio** | **Evaluation** |
| Ant 1 | Head | 5 | 13.50 | 5825 | 10.80 | Yes |
| | Body-worn | 15 | 13.50 | 5825 | 3.60 | Yes |
| | Hotspot | 10 | 13.50 | 5825 | 5.40 | Yes |
| Ant 2 | Head | 5 | 9.50 | 5825 | 4.30 | Yes |
| | Body-worn | 15 | 9.50 | 5825 | 1.43 | No |
| | Hotspot | 10 | 9.50 | 5825 | 2.15 | No |
| | Product specific 10-g SAR | 5 | 9.50 | 5825 | 10.75 | Yes |
| MIMO | Head | 5 | 14.50 | 5825 | 13.60 | Yes |
| | Body-worn | 15 | 14.50 | 5825 | 4.53 | Yes |
| | Hotspot | 10 | 14.50 | 5825 | 6.80 | Yes |

## 10.3 Measured SAR Results

**Table 1: GSM 850 (Main-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Time slot | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | |
| Left Cheek | standard | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | 0.022 | 0.288 | 1.17 | 0.336 | 37 |
| Left Tilt | standard | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | 0.020 | 0.161 | 1.17 | 0.188 | / |
| Right Cheek | standard | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | -0.150 | 0.286 | 1.17 | 0.334 | / |
| Right Tilt | standard | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | 0.020 | 0.155 | 1.17 | 0.181 | / |
| Left Cheek | SIM 2 | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | 0.020 | 0.249 | 1.17 | 0.291 | / |
| Left Cheek | Battery 2 | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | -0.110 | 0.250 | 1.17 | 0.292 | / |
| Left Cheek | Battery 3 | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | 0.021 | 0.267 | 1.17 | 0.312 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | -0.130 | 0.325 | 1.17 | 0.379 | 38 |
| Front Side | standard | 190/836.6 | GSM | 1:8.3 | 33.50 | 32.83 | 0.020 | 0.315 | 1.17 | 0.368 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | 0.010 | 0.435 | 1.22 | 0.533 | / |
| Front Side | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | -0.010 | 0.426 | 1.22 | 0.522 | / |
| Left Edge | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | -0.050 | 0.159 | 1.22 | 0.195 | / |
| Right Edge | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | -0.080 | 0.282 | 1.22 | 0.345 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | 0.010 | 0.183 | 1.22 | 0.224 | / |
| Back Side | SIM 2 | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | 0.030 | 0.416 | 1.22 | 0.509 | / |
| Back Side | Battery 2 | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | 0.030 | 0.445 | 1.22 | 0.545 | 39 |
| Back Side | Battery 3 | 190/836.6 | 2Txslots | 1:4.15 | 31.50 | 30.62 | -0.091 | 0.431 | 1.22 | 0.528 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.

4. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 2: GSM 1900 (Main-antenna)**

| Test Position | Cover Type | | Channel/ Frequency (MHz) | Time slot | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.080 | 0.176 | 1.20 | 0.211 | / |
| Left Tilt | standard | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | -0.110 | 0.147 | 1.20 | 0.176 | / |
| Right Cheek | standard | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.140 | 0.404 | 1.20 | 0.485 | / |
| | | State2 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | -0.032 | 0.370 | 1.20 | 0.444 | / |
| Right Tilt | standard | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.060 | 0.126 | 1.20 | 0.151 | / |
| Right Cheek | SIM 2 | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.170 | 0.391 | 1.20 | 0.469 | / |
| Right Cheek | Battery 2 | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.170 | 0.407 | 1.20 | 0.488 | 40 |
| | | State2 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.103 | 0.377 | 1.20 | 0.452 | / |
| Right Cheek | Battery 3 | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.070 | 0.379 | 1.20 | 0.455 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.038 | 0.144 | 1.20 | 0.173 | / |
| | | State2 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | 0.170 | 0.150 | 1.20 | 0.180 | / |
| Front Side | standard | State2 | 661/1880 | GSM | 1:8.3 | 30.30 | 29.51 | -0.110 | 0.151 | 1.20 | 0.181 | 41 |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | 0.090 | 0.379 | 1.25 | 0.474 | 42 |
| | | State1 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | 0.140 | 0.336 | 1.25 | 0.420 | / |
| Front Side | standard | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | -0.160 | 0.300 | 1.25 | 0.375 | / |
| Left Edge | standard | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | -0.030 | 0.062 | 1.25 | 0.077 | / |
| Right Edge | standard | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | 0.080 | 0.269 | 1.25 | 0.336 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | -0.020 | 0.265 | 1.25 | 0.331 | / |
| Back Side | SIM 2 | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | 0.060 | 0.346 | 1.25 | 0.433 | / |
| Back Side | Battery 2 | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | 0.020 | 0.294 | 1.25 | 0.368 | / |
| Back Side | Battery 3 | State2 | 661/1880 | 2Txslots | 1:4.15 | 28.50 | 27.53 | 0.170 | 0.334 | 1.25 | 0.418 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.

4. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 3: UMTS Band II (Main-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Channel Type | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | |
| Left Cheek | standard | State1 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.180 | 0.394 | 1.19 | 0.469 | / |
| Left Tilt | standard | State1 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.026 | 0.370 | 1.19 | 0.441 | / |
| Right Cheek | standard | State1 | 9538/1907.6 | RMC 12.2K | 1:1 | 24.50 | 23.87 | 0.020 | 0.740 | 1.16 | 0.856 | / |
| | | State1 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.100 | 0.815 | 1.19 | 0.971 | / |
| | | State2 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.130 | 0.727 | 1.19 | 0.866 | / |
| | | State1 | 9262/1852.4 | RMC 12.2K | 1:1 | 24.50 | 23.57 | -0.020 | 0.891 | 1.24 | 1.104 | 43 |
| | | State2 | 9262/1852.4 | RMC 12.2K | 1:1 | 24.50 | 23.57 | 0.110 | 0.784 | 1.24 | 0.971 | / |
| Right Tilt | standard | State1 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.060 | 0.303 | 1.19 | 0.361 | / |
| Right Cheek | SIM 2 | State1 | 9262/1852.4 | RMC 12.2K | 1:1 | 24.50 | 23.57 | 0.030 | 0.873 | 1.24 | 1.081 | / |
| Right Cheek | Battery 2 | State1 | 9262/1852.4 | RMC 12.2K | 1:1 | 24.50 | 23.57 | -0.025 | 0.740 | 1.24 | 0.917 | / |
| Right Cheek | Battery 3 | State1 | 9262/1852.4 | RMC 12.2K | 1:1 | 24.50 | 23.57 | -0.023 | 0.685 | 1.24 | 0.849 | / |
| Right Cheek | Repeated | State1 | 9262/1852.4 | RMC 12.2K | 1:1 | 24.50 | 23.57 | 0.000 | 0.847 | 1.24 | 1.049 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | State1 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.010 | 0.270 | 1.19 | 0.322 | / |
| | | State2 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.090 | 0.339 | 1.19 | 0.404 | 44 |
| Front Side | standard | State2 | 9400/1880 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.170 | 0.280 | 1.19 | 0.334 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | 0.029 | 0.471 | 1.20 | 0.565 | / |
| Front Side | standard | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | 0.000 | 0.480 | 1.20 | 0.576 | 45 |
| | | State1 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | 0.140 | 0.456 | 1.20 | 0.547 | / |
| Left Edge | standard | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | 0.020 | 0.068 | 1.20 | 0.081 | / |
| Right Edge | standard | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | 0.050 | 0.343 | 1.20 | 0.411 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | -0.020 | 0.325 | 1.20 | 0.390 | / |
| Front Side | SIM 2 | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | -0.060 | 0.421 | 1.20 | 0.505 | / |
| Front Side | Battery 2 | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | 0.090 | 0.465 | 1.20 | 0.558 | / |
| Front Side | Battery 3 | State2 | 9400/1880 | RMC 12.2K | 1:1 | 23.00 | 22.21 | -0.025 | 0.477 | 1.20 | 0.572 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2

W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek | 9262/1852.4 | 0.891 | 0.847 | 1.05 |
| Note: 1) When the original highest measured $SAR_{1g}$ is ≥ 0.80 W/kg or $SAR_{10g}$ is ≥ 2.0 W/kg, the measurement was repeated once. 2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20. | | | | |

**Table 4: UMTS Band IV (Main-antenna)**

| Test Position | Cover Type | | Channel/ Frequency (MHz) | Channel Type | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.021 | 0.277 | 1.19 | 0.330 | / |
| Left Tilt | standard | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.170 | 0.237 | 1.19 | 0.282 | / |
| Right Cheek | standard | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.027 | 0.465 | 1.19 | 0.554 | 46 |
| | | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.023 | 0.403 | 1.19 | 0.480 | / |
| Right Tilt | standard | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.137 | 0.206 | 1.19 | 0.245 | / |
| Right Cheek | SIM 2 | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.010 | 0.435 | 1.19 | 0.518 | / |
| Right Cheek | Battery 2 | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.043 | 0.401 | 1.19 | 0.478 | / |
| Right Cheek | Battery 3 | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.059 | 0.432 | 1.19 | 0.515 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.060 | 0.191 | 1.19 | 0.228 | / |
| | | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.050 | 0.272 | 1.19 | 0.324 | 47 |
| Front Side | standard | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.140 | 0.207 | 1.19 | 0.247 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.060 | 0.396 | 1.19 | 0.472 | 48 |
| | | State1 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.060 | 0.349 | 1.19 | 0.416 | / |
| Front Side | standard | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.060 | 0.358 | 1.19 | 0.426 | / |
| Left Edge | standard | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.029 | 0.104 | 1.19 | 0.124 | / |
| Right Edge | standard | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.090 | 0.244 | 1.19 | 0.291 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.110 | 0.139 | 1.19 | 0.166 | / |
| Back Side | SIM 2 | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.023 | 0.341 | 1.19 | 0.406 | / |
| Back Side | Battery 2 | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | 0.065 | 0.311 | 1.19 | 0.370 | / |
| Back Side | Battery 3 | State2 | 1413/1732.6 | RMC 12.2K | 1:1 | 24.50 | 23.74 | -0.020 | 0.332 | 1.19 | 0.395 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 5: UMTS Band V (Main-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Channel Type | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | |
| Left Cheek | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.060 | 0.231 | 1.17 | 0.271 | / |
| Left Tilt | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.020 | 0.156 | 1.17 | 0.183 | / |
| Right Cheek | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.080 | 0.269 | 1.17 | 0.315 | / |
| Right Tilt | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.010 | 0.139 | 1.17 | 0.163 | / |
| Right Cheek | SIM 2 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.011 | 0.262 | 1.17 | 0.307 | / |
| Right Cheek | Battery 2 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.150 | 0.313 | 1.17 | 0.367 | / |
| Right Cheek | Battery 3 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.010 | 0.348 | 1.17 | 0.408 | 49 |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.130 | 0.235 | 1.17 | 0.275 | 50 |
| Front Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.020 | 0.226 | 1.17 | 0.265 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.010 | 0.348 | 1.17 | 0.408 | 51 |
| Front Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.071 | 0.259 | 1.17 | 0.304 | / |
| Left Edge | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.014 | 0.121 | 1.17 | 0.142 | / |
| Right Edge | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.040 | 0.293 | 1.17 | 0.343 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.017 | 0.196 | 1.17 | 0.230 | / |
| Back Side | SIM 2 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | 0.103 | 0.322 | 1.17 | 0.377 | / |
| Back Side | Battery 2 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.040 | 0.318 | 1.17 | 0.373 | / |
| Back Side | Battery 3 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.31 | -0.030 | 0.301 | 1.17 | 0.353 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. 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

4. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 6: LTE Band 2 (20MHz, Main-antenna)**

| Test Position | Cover Type | | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | | |
| Left Cheek | standard | State2 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | -0.061 | 0.476 | 1.14 | 0.540 | / |
| Left Tilt | standard | State2 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | 0.040 | 0.431 | 1.14 | 0.489 | / |
| Right Cheek | standard | State2 | 1RB | 50 | 19100/1900 | 24.00 | 23.20 | -0.160 | 1.030 | 1.20 | 1.238 | / |
| | | State1 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | 0.190 | 0.845 | 1.14 | 0.959 | / |
| | | State2 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | 0.023 | 0.962 | 1.14 | 1.092 | / |
| | | State2 | 1RB | 50 | 18700/1860 | 24.00 | 23.13 | -0.046 | 0.892 | 1.22 | 1.090 | / |
| Right Tilt | standard | State2 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | 0.020 | 0.341 | 1.14 | 0.387 | / |
| Left Cheek | standard | State2 | 50%RB | 25 | 19100/1900 | 23.00 | 22.35 | -0.050 | 0.400 | 1.16 | 0.465 | / |
| Left Tilt | standard | State2 | 50%RB | 25 | 19100/1900 | 23.00 | 22.35 | -0.090 | 0.354 | 1.16 | 0.411 | / |
| Right Cheek | standard | State2 | 50%RB | 25 | 19100/1900 | 23.00 | 22.35 | 0.021 | 0.648 | 1.16 | 0.753 | / |
| Right Tilt | standard | State2 | 50%RB | 25 | 19100/1900 | 23.00 | 22.35 | -0.120 | 0.244 | 1.16 | 0.283 | / |
| Right Cheek | standard | State2 | 100%RB | 0 | 18900/1880 | 23.00 | 22.24 | 0.180 | 0.654 | 1.19 | 0.779 | / |
| Right Cheek | SIM 2 | State2 | 1RB | 50 | 19100/1900 | 24.00 | 23.20 | 0.045 | 0.996 | 1.20 | 1.197 | / |
| Right Cheek | Battery 2 | State2 | 1RB | 50 | 19100/1900 | 24.00 | 23.20 | -0.021 | 0.907 | 1.20 | 1.090 | / |
| Right Cheek | Battery 3 | State2 | 1RB | 50 | 19100/1900 | 24.00 | 23.20 | 0.020 | 1.100 | 1.20 | 1.322 | 52 |
| | | State1 | 1RB | 50 | 19100/1900 | 24.00 | 23.20 | 0.108 | 0.904 | 1.20 | 1.087 | / |
| Right Cheek | No Holder | State2 | 1RB | 50 | 19100/1900 | 24.00 | 23.20 | 0.112 | 0.978 | 1.20 | 1.176 | / |
| Right Cheek | Repeated | State2 | 1RB | 50 | 19100/1900 | 24.00 | 23.20 | 0.020 | 0.937 | 1.20 | 1.127 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | 0.060 | 0.340 | 1.14 | 0.386 | / |
| | | State2 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | 0.028 | 0.465 | 1.14 | 0.528 | 53 |
| Front Side | standard | State2 | 1RB | 50 | 18900/1880 | 24.00 | 23.45 | 0.000 | 0.355 | 1.14 | 0.403 | / |
| Back Side | standard | State2 | 50%RB | 25 | 19100/1900 | 23.00 | 22.35 | 0.100 | 0.431 | 1.16 | 0.501 | / |
| Front Side | standard | State2 | 50%RB | 25 | 19100/1900 | 23.00 | 22.35 | -0.120 | 0.343 | 1.16 | 0.398 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | State2 | 1RB | 50 | 19100/1900 | 23.50 | 22.78 | 0.100 | 0.871 | 1.18 | 1.028 | 54 |
| | | State1 | 1RB | 50 | 19100/1900 | 23.50 | 22.78 | 0.043 | 0.716 | 1.18 | 0.845 | / |
| | | State2 | 1RB | 50 | 18900/1880 | 23.50 | 22.82 | 0.020 | 0.753 | 1.17 | 0.881 | / |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | State2 | 1RB | 50 | 18700/1860 | 23.50 | 22.64 | 0.042 | 0.479 | 1.22 | 0.584 | / |
| Front Side | standard | State2 | 1RB | 50 | 18900/1880 | 23.50 | 22.82 | 0.000 | 0.581 | 1.17 | 0.679 | / |
| Left Edge | standard | State2 | 1RB | 50 | 18900/1880 | 23.50 | 22.82 | -0.090 | 0.124 | 1.17 | 0.145 | / |
| Right Edge | standard | State2 | 1RB | 50 | 18900/1880 | 23.50 | 22.82 | -0.060 | 0.574 | 1.17 | 0.671 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State2 | 1RB | 50 | 18900/1880 | 23.50 | 22.82 | -0.010 | 0.593 | 1.17 | 0.694 | / |
| Back Side | standard | State2 | 50%RB | 25 | 19100/1900 | 22.50 | 21.85 | 0.090 | 0.593 | 1.16 | 0.689 | / |
| Front Side | standard | State2 | 50%RB | 25 | 19100/1900 | 22.50 | 21.85 | -0.160 | 0.549 | 1.16 | 0.638 | / |
| Left Edge | standard | State2 | 50%RB | 25 | 19100/1900 | 22.50 | 21.85 | -0.150 | 0.137 | 1.16 | 0.159 | / |
| Right Edge | standard | State2 | 50%RB | 25 | 19100/1900 | 22.50 | 21.85 | -0.034 | 0.453 | 1.16 | 0.526 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State2 | 50%RB | 25 | 19100/1900 | 22.50 | 21.85 | -0.040 | 0.653 | 1.16 | 0.758 | / |
| Back Side | standard | State2 | 100%RB | 0 | 18900/1880 | 22.50 | 21.74 | 0.180 | 0.530 | 1.19 | 0.631 | / |
| Back Side | SIM 2 | State2 | 1RB | 50 | 19100/1900 | 23.50 | 22.78 | 0.100 | 0.772 | 1.18 | 0.911 | / |
| Back Side | Battery 2 | State2 | 1RB | 50 | 19100/1900 | 23.50 | 22.78 | 0.160 | 0.621 | 1.18 | 0.733 | / |
| Back Side | Battery 3 | State2 | 1RB | 50 | 19100/1900 | 23.50 | 22.78 | 0.029 | 0.631 | 1.18 | 0.745 | / |
| Back Side | Repeated | State2 | 1RB | 50 | 19100/1900 | 23.50 | 22.78 | 0.084 | 0.815 | 1.18 | 0.962 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

5. According to TCBC workshop 2016-10-12-4.3 RF Exposure General Issues 101216 - KC，When the highest reported SAR of an antenna is > 1.2 W/kg, holder perturbation verification is required for each antenna, using the highest SAR configuration among all applicable frequency bands.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{10g}$ (W/kg)** | **1st Repeated $SAR_{10g}$ (W/kg)** | **Ratio** |
| Right Cheek | 19100/1900 | 1.100 | 0.937 | 1.17 |
| Back Side | 19100/1900 | 0.871 | 0.815 | 1.07 |

Note: 1) When the original highest measured $SAR_{1g}$ is ≥ 0.80 W/kg or $SAR_{10g}$ is ≥ 2 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20

**Table 7: LTE Band 4 (20MHz, Main-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | |
| Left Cheek | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.034 | 0.209 | 1.15 | 0.241 | / |
| Left Tilt | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.150 | 0.180 | 1.15 | 0.207 | / |
| Right Cheek | standard | State1 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.140 | 0.410 | 1.15 | 0.472 | / |
| | | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.040 | 0.419 | 1.15 | 0.482 | 55 |
| Right Tilt | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.030 | 0.172 | 1.15 | 0.198 | / |
| Left Cheek | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | -0.060 | 0.231 | 1.14 | 0.263 | / |
| Left Tilt | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | -0.080 | 0.151 | 1.14 | 0.172 | / |
| Right Cheek | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | -0.026 | 0.327 | 1.14 | 0.373 | / |
| Right Tilt | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | -0.030 | 0.152 | 1.14 | 0.173 | / |
| Right Cheek | SIM 2 | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.021 | 0.376 | 1.15 | 0.433 | / |
| Right Cheek | Battery 2 | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.120 | 0.381 | 1.15 | 0.438 | / |
| Right Cheek | Battery 3 | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.036 | 0.394 | 1.15 | 0.453 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.070 | 0.155 | 1.15 | 0.178 | / |
| | | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.170 | 0.249 | 1.15 | 0.287 | 56 |
| Front Side | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.050 | 0.164 | 1.15 | 0.189 | / |
| Back Side | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | 0.010 | 0.147 | 1.14 | 0.168 | / |
| Front Side | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | -0.060 | 0.163 | 1.14 | 0.186 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.070 | 0.384 | 1.15 | 0.442 | 57 |
| | | State1 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.090 | 0.299 | 1.15 | 0.344 | / |
| Front Side | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.020 | 0.307 | 1.15 | 0.353 | / |
| Left Edge | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.023 | 0.058 | 1.15 | 0.067 | / |
| Right Edge | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.030 | 0.186 | 1.15 | 0.214 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.041 | 0.152 | 1.15 | 0.175 | / |
| Back Side | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | 0.020 | 0.271 | 1.14 | 0.309 | / |
| Front Side | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | 0.040 | 0.255 | 1.14 | 0.291 | / |
| Left Edge | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | -0.170 | 0.083 | 1.14 | 0.094 | / |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Right Edge | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | 0.074 | 0.128 | 1.14 | 0.146 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State2 | 50%RB | 0 | 20175/1732.5 | 23.00 | 22.43 | 0.100 | 0.097 | 1.14 | 0.110 | / |
| Back Side | SIM 2 | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.120 | 0.381 | 1.15 | 0.438 | / |
| Back Side | Battery 2 | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | 0.033 | 0.378 | 1.15 | 0.435 | / |
| Back Side | Battery 3 | State2 | 1RB | 99 | 20300/1745 | 24.00 | 23.39 | -0.010 | 0.339 | 1.15 | 0.390 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 8: LTE Band 5 (10MHz, Main-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.120 | 0.097 | 1.14 | 0.110 | / |
| Left Tilt | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.053 | 0.070 | 1.14 | 0.079 | / |
| Right Cheek | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | -0.030 | 0.327 | 1.14 | 0.372 | / |
| Right Tilt | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.090 | 0.167 | 1.14 | 0.190 | / |
| Left Cheek | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | -0.010 | 0.091 | 1.13 | 0.102 | / |
| Left Tilt | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | 0.026 | 0.082 | 1.13 | 0.093 | / |
| Right Cheek | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | -0.021 | 0.143 | 1.13 | 0.162 | / |
| Right Tilt | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | -0.080 | 0.131 | 1.13 | 0.148 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.012 | 0.301 | 1.14 | 0.342 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.000 | 0.336 | 1.14 | 0.382 | 58 |
| Right Cheek | Battery 3 | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.060 | 0.317 | 1.14 | 0.361 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | -0.190 | 0.240 | 1.14 | 0.273 | 59 |
| Front Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.050 | 0.172 | 1.14 | 0.196 | / |
| Back Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | 0.060 | 0.230 | 1.13 | 0.260 | / |
| Front Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | -0.090 | 0.163 | 1.13 | 0.184 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.060 | 0.318 | 1.14 | 0.362 | / |
| Front Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | -0.030 | 0.249 | 1.14 | 0.283 | / |
| Left Edge | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.170 | 0.117 | 1.14 | 0.133 | / |
| Right Edge | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | -0.020 | 0.146 | 1.14 | 0.166 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.050 | 0.173 | 1.14 | 0.197 | / |
| Back Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | 0.050 | 0.233 | 1.13 | 0.263 | / |
| Front Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | -0.060 | 0.229 | 1.13 | 0.259 | / |
| Left Edge | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | 0.130 | 0.088 | 1.13 | 0.099 | / |
| Right Edge | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | -0.010 | 0.113 | 1.13 | 0.128 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.97 | 0.038 | 0.143 | 1.13 | 0.162 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | SIM 2 | 1RB | 25 | 20600/844 | 23.50 | 22.94 | -0.011 | 0.312 | 1.14 | 0.355 | / |
| Back Side | Battery 2 | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.020 | 0.336 | 1.14 | 0.382 | 60 |
| Back Side | Battery 3 | 1RB | 25 | 20600/844 | 23.50 | 22.94 | 0.077 | 0.325 | 1.14 | 0.370 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 9: LTE Band 7 (20MHz, Main-antenna)**

| Test Position | Cover Type | | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | | |
| Left Cheek | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.000 | 0.143 | 1.17 | 0.167 | / |
| Left Tilt | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.088 | 0.155 | 1.17 | 0.181 | / |
| Right Cheek | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.157 | 0.260 | 1.17 | 0.304 | / |
| | | State2 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.045 | 0.232 | 1.17 | 0.271 | / |
| Right Tilt | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.047 | 0.097 | 1.17 | 0.114 | / |
| Left Cheek | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.178 | 0.139 | 1.18 | 0.164 | / |
| Left Tilt | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.091 | 0.144 | 1.18 | 0.170 | / |
| Right Cheek | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.063 | 0.213 | 1.18 | 0.251 | / |
| Right Tilt | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.052 | 0.073 | 1.18 | 0.085 | / |
| Right Cheek | SIM 2 | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.050 | 0.302 | 1.17 | 0.353 | 61 |
| | | State2 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.073 | 0.249 | 1.17 | 0.291 | / |
| Right Cheek | Battery 2 | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.112 | 0.172 | 1.17 | 0.201 | / |
| Right Cheek | Battery 3 | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.106 | 0.181 | 1.17 | 0.212 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | -0.150 | 0.214 | 1.17 | 0.250 | 62 |
| | | State2 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.092 | 0.126 | 1.17 | 0.147 | / |
| Front Side | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.046 | 0.196 | 1.17 | 0.229 | / |
| Back Side | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.090 | 0.098 | 1.18 | 0.116 | / |
| Front Side | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.093 | 0.107 | 1.18 | 0.126 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.024 | 0.245 | 1.17 | 0.287 | / |
| Front Side | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.039 | 0.285 | 1.17 | 0.333 | 63 |
| | | State2 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.102 | 0.247 | 1.17 | 0.289 | / |
| Left Edge | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | -0.027 | 0.032 | 1.17 | 0.038 | / |
| Right Edge | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | -0.070 | 0.188 | 1.17 | 0.220 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.052 | 0.257 | 1.17 | 0.301 | / |
| Back Side | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.035 | 0.200 | 1.18 | 0.236 | / |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Front Side | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.041 | 0.227 | 1.18 | 0.267 | / |
| Left Edge | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.021 | 0.027 | 1.18 | 0.032 | / |
| Right Edge | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | -0.020 | 0.156 | 1.18 | 0.184 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State1 | 50%RB | 0 | 20850/2510 | 22.50 | 21.79 | 0.076 | 0.225 | 1.18 | 0.265 | / |
| Front Side | SIM 2 | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.057 | 0.271 | 1.17 | 0.317 | / |
| Front Side | Battery 2 | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.092 | 0.273 | 1.17 | 0.319 | / |
| Front Side | Battery 3 | State1 | 1RB | 50 | 21100/2535 | 23.50 | 22.82 | 0.113 | 0.252 | 1.17 | 0.295 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 10: LTE Band 12 (20MHz, Main-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.190 | 0.083 | 1.18 | 0.097 | / |
| Left Tilt | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | -0.060 | 0.075 | 1.18 | 0.089 | / |
| Right Cheek | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | -0.010 | 0.110 | 1.18 | 0.130 | / |
| Right Tilt | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | -0.040 | 0.078 | 1.18 | 0.092 | / |
| Left Cheek | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | 0.010 | 0.081 | 1.19 | 0.097 | / |
| Left Tilt | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | -0.050 | 0.073 | 1.19 | 0.087 | / |
| Right Cheek | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | 0.070 | 0.109 | 1.19 | 0.130 | / |
| Right Tilt | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | -0.090 | 0.071 | 1.19 | 0.084 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 23130/711 | 23.50 | 22.78 | -0.025 | 0.116 | 1.18 | 0.137 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.059 | 0.142 | 1.18 | 0.168 | / |
| Right Cheek | Battery 3 | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.068 | 0.153 | 1.18 | 0.181 | 64 |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.000 | 0.173 | 1.18 | 0.204 | 65 |
| Front Side | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.030 | 0.105 | 1.18 | 0.124 | / |
| Back Side | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | 0.020 | 0.143 | 1.19 | 0.170 | / |
| Front Side | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | 0.010 | 0.112 | 1.19 | 0.133 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.030 | 0.215 | 1.18 | 0.254 | 66 |
| Front Side | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.020 | 0.192 | 1.18 | 0.227 | / |
| Left Edge | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.010 | 0.101 | 1.18 | 0.119 | / |
| Right Edge | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.080 | 0.188 | 1.18 | 0.222 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.000 | 0.135 | 1.18 | 0.159 | / |
| Back Side | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | -0.010 | 0.177 | 1.19 | 0.211 | / |
| Front Side | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | 0.020 | 0.162 | 1.19 | 0.193 | / |
| Left Edge | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | 0.020 | 0.083 | 1.19 | 0.098 | / |
| Right Edge | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | -0.020 | 0.156 | 1.19 | 0.186 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 50%RB | 13 | 23130/711 | 22.50 | 21.74 | 0.010 | 0.111 | 1.19 | 0.132 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | SIM 2 | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.104 | 0.211 | 1.18 | 0.249 | / |
| Back Side | Battery 2 | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.049 | 0.196 | 1.18 | 0.231 | / |
| Back Side | Battery 3 | 1RB | 25 | 23130/711 | 23.50 | 22.78 | 0.017 | 0.203 | 1.18 | 0.240 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 11: LTE Band 17 (10MHz, Main-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.120 | 0.106 | 1.20 | 0.127 | / |
| Left Tilt | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.010 | 0.099 | 1.20 | 0.118 | / |
| Right Cheek | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.030 | 0.096 | 1.20 | 0.115 | / |
| Right Tilt | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.110 | 0.108 | 1.20 | 0.129 | 67 |
| Left Cheek | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | -0.070 | 0.094 | 1.20 | 0.113 | / |
| Left Tilt | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.100 | 0.075 | 1.20 | 0.090 | / |
| Right Cheek | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.060 | 0.088 | 1.20 | 0.106 | / |
| Right Tilt | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | -0.110 | 0.075 | 1.20 | 0.090 | / |
| Right Tilt | SIM 2 | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.035 | 0.096 | 1.20 | 0.115 | / |
| Right Tilt | Battery 2 | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.040 | 0.071 | 1.20 | 0.085 | / |
| Right Tilt | Battery 3 | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.024 | 0.070 | 1.20 | 0.084 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.020 | 0.166 | 1.20 | 0.199 | 68 |
| Front Side | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.030 | 0.099 | 1.20 | 0.118 | / |
| Back Side | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.020 | 0.158 | 1.20 | 0.189 | / |
| Front Side | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.060 | 0.104 | 1.20 | 0.124 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.010 | 0.227 | 1.20 | 0.272 | / |
| Front Side | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.020 | 0.187 | 1.20 | 0.224 | / |
| Left Edge | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.040 | 0.066 | 1.20 | 0.079 | / |
| Right Edge | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.010 | 0.203 | 1.20 | 0.243 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.110 | 0.146 | 1.20 | 0.175 | / |
| Back Side | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | -0.010 | 0.173 | 1.20 | 0.207 | / |
| Front Side | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.020 | 0.160 | 1.20 | 0.191 | / |
| Left Edge | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.000 | 0.049 | 1.20 | 0.059 | / |
| Right Edge | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.050 | 0.156 | 1.20 | 0.187 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 50%RB | 13 | 23800/711 | 22.50 | 21.72 | 0.060 | 0.115 | 1.20 | 0.138 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | SIM 2 | 1RB | 25 | 23790/710 | 23.50 | 22.72 | -0.028 | 0.216 | 1.20 | 0.258 | / |
| Back Side | Battery 2 | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.000 | 0.265 | 1.20 | 0.317 | 69 |
| Back Side | Battery 3 | 1RB | 25 | 23790/710 | 23.50 | 22.72 | 0.014 | 0.259 | 1.20 | 0.310 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 12: LTE Band 26 (15MHz, Main-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | -0.055 | 0.094 | 1.21 | 0.254 | / |
| Left Tilt | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.040 | 0.070 | 1.21 | 0.084 | / |
| Right Cheek | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.033 | 0.210 | 1.21 | 0.254 | / |
| Right Tilt | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.110 | 0.154 | 1.21 | 0.186 | / |
| Left Cheek | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | -0.090 | 0.096 | 1.23 | 0.118 | / |
| Left Tilt | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.028 | 0.085 | 1.23 | 0.105 | / |
| Right Cheek | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.060 | 0.215 | 1.23 | 0.265 | 70 |
| Right Tilt | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.031 | 0.126 | 1.23 | 0.155 | / |
| Right Cheek | SIM 2 | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.042 | 0.207 | 1.23 | 0.255 | / |
| Right Cheek | Battery 2 | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.032 | 0.166 | 1.23 | 0.204 | / |
| Right Cheek | Battery 3 | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.028 | 0.171 | 1.23 | 0.210 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.130 | 0.214 | 1.21 | 0.259 | 71 |
| Front Side | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.154 | 0.205 | 1.21 | 0.248 | / |
| Back Side | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.050 | 0.205 | 1.23 | 0.252 | / |
| Front Side | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.010 | 0.203 | 1.23 | 0.250 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.030 | 0.257 | 1.21 | 0.311 | 72 |
| Front Side | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | -0.090 | 0.202 | 1.21 | 0.245 | / |
| Left Edge | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.040 | 0.070 | 1.21 | 0.085 | / |
| Right Edge | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.060 | 0.197 | 1.21 | 0.238 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | -0.180 | 0.150 | 1.21 | 0.182 | / |
| Back Side | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.060 | 0.223 | 1.23 | 0.274 | / |
| Front Side | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | -0.030 | 0.212 | 1.23 | 0.261 | / |
| Left Edge | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | 0.030 | 0.065 | 1.23 | 0.080 | / |
| Right Edge | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | -0.030 | 0.162 | 1.23 | 0.199 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | 50%RB | 0 | 26865/831.5 | 22.30 | 21.40 | -0.190 | 0.108 | 1.23 | 0.133 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | SIM 2 | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.112 | 0.216 | 1.21 | 0.261 | / |
| Back Side | Battery 2 | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.016 | 0.248 | 1.21 | 0.300 | / |
| Back Side | Battery 3 | 1RB | 38 | 26965/841.5 | 23.30 | 22.47 | 0.048 | 0.252 | 1.21 | 0.305 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 13: LTE Band 38 (20MHz, Main-antenna)**

| Test Position | Cover Type | | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | | |
| Left Cheek | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.089 | 0.091 | 1.17 | 0.106 | / |
| Left Tilt | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.047 | 0.122 | 1.17 | 0.143 | / |
| Right Cheek | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.138 | 0.196 | 1.17 | 0.230 | 73 |
| | | State2 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.165 | 0.125 | 1.17 | 0.147 | / |
| Right Tilt | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.130 | 0.064 | 1.17 | 0.074 | / |
| Left Cheek | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.020 | 0.084 | 1.16 | 0.097 | / |
| Left Tilt | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.074 | 0.106 | 1.16 | 0.123 | / |
| Right Cheek | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.028 | 0.183 | 1.16 | 0.213 | / |
| Right Tilt | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.051 | 0.056 | 1.16 | 0.065 | / |
| Right Cheek | SIM 2 | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | -0.090 | 0.185 | 1.17 | 0.217 | / |
| Right Cheek | Battery 2 | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | -0.130 | 0.155 | 1.17 | 0.182 | / |
| Right Cheek | Battery 3 | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.023 | 0.179 | 1.17 | 0.210 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.047 | 0.117 | 1.17 | 0.137 | / |
| | | State2 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.035 | 0.101 | 1.17 | 0.118 | / |
| Front Side | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.136 | 0.151 | 1.17 | 0.177 | 74 |
| Back Side | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.012 | 0.111 | 1.16 | 0.129 | / |
| Front Side | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.050 | 0.145 | 1.16 | 0.168 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.022 | 0.423 | 1.17 | 0.496 | / |
| Front Side | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | -0.040 | 0.553 | 1.17 | 0.648 | / |
| Left Edge | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.131 | 0.030 | 1.17 | 0.035 | / |
| Right Edge | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | -0.100 | 0.393 | 1.17 | 0.461 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.160 | 0.406 | 1.17 | 0.476 | / |
| Back Side | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.046 | 0.386 | 1.16 | 0.448 | / |
| Front Side | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.022 | 0.468 | 1.16 | 0.544 | / |
| Left Edge | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.166 | 0.026 | 1.16 | 0.030 | / |
| Right Edge | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | -0.040 | 0.337 | 1.16 | 0.391 | / |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State1 | 50%RB | 25 | 38150/2610 | 22.50 | 21.85 | 0.170 | 0.341 | 1.16 | 0.396 | / |
| Front Side | SIM 2 | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.023 | 0.576 | 1.17 | 0.675 | 75 |
| | | State2 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.037 | 0.522 | 1.17 | 0.612 | / |
| Front Side | Battery 2 | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.066 | 0.426 | 1.17 | 0.499 | / |
| Front Side | Battery 3 | State1 | 1RB | 50 | 38150/2610 | 23.50 | 22.81 | 0.066 | 0.435 | 1.17 | 0.510 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 14: LTE Band 41 (20MHz, Main-antenna)**

| Test Position | Cover Type | | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power(dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | | |
| Left Cheek | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.089 | 0.138 | 1.22 | 0.169 | / |
| Left Tilt | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | -0.050 | 0.131 | 1.22 | 0.160 | / |
| Right Cheek | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.023 | 0.312 | 1.22 | 0.381 | / |
| | | State2 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.144 | 0.234 | 1.22 | 0.286 | / |
| Right Tilt | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.052 | 0.078 | 1.22 | 0.095 | / |
| Left Cheek | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.028 | 0.092 | 1.23 | 0.113 | / |
| Left Tilt | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.040 | 0.097 | 1.23 | 0.119 | / |
| Right Cheek | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | -0.070 | 0.188 | 1.23 | 0.232 | / |
| Right Tilt | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | -0.032 | 0.064 | 1.23 | 0.079 | / |
| Right Cheek | SIM 2 | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.110 | 0.327 | 1.22 | 0.400 | 76 |
| | | State2 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.142 | 0.259 | 1.22 | 0.316 | |
| Right Cheek | Battery 2 | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.050 | 0.289 | 1.22 | 0.353 | / |
| Right Cheek | Battery 3 | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | -0.090 | 0.277 | 1.22 | 0.338 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.076 | 0.151 | 1.22 | 0.184 | / |
| | | State2 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.190 | 0.098 | 1.22 | 0.119 | / |
| Front Side | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.023 | 0.193 | 1.22 | 0.236 | 77 |
| Back Side | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.124 | 0.111 | 1.23 | 0.137 | / |
| Front Side | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.147 | 0.158 | 1.23 | 0.195 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.079 | 0.438 | 1.22 | 0.535 | / |
| Front Side | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.130 | 0.560 | 1.22 | 0.684 | / |
| Left Edge | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.046 | 0.078 | 1.22 | 0.095 | / |
| Right Edge | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | -0.080 | 0.415 | 1.22 | 0.507 | / |
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | -0.022 | 0.421 | 1.22 | 0.514 | / |
| Back Side | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.118 | 0.299 | 1.23 | 0.369 | / |
| Front Side | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.090 | 0.389 | 1.23 | 0.480 | / |
| Left Edge | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.092 | 0.041 | 1.23 | 0.051 | / |
| Right Edge | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | -0.040 | 0.271 | 1.23 | 0.334 | / |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Top Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Bottom Edge | standard | State1 | 50%RB | 25 | 41140/2645 | 22.80 | 21.89 | 0.090 | 0.289 | 1.23 | 0.356 | / |
| Front Side | SIM 2 | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.030 | 0.596 | 1.22 | 0.728 | 78 |
| | | State2 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.016 | 0.498 | 1.22 | 0.608 | / |
| Front Side | Battery 2 | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.040 | 0.427 | 1.22 | 0.522 | / |
| Front Side | Battery 3 | State1 | 1RB | 99 | 41140/2645 | 23.80 | 22.93 | 0.180 | 0.442 | 1.22 | 0.540 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg. SAR is no required.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 15: GSM 850 (Second-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Time slot | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | |
| Left Cheek | standard | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.020 | 0.758 | 1.11 | 0.843 | / |
| | | 190/836.6 | GSM | 1:8.3 | 33.00 | 32.50 | -0.049 | 0.753 | 1.12 | 0.845 | / |
| | | 128/824.2 | GSM | 1:8.3 | 33.00 | 32.43 | 0.026 | 0.733 | 1.14 | 0.836 | / |
| Left Tilt | standard | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.090 | 0.722 | 1.11 | 0.803 | / |
| | | 190/836.6 | GSM | 1:8.3 | 33.00 | 32.50 | 0.030 | 0.716 | 1.12 | 0.803 | / |
| | | 128/824.2 | GSM | 1:8.3 | 33.00 | 32.43 | 0.070 | 0.701 | 1.14 | 0.799 | / |
| Right Cheek | standard | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.023 | 0.989 | 1.11 | 1.100 | / |
| | | 190/836.6 | GSM | 1:8.3 | 33.00 | 32.50 | 0.090 | 0.967 | 1.12 | 1.085 | / |
| | | 128/824.2 | GSM | 1:8.3 | 33.00 | 32.43 | 0.100 | 0.955 | 1.14 | 1.089 | / |
| Right Tilt | standard | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.080 | 0.914 | 1.11 | 1.016 | / |
| | | 190/836.6 | GSM | 1:8.3 | 33.00 | 32.50 | 0.120 | 0.921 | 1.12 | 1.033 | / |
| | | 128/824.2 | GSM | 1:8.3 | 33.00 | 32.43 | -0.130 | 0.903 | 1.14 | 1.030 | / |
| Right Cheek | SIM 2 | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.030 | 0.986 | 1.11 | 1.096 | / |
| Right Cheek | Battery 2 | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.170 | 0.970 | 1.11 | 1.078 | / |
| Right Cheek | Battery 3 | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.060 | 0.992 | 1.11 | 1.103 | 79 |
| Right Cheek | Repeated | 251/848.8 | GSM | 1:8.3 | 33.00 | 32.54 | 0.104 | 0.977 | 1.11 | 1.086 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 190/836.6 | GSM | 1:8.3 | 33.00 | 32.50 | 0.070 | 0.233 | 1.12 | 0.261 | 80 |
| Front Side | standard | 190/836.6 | GSM | 1:8.3 | 33.00 | 32.50 | 0.040 | 0.202 | 1.12 | 0.227 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.00 | 30.28 | 0.020 | 0.468 | 1.18 | 0.552 | 81 |
| Front Side | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.00 | 30.28 | 0.034 | 0.348 | 1.18 | 0.411 | / |
| Left Edge | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.00 | 30.28 | 0.130 | 0.351 | 1.18 | 0.414 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 190/836.6 | 2Txslots | 1:4.15 | 31.00 | 30.28 | 0.180 | 0.340 | 1.18 | 0.401 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 190/836.6 | 2Txslots | 1:4.15 | 31.00 | 30.28 | 0.080 | 0.416 | 1.18 | 0.491 | / |
| Back Side | Battery 2 | 190/836.6 | 2Txslots | 1:4.15 | 31.00 | 30.28 | 0.120 | 0.438 | 1.18 | 0.517 | / |
| Back Side | Battery 3 | 190/836.6 | 2Txslots | 1:4.15 | 31.00 | 30.28 | -0.030 | 0.421 | 1.18 | 0.497 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).
3. When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.
4. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.
5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek | 190/836.6 | 0.992 | 0.977 | 1.02 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 16: GSM 1900 (Second-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Time slot | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 661/1880 | GSM | 1:8.3 | 29.00 | 28.61 | -0.080 | 0.535 | 1.09 | 0.585 | / |
| Left Tilt | standard | 661/1880 | GSM | 1:8.3 | 29.00 | 28.61 | 0.099 | 0.428 | 1.09 | 0.468 | / |
| Right Cheek | standard | 810/1909.8 | GSM | 1:8.3 | 29.00 | 28.63 | 0.026 | 1.040 | 1.09 | 1.132 | 82 |
| | | 661/1880 | GSM | 1:8.3 | 29.00 | 28.61 | -0.026 | 0.912 | 1.09 | 0.998 | / |
| | | 512/1850.2 | GSM | 1:8.3 | 29.00 | 28.56 | 0.089 | 0.968 | 1.11 | 1.071 | / |
| Right Tilt | standard | 661/1880 | GSM | 1:8.3 | 29.00 | 28.61 | 0.089 | 0.722 | 1.09 | 0.790 | / |
| Right Cheek | SIM 2 | 810/1909.8 | GSM | 1:8.3 | 29.00 | 28.63 | -0.021 | 1.010 | 1.09 | 1.100 | / |
| Right Cheek | Battery 2 | 810/1909.8 | GSM | 1:8.3 | 29.00 | 28.63 | -0.039 | 1.024 | 1.09 | 1.115 | / |
| Right Cheek | Battery 3 | 810/1909.8 | GSM | 1:8.3 | 29.00 | 28.63 | 0.119 | 0.985 | 1.09 | 1.073 | / |
| Right Cheek | Repeated | 810/1909.8 | GSM | 1:8.3 | 29.00 | 28.63 | -0.014 | 0.962 | 1.09 | 1.048 | / |
| **Head SAR For Simultaneous Transmission (Reduce Power)** | | | | | | | | | | | |
| Left Cheek | standard | 661/1880 | GSM | 1:8.3 | 28.50 | 27.53 | -0.082 | 0.458 | 1.25 | 0.573 | / |
| Left Tilt | standard | 661/1880 | GSM | 1:8.3 | 28.50 | 27.53 | 0.076 | 0.396 | 1.25 | 0.495 | / |
| Right Cheek | standard | 810/1909.8 | GSM | 1:8.3 | 28.50 | 27.47 | 0.033 | 0.830 | 1.27 | 1.052 | 83 |
| | | 661/1880 | GSM | 1:8.3 | 28.50 | 27.53 | -0.069 | 0.817 | 1.25 | 1.021 | / |
| | | 512/1850.2 | GSM | 1:8.3 | 28.50 | 27.62 | 0.046 | 0.808 | 1.22 | 0.989 | / |
| Right Tilt | standard | 661/1880 | GSM | 1:8.3 | 28.50 | 27.53 | 0.046 | 0.617 | 1.25 | 0.771 | / |
| Right Cheek | SIM 2 | 810/1909.8 | GSM | 1:8.3 | 28.50 | 27.47 | -0.064 | 0.827 | 1.27 | 1.048 | / |
| Right Cheek | Battery 2 | 810/1909.8 | GSM | 1:8.3 | 28.50 | 27.47 | 0.040 | 0.790 | 1.27 | 1.001 | / |
| Right Cheek | Battery 3 | 810/1909.8 | GSM | 1:8.3 | 28.50 | 27.47 | 0.120 | 0.821 | 1.27 | 1.041 | / |
| Right Cheek | Repeated | 810/1909.8 | GSM | 1:8.3 | 28.50 | 27.47 | 0.044 | 0.771 | 1.27 | 0.977 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 661/1880 | GSM | 1:8.3 | 29.00 | 28.61 | 0.030 | 0.096 | 1.09 | 0.105 | 84 |
| Front Side | standard | 661/1880 | GSM | 1:8.3 | 29.00 | 28.61 | 0.010 | 0.085 | 1.09 | 0.093 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 661/1880 | 2Txslots | 1:4.15 | 27.00 | 26.17 | 0.017 | 0.192 | 1.21 | 0.232 | / |
| Front Side | standard | 661/1880 | 2Txslots | 1:4.15 | 27.00 | 26.17 | 0.140 | 0.171 | 1.21 | 0.207 | / |
| Left Edge | standard | 661/1880 | 2Txslots | 1:4.15 | 27.00 | 26.17 | 0.000 | 0.213 | 1.21 | 0.258 | 85 |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 661/1880 | 2Txslots | 1:4.15 | 27.00 | 26.17 | -0.070 | 0.145 | 1.21 | 0.176 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Left Edge | SIM 2 | 661/1880 | 2Txslots | 1:4.15 | 27.00 | 26.17 | 0.110 | 0.199 | 1.21 | 0.241 | / |
| Left Edge | Battery 2 | 661/1880 | 2Txslots | 1:4.15 | 27.00 | 26.17 | 0.070 | 0.187 | 1.21 | 0.226 | / |
| Left Edge | Battery 3 | 661/1880 | 2Txslots | 1:4.15 | 27.00 | 26.17 | 0.020 | 0.176 | 1.21 | 0.213 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.

4. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek | 810/1909.8 | 1.040 | 0.962 | 1.08 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 17: UMTS Band II (Second-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Channel Type | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | -0.126 | 0.539 | 1.14 | 0.612 | / |
| Left Tilt | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | -0.013 | 0.486 | 1.14 | 0.552 | / |
| Right Cheek | standard | 9538/1907.6 | RMC 12.2K | 1:1 | 20.50 | 20.02 | -0.010 | 1.130 | 1.12 | 1.262 | 86 |
| | | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.037 | 0.973 | 1.14 | 1.104 | / |
| | | 9262/1852.4 | RMC 12.2K | 1:1 | 20.50 | 19.81 | 0.087 | 1.050 | 1.17 | 1.231 | / |
| Right Tilt | standard | 9538/1907.6 | RMC 12.2K | 1:1 | 20.50 | 20.02 | 0.022 | 0.726 | 1.12 | 0.811 | / |
| | | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.087 | 0.714 | 1.14 | 0.810 | / |
| | | 9262/1852.4 | RMC 12.2K | 1:1 | 20.50 | 19.81 | 0.090 | 0.702 | 1.17 | 0.823 | / |
| Right Cheek | SIM 2 | 9538/1907.6 | RMC 12.2K | 1:1 | 20.50 | 20.02 | -0.023 | 1.100 | 1.12 | 1.229 | / |
| Right Cheek | Battery 2 | 9538/1907.6 | RMC 12.2K | 1:1 | 20.50 | 20.02 | -0.063 | 1.020 | 1.12 | 1.139 | / |
| Right Cheek | Battery 3 | 9538/1907.6 | RMC 12.2K | 1:1 | 20.50 | 20.02 | -0.008 | 1.090 | 1.12 | 1.217 | / |
| Right Cheek | standard | 9538/1907.6 | AMR 12.2K | 1:1 | 20.50 | 19.97 | 0.033 | 1.040 | 1.13 | 1.175 | / |
| Right Cheek | Repeated | 9538/1907.6 | RMC 12.2K | 1:1 | 20.50 | 20.02 | 0.012 | 1.080 | 1.12 | 1.206 | / |
| **Head SAR For Simultaneous Transmission (Reduce Power)** | | | | | | | | | | | |
| Left Cheek | standard | 9400/1880 | RMC 12.2K | 1:1 | 19.50 | 18.92 | -0.137 | 0.323 | 1.14 | 0.369 | / |
| Left Tilt | standard | 9400/1880 | RMC 12.2K | 1:1 | 19.50 | 18.92 | -0.024 | 0.246 | 1.14 | 0.281 | / |
| Right Cheek | standard | 9538/1907.6 | RMC 12.2K | 1:1 | 19.50 | 19.07 | 0.110 | 0.933 | 1.10 | 1.030 | 87 |
| | | 9400/1880 | RMC 12.2K | 1:1 | 19.50 | 18.92 | 0.022 | 0.817 | 1.14 | 0.934 | / |
| | | 9262/1852.4 | RMC 12.2K | 1:1 | 19.50 | 18.91 | 0.026 | 0.855 | 1.15 | 0.979 | / |
| Right Tilt | standard | 9400/1880 | RMC 12.2K | 1:1 | 19.50 | 18.92 | 0.071 | 0.484 | 1.14 | 0.553 | / |
| Right Cheek | SIM 2 | 9538/1907.6 | RMC 12.2K | 1:1 | 19.50 | 19.07 | -0.034 | 0.860 | 1.10 | 0.950 | / |
| Right Cheek | Battery 2 | 9538/1907.6 | RMC 12.2K | 1:1 | 19.50 | 19.07 | 0.080 | 0.912 | 1.10 | 1.007 | / |
| Right Cheek | Battery 3 | 9538/1907.6 | RMC 12.2K | 1:1 | 19.50 | 19.07 | 0.080 | 0.876 | 1.10 | 0.967 | / |
| Right Cheek | Repeated | 9538/1907.6 | RMC 12.2K | 1:1 | 19.50 | 19.07 | 0.076 | 0.914 | 1.10 | 1.009 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.024 | 0.128 | 1.14 | 0.146 | 88 |
| Front Side | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.028 | 0.114 | 1.14 | 0.130 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.014 | 0.210 | 1.14 | 0.238 | / |
| Front Side | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.032 | 0.179 | 1.14 | 0.203 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Left Edge | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | -0.043 | 0.219 | 1.14 | 0.249 | 89 |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.017 | 0.163 | 1.14 | 0.184 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Left Edge | SIM 2 | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.090 | 0.202 | 1.14 | 0.229 | / |
| Left Edge | Battery 2 | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.120 | 0.209 | 1.14 | 0.237 | / |
| Left Edge | Battery 3 | 9400/1880 | RMC 12.2K | 1:1 | 20.50 | 19.95 | 0.020 | 0.198 | 1.14 | 0.225 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

4. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 9538/1907.6 | 1.130 | 1.080 | 1.05 |
| Right Cheek (Reduce Power) | 9538/1907.6 | 0.933 | 0.914 | 1.02 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 18: UMTS Band IV (Second-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Channel Type | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.060 | 0.271 | 1.12 | 0.305 | / |
| Left Tilt | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.072 | 0.143 | 1.12 | 0.161 | / |
| Right Cheek | standard | 1513/1752.6 | RMC 12.2K | 1:1 | 21.00 | 20.59 | 0.080 | 0.994 | 1.10 | 1.092 | / |
| | | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.017 | 0.849 | 1.12 | 0.955 | / |
| | | 1312/1712.4 | RMC 12.2K | 1:1 | 21.00 | 20.57 | 0.049 | 0.882 | 1.10 | 0.974 | / |
| Right Tilt | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.090 | 0.570 | 1.12 | 0.641 | / |
| Right Cheek | SIM 2 | 1513/1752.6 | RMC 12.2K | 1:1 | 21.00 | 20.59 | 0.041 | 0.985 | 1.10 | 1.083 | / |
| Right Cheek | Battery 2 | 1513/1752.6 | RMC 12.2K | 1:1 | 21.00 | 20.59 | 0.010 | 0.980 | 1.10 | 1.077 | / |
| Right Cheek | Battery 3 | 1513/1752.6 | RMC 12.2K | 1:1 | 21.00 | 20.59 | 0.030 | 1.020 | 1.10 | 1.121 | 90 |
| Right Cheek | Repeated | 1513/1752.6 | RMC 12.2K | 1:1 | 21.00 | 20.59 | 0.079 | 0.944 | 1.10 | 1.037 | / |
| **Head SAR For Simultaneous Transmission (Reduce Power)** | | | | | | | | | | | |
| Left Cheek | Standard | 1413/1732.6 | RMC 12.2K | 1:1 | 20.00 | 19.57 | -0.020 | 0.259 | 1.10 | 0.286 | / |
| Left Tilt | Standard | 1413/1732.6 | RMC 12.2K | 1:1 | 20.00 | 19.57 | 0.032 | 0.126 | 1.10 | 0.139 | / |
| Right Cheek | Standard | 1513/1752.6 | RMC 12.2K | 1:1 | 20.00 | 19.52 | 0.010 | 0.921 | 1.12 | 1.029 | 91 |
| | Standard | 1413/1732.6 | RMC 12.2K | 1:1 | 20.00 | 19.57 | 0.031 | 0.780 | 1.10 | 0.861 | / |
| | Standard | 1312/1712.4 | RMC 12.2K | 1:1 | 20.00 | 19.56 | 0.076 | 0.810 | 1.11 | 0.896 | / |
| Right Tilt | Standard | 1413/1732.6 | RMC 12.2K | 1:1 | 20.00 | 19.57 | 0.052 | 0.526 | 1.10 | 0.581 | / |
| Right Cheek | SIM2 | 1513/1752.6 | RMC 12.2K | 1:1 | 20.00 | 19.52 | 0.014 | 0.907 | 1.12 | 1.013 | / |
| Right Cheek | Battery 2 | 1513/1752.6 | RMC 12.2K | 1:1 | 20.00 | 19.52 | 0.041 | 0.905 | 1.12 | 1.011 | / |
| Right Cheek | Battery 3 | 1513/1752.6 | RMC 12.2K | 1:1 | 20.00 | 19.52 | -0.020 | 0.918 | 1.12 | 1.025 | / |
| Right Cheek | Repeated | 1513/1752.6 | RMC 12.2K | 1:1 | 20.00 | 19.52 | 0.177 | 0.871 | 1.12 | 0.973 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | -0.050 | 0.063 | 1.12 | 0.071 | / |
| Front Side | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | -0.057 | 0.064 | 1.12 | 0.072 | 92 |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.015 | 0.154 | 1.12 | 0.173 | 93 |
| Front Side | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.013 | 0.153 | 1.12 | 0.172 | / |
| Left Edge | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | -0.012 | 0.093 | 1.12 | 0.105 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Top Edge | standard | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.016 | 0.109 | 1.12 | 0.123 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.050 | 0.144 | 1.12 | 0.162 | / |
| Back Side | Battery 2 | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | -0.020 | 0.151 | 1.12 | 0.170 | / |
| Back Side | Battery 3 | 1413/1732.6 | RMC 12.2K | 1:1 | 21.00 | 20.49 | 0.070 | 0.149 | 1.12 | 0.168 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 1513/1752.6 | 1.020 | 0.944 | 1.08 |
| Right Cheek (Reduce Power) | 1513/1752.6 | 0.921 | 0.871 | 1.06 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 19: UMTS Band V (Second-antenna)**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Channel Type | Duty Cycle | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | |
| Left Cheek | standard | 4233/846.6 | RMC 12.2K | 1:1 | 24.00 | 23.38 | 0.030 | 0.764 | 1.15 | 0.881 | / |
| | | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.050 | 0.757 | 1.16 | 0.879 | / |
| | | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | -0.120 | 0.749 | 1.16 | 0.872 | / |
| Left Tilt | standard | 4233/846.6 | RMC 12.2K | 1:1 | 24.00 | 23.38 | 0.120 | 0.723 | 1.15 | 0.834 | / |
| | | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.022 | 0.716 | 1.16 | 0.832 | / |
| | | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | 0.090 | 0.710 | 1.16 | 0.827 | / |
| Right Cheek | standard | 4233/846.6 | RMC 12.2K | 1:1 | 24.00 | 23.38 | 0.017 | 0.840 | 1.15 | 0.969 | / |
| | | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.140 | 0.925 | 1.16 | 1.074 | / |
| | | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | -0.040 | 0.985 | 1.16 | 1.147 | / |
| Right Tilt | standard | 4233/846.6 | RMC 12.2K | 1:1 | 24.00 | 23.38 | 0.067 | 0.810 | 1.15 | 0.934 | / |
| | | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | -0.070 | 0.847 | 1.16 | 0.984 | / |
| | | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | 0.033 | 0.968 | 1.16 | 1.127 | / |
| Right Cheek | SIM 2 | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | 0.190 | 1.070 | 1.16 | 1.246 | 94 |
| Right Cheek | Battery 2 | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | 0.150 | 0.905 | 1.16 | 1.054 | / |
| Right Cheek | Battery 3 | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | -0.100 | 0.955 | 1.16 | 1.112 | / |
| Right Cheek | standard | 4132/826.4 | AMR 12.2K | 1:1 | 24.00 | 23.30 | 0.017 | 0.982 | 1.17 | 1.154 | / |
| Right Cheek | Repeated | 4132/826.4 | RMC 12.2K | 1:1 | 24.00 | 23.34 | 0.019 | 0.974 | 1.16 | 1.134 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | -0.020 | 0.221 | 1.16 | 0.257 | 95 |
| Front Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.005 | 0.162 | 1.16 | 0.188 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | -0.020 | 0.403 | 1.16 | 0.468 | 96 |
| Front Side | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.140 | 0.161 | 1.16 | 0.187 | / |
| Left Edge | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.100 | 0.218 | 1.16 | 0.253 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.130 | 0.251 | 1.16 | 0.292 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | -0.134 | 0.394 | 1.16 | 0.458 | / |
| Back Side | Battery 2 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | 0.024 | 0.382 | 1.16 | 0.444 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | Battery 3 | 4183/836.6 | RMC 12.2K | 1:1 | 24.00 | 23.35 | -0.044 | 0.386 | 1.16 | 0.448 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. 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

4. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.

5. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek | 4132/826.4 | 1.070 | 0.974 | 1.10 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 20: LTE Band 2 (20MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK, Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.016 | 0.376 | 1.17 | 0.439 | / |
| Left Tilt | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.004 | 0.327 | 1.17 | 0.382 | / |
| Right Cheek | standard | 1RB | 50 | 19100/1900 | 20.50 | 19.81 | 0.084 | 0.859 | 1.17 | 1.007 | / |
| | | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.012 | 0.814 | 1.17 | 0.950 | / |
| | | 1RB | 50 | 18700/1860 | 20.50 | 19.66 | 0.050 | 0.825 | 1.21 | 1.001 | / |
| Right Tilt | standard | 1RB | 50 | 19100/1900 | 20.50 | 19.81 | 0.070 | 0.711 | 1.17 | 0.833 | / |
| | | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.010 | 0.715 | 1.17 | 0.834 | / |
| | | 1RB | 50 | 18700/1860 | 20.50 | 19.66 | 0.025 | 0.623 | 1.21 | 0.756 | / |
| Left Cheek | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | -0.016 | 0.271 | 1.06 | 0.288 | / |
| Left Tilt | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.014 | 0.234 | 1.06 | 0.248 | / |
| Right Cheek | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.022 | 0.732 | 1.06 | 0.777 | / |
| Right Tilt | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.052 | 0.568 | 1.06 | 0.603 | / |
| Right Cheek | standard | 100%RB | 0 | 18900/1880 | 19.50 | 18.40 | 0.017 | 0.501 | 1.29 | 0.645 | / |
| Right Tilt | standard | 100%RB | 0 | 18900/1880 | 19.50 | 18.40 | 0.068 | 0.469 | 1.29 | 0.604 | / |
| Right Cheek | SIM 2 | 1RB | 50 | 19100/1900 | 20.50 | 19.81 | 0.030 | 0.856 | 1.17 | 1.003 | / |
| Right Cheek | Battery 2 | 1RB | 50 | 19100/1900 | 20.50 | 19.81 | 0.080 | 1.040 | 1.17 | 1.219 | / |
| Right Cheek | Battery 3 | 1RB | 50 | 19100/1900 | 20.50 | 19.81 | 0.070 | 1.140 | 1.17 | 1.336 | 97 |
| Right Cheek | Repeated | 1RB | 50 | 19100/1900 | 20.50 | 19.81 | 0.023 | 1.032 | 1.17 | 1.207 | / |
| **Head SAR For Simultaneous Transmission (QPSK, Power Reduce)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 50 | 18900/1880 | 19.50 | 19.19 | 0.015 | 0.329 | 1.07 | 0.353 | / |
| Left Tilt | standard | 1RB | 50 | 18900/1880 | 19.50 | 19.19 | 0.004 | 0.284 | 1.07 | 0.305 | / |
| Right Cheek | standard | 1RB | 50 | 19100/1900 | 19.50 | 19.09 | 0.043 | 0.798 | 1.10 | 0.877 | / |
| | | 1RB | 50 | 18900/1880 | 19.50 | 19.19 | 0.011 | 0.761 | 1.07 | 0.817 | / |
| | | 1RB | 50 | 18700/1860 | 19.50 | 18.81 | 0.046 | 0.746 | 1.17 | 0.874 | / |
| Right Tilt | standard | 1RB | 50 | 18900/1880 | 19.50 | 19.19 | 0.009 | 0.645 | 1.07 | 0.693 | / |
| Left Cheek | standard | 50%RB | 25 | 19100/1900 | 19.00 | 18.55 | -0.015 | 0.232 | 1.11 | 0.257 | / |
| Left Tilt | standard | 50%RB | 25 | 19100/1900 | 19.00 | 18.55 | 0.013 | 0.197 | 1.11 | 0.219 | / |
| Right Cheek | standard | 50%RB | 25 | 19100/1900 | 19.00 | 18.55 | 0.020 | 0.660 | 1.11 | 0.732 | / |
| Right Tilt | standard | 50%RB | 25 | 19100/1900 | 19.00 | 18.55 | 0.048 | 0.507 | 1.11 | 0.562 | / |
| Right Cheek | standard | 100%RB | 0 | 18900/1880 | 19.00 | 17.67 | 0.103 | 0.504 | 1.36 | 0.685 | / |
| Right Cheek | SIM 2 | 1RB | 50 | 19100/1900 | 19.50 | 19.09 | 0.016 | 0.764 | 1.10 | 0.840 | / |
| Right Cheek | Battery 2 | 1RB | 50 | 19100/1900 | 19.50 | 19.09 | 0.029 | 0.814 | 1.10 | 0.895 | 98 |
| Right Cheek | Battery 3 | 1RB | 50 | 19100/1900 | 19.50 | 19.09 | 0.180 | 0.753 | 1.10 | 0.828 | / |
| Right Cheek | Repeated | 1RB | 50 | 19100/1900 | 19.50 | 19.09 | 0.091 | 0.738 | 1.10 | 0.811 | / |

| Body-worn (QPSK, Distance 15mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.107 | 0.145 | 1.17 | 0.169 | 99 |
| Front Side | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.068 | 0.112 | 1.17 | 0.131 | / |
| Back Side | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.025 | 0.115 | 1.06 | 0.122 | / |
| Front Side | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.100 | 0.105 | 1.06 | 0.111 | / |
| Hotspot (QPSK, Distance 10mm) | | | | | | | | | | | |
| Back Side | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.024 | 0.228 | 1.17 | 0.266 | 100 |
| Front Side | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.021 | 0.204 | 1.17 | 0.238 | / |
| Left Edge | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.027 | 0.203 | 1.17 | 0.237 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.018 | 0.176 | 1.17 | 0.205 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.032 | 0.177 | 1.06 | 0.188 | / |
| Front Side | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.021 | 0.158 | 1.06 | 0.168 | / |
| Left Edge | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.014 | 0.210 | 1.06 | 0.223 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 25 | 19100/1900 | 19.50 | 19.24 | 0.025 | 0.125 | 1.06 | 0.133 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | -0.010 | 0.212 | 1.17 | 0.247 | / |
| Back Side | Battery 2 | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.050 | 0.209 | 1.17 | 0.244 | / |
| Back Side | Battery 3 | 1RB | 50 | 18900/1880 | 20.50 | 19.83 | 0.090 | 0.205 | 1.17 | 0.239 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 19100/1900 | 1.140 | 1.032 | 1.10 |
| Right Cheek (Reduce Power) | 19100/1900 | 0.814 | 0.738 | 1.10 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 21: LTE Band 4 (20MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.090 | 0.298 | 1.11 | 0.331 | / |
| Left Tilt | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.010 | 0.381 | 1.11 | 0.424 | / |
| Right Cheek | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.100 | 0.938 | 1.11 | 1.043 | 101 |
| | | 1RB | 0 | 20175/1732.5 | 20.70 | 19.49 | 0.010 | 0.665 | 1.32 | 0.879 | / |
| | | 1RB | 50 | 20050/1720 | 20.70 | 19.85 | 0.000 | 0.773 | 1.22 | 0.940 | / |
| Right Tilt | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.000 | 0.937 | 1.11 | 1.042 | / |
| | | 1RB | 0 | 20175/1732.5 | 20.70 | 19.49 | -0.020 | 0.646 | 1.32 | 0.854 | / |
| | | 1RB | 50 | 20050/1720 | 20.70 | 19.85 | -0.040 | 0.753 | 1.22 | 0.916 | / |
| Left Cheek | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.030 | 0.148 | 1.20 | 0.178 | / |
| Left Tilt | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.130 | 0.205 | 1.20 | 0.246 | / |
| Right Cheek | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | -0.040 | 0.520 | 1.20 | 0.624 | / |
| Right Tilt | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.090 | 0.545 | 1.20 | 0.654 | / |
| Right Cheek | standard | 100%RB | 0 | 20175/1732.5 | 20.00 | 19.44 | 0.070 | 0.512 | 1.14 | 0.582 | / |
| Right Tilt | standard | 100%RB | 0 | 20175/1732.5 | 20.00 | 19.44 | 0.092 | 0.488 | 1.14 | 0.555 | / |
| Right Cheek | SIM 2 | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.060 | 0.929 | 1.11 | 1.033 | / |
| Right Cheek | Battery 2 | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | -0.110 | 0.891 | 1.11 | 0.991 | / |
| Right Cheek | Battery 3 | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | -0.020 | 0.850 | 1.11 | 0.945 | / |
| Right Cheek | Repeated | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.030 | 0.931 | 1.11 | 1.035 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.000 | 0.077 | 1.11 | 0.086 | 102 |
| Front Side | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.140 | 0.074 | 1.11 | 0.082 | / |
| Back Side | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.065 | 0.037 | 1.20 | 0.044 | / |
| Front Side | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.030 | 0.037 | 1.20 | 0.044 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.040 | 0.161 | 1.11 | 0.179 | / |
| Front Side | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.150 | 0.165 | 1.11 | 0.183 | / |
| Left Edge | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.090 | 0.181 | 1.11 | 0.201 | 103 |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.070 | 0.166 | 1.11 | 0.185 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.170 | 0.078 | 1.20 | 0.093 | / |
| Front Side | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.040 | 0.072 | 1.20 | 0.086 | / |
| Left Edge | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.190 | 0.100 | 1.20 | 0.120 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 0 | 20175/1732.5 | 20.00 | 19.21 | 0.080 | 0.081 | 1.20 | 0.097 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Left Edge | SIM 2 | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | -0.030 | 0.172 | 1.11 | 0.191 | / |
| Left Edge | Battery 2 | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | 0.050 | 0.164 | 1.11 | 0.182 | / |
| Left Edge | Battery 3 | 1RB | 99 | 20300/1745 | 20.70 | 20.24 | -0.030 | 0.156 | 1.11 | 0.173 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek | 20300/1745 | 0.938 | 0.931 | 1.01 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 22: LTE Band 5 (10MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK, Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | -0.050 | 0.750 | 1.15 | 0.859 | / |
| | | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | -0.010 | 0.982 | 1.20 | 1.175 | / |
| | | 1RB | 25 | 20450/829 | 23.50 | 22.67 | -0.020 | 0.780 | 1.21 | 0.944 | / |
| Left Tilt | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | 0.030 | 0.715 | 1.15 | 0.819 | / |
| | | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | 0.050 | 0.735 | 1.20 | 0.880 | / |
| | | 1RB | 25 | 20450/829 | 23.50 | 22.67 | -0.080 | 0.728 | 1.21 | 0.881 | / |
| Right Cheek | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | 0.110 | 0.706 | 1.15 | 0.809 | / |
| | | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | 0.190 | 1.170 | 1.20 | 1.400 | 104 |
| | | 1RB | 25 | 20450/829 | 23.50 | 22.67 | -0.090 | 0.826 | 1.21 | 1.000 | / |
| Right Tilt | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | 0.040 | 0.656 | 1.15 | 0.751 | / |
| | | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | 0.070 | 1.050 | 1.20 | 1.257 | / |
| | | 1RB | 25 | 20450/829 | 23.50 | 22.67 | 0.010 | 0.811 | 1.21 | 0.982 | / |
| Left Cheek | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | -0.030 | 0.610 | 1.18 | 0.722 | / |
| Left Tilt | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | 0.020 | 0.584 | 1.18 | 0.691 | / |
| Right Cheek | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | 0.010 | 0.603 | 1.18 | 0.713 | / |
| Right Tilt | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | -0.060 | 0.561 | 1.18 | 0.664 | / |
| Left Cheek | standard | 100%RB | 0 | 20450/829 | 22.50 | 22.05 | 0.030 | 0.650 | 1.11 | 0.721 | / |
| Left Tilt | standard | 100%RB | 0 | 20450/829 | 22.50 | 22.05 | 0.107 | 0.593 | 1.11 | 0.658 | / |
| Right Cheek | standard | 100%RB | 0 | 20450/829 | 22.50 | 22.05 | -0.080 | 0.648 | 1.11 | 0.719 | / |
| Right Tilt | standard | 100%RB | 0 | 20450/829 | 22.50 | 22.05 | -0.050 | 0.644 | 1.11 | 0.714 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | 0.020 | 0.991 | 1.20 | 1.186 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | 0.060 | 1.035 | 1.20 | 1.239 | / |
| Right Cheek | Battery 3 | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | 0.010 | 1.040 | 1.20 | 1.245 | / |
| Right Cheek | Repeated | 1RB | 25 | 20525/836.5 | 23.50 | 22.72 | 0.030 | 1.110 | 1.20 | 1.328 | / |
| **Head SAR For Simultaneous Transmission (QPSK, Power Reduce)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 20600/844 | 23.00 | 22.35 | -0.104 | 0.395 | 1.16 | 0.459 | / |
| Left Tilt | standard | 1RB | 25 | 20600/844 | 23.00 | 22.35 | -0.034 | 0.569 | 1.16 | 0.661 | / |
| Right Cheek | standard | 1RB | 25 | 20600/844 | 23.00 | 22.35 | 0.090 | 0.563 | 1.16 | 0.654 | / |
| | | 1RB | 25 | 20525/836.5 | 23.00 | 22.26 | 0.025 | 0.980 | 1.19 | 1.162 | 105 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1RB | 25 | 20450/829 | 23.00 | 21.96 | -0.139 | 0.667 | 1.27 | 0.847 | / |
| Right Tilt | standard | 1RB | 25 | 20600/844 | 23.00 | 22.35 | -0.025 | 0.518 | 1.16 | 0.602 | / |
| Left Cheek | standard | 50%RB | 13 | 20450/829 | 22.00 | 21.20 | -0.086 | 0.477 | 1.20 | 0.573 | / |
| Left Tilt | standard | 50%RB | 13 | 20450/829 | 22.00 | 21.20 | -0.042 | 0.454 | 1.20 | 0.546 | / |
| Right Cheek | standard | 50%RB | 13 | 20450/829 | 22.00 | 21.20 | -0.051 | 0.471 | 1.20 | 0.566 | / |
| Right Tilt | standard | 50%RB | 13 | 20450/829 | 22.00 | 21.20 | -0.113 | 0.434 | 1.20 | 0.522 | / |
| Right Cheek | standard | 100%RB | 0 | 20450/829 | 22.00 | 21.46 | -0.130 | 0.565 | 1.13 | 0.640 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 20525/836.5 | 23.00 | 22.26 | -0.042 | 0.812 | 1.19 | 0.963 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 20525/836.5 | 23.00 | 22.26 | -0.007 | 0.851 | 1.19 | 1.009 | / |
| Right Cheek | Battery 3 | 1RB | 25 | 20525/836.5 | 23.00 | 22.26 | -0.051 | 0.856 | 1.19 | 1.015 | / |
| Right Cheek | Repeated | 1RB | 25 | 20525/836.5 | 23.00 | 22.26 | 0.044 | 0.912 | 1.19 | 1.081 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | -0.010 | 0.205 | 1.15 | 0.235 | 106 |
| Front Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | 0.040 | 0.160 | 1.15 | 0.183 | / |
| Back Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | -0.010 | 0.180 | 1.18 | 0.213 | / |
| Front Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | -0.020 | 0.170 | 1.18 | 0.201 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | -0.050 | 0.310 | 1.15 | 0.355 | / |
| Front Side | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | 0.020 | 0.302 | 1.15 | 0.346 | / |
| Left Edge | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | 0.060 | 0.211 | 1.15 | 0.242 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 25 | 20600/844 | 23.50 | 22.91 | 0.020 | 0.274 | 1.15 | 0.314 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | -0.020 | 0.364 | 1.18 | 0.431 | 107 |
| Front Side | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | 0.030 | 0.306 | 1.18 | 0.362 | / |
| Left Edge | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | 0.130 | 0.155 | 1.18 | 0.183 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | 0.080 | 0.228 | 1.18 | 0.270 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | 0.110 | 0.351 | 1.18 | 0.415 | / |
| Back Side | Battery 2 | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | 0.090 | 0.344 | 1.18 | 0.407 | / |
| Back Side | Battery 3 | 50%RB | 13 | 20450/829 | 22.50 | 21.77 | -0.030 | 0.349 | 1.18 | 0.413 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 20525/836.5 | 1.170 | 1.110 | 1.05 |
| Right Cheek (Reduce Power) | 20525/836.5 | 0.980 | 0.912 | 1.07 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 23: LTE Band 7 (20MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | -0.041 | 0.398 | 1.17 | 0.464 | / |
| Left Tilt | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.150 | 0.376 | 1.17 | 0.439 | / |
| Right Cheek | standard | 1RB | 99 | 21350/2560 | 18.80 | 17.64 | 0.034 | 0.763 | 1.31 | 0.997 | / |
| | | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.026 | 0.969 | 1.17 | 1.131 | 108 |
| | | 1RB | 50 | 20850/2510 | 18.80 | 17.86 | 0.140 | 0.900 | 1.24 | 1.117 | / |
| Right Tilt | standard | 1RB | 99 | 21350/2560 | 18.80 | 17.64 | 0.050 | 0.744 | 1.31 | 0.972 | / |
| | | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.022 | 0.958 | 1.17 | 1.118 | / |
| | | 1RB | 50 | 20850/2510 | 18.80 | 17.86 | 0.140 | 0.733 | 1.24 | 0.910 | / |
| Left Cheek | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.190 | 0.342 | 1.22 | 0.416 | / |
| Left Tilt | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.021 | 0.305 | 1.22 | 0.371 | / |
| Right Cheek | standard | 50%RB | 0 | 21350/2560 | 17.80 | 16.68 | 0.023 | 0.721 | 1.29 | 0.933 | / |
| | | 50%RB | 25 | 21100/2535 | 17.80 | 16.90 | 0.021 | 0.806 | 1.23 | 0.992 | / |
| | | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.020 | 0.850 | 1.22 | 1.034 | / |
| Right Tilt | standard | 50%RB | 0 | 21350/2560 | 17.80 | 16.68 | 0.020 | 0.689 | 1.29 | 0.892 | / |
| | | 50%RB | 25 | 21100/2535 | 17.80 | 16.90 | 0.034 | 0.704 | 1.23 | 0.866 | / |
| | | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.130 | 0.740 | 1.22 | 0.900 | / |
| Right Cheek | standard | 100%RB | 0 | 21350/2560 | 17.80 | 16.75 | 0.180 | 0.720 | 1.27 | 0.917 | / |
| | | 100%RB | 0 | 21100/2535 | 17.80 | 16.82 | 0.110 | 0.812 | 1.25 | 1.018 | / |
| | | 100%RB | 0 | 20850/2510 | 17.80 | 16.65 | 0.032 | 0.743 | 1.30 | 0.968 | / |
| Right Tilt | standard | 100%RB | 0 | 21350/2560 | 17.80 | 16.75 | 0.110 | 0.683 | 1.27 | 0.870 | / |
| | | 100%RB | 0 | 21100/2535 | 17.80 | 16.82 | 0.150 | 0.728 | 1.25 | 0.912 | / |
| | | 100%RB | 0 | 20850/2510 | 17.80 | 16.65 | 0.022 | 0.664 | 1.30 | 0.865 | / |
| Right Cheek | SIM 2 | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.130 | 0.923 | 1.17 | 1.077 | / |
| Right Cheek | Battery 2 | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.020 | 0.935 | 1.17 | 1.091 | / |
| Right Cheek | Battery 3 | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | -0.050 | 0.921 | 1.17 | 1.075 | / |
| Right Cheek | Repeated | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.070 | 0.938 | 1.17 | 1.094 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.079 | 0.069 | 1.17 | 0.080 | / |
| Front Side | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.137 | 0.085 | 1.17 | 0.099 | 109 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.046 | 0.078 | 1.22 | 0.095 | / |
| Front Side | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.023 | 0.082 | 1.22 | 0.099 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.034 | 0.167 | 1.17 | 0.195 | / |
| Front Side | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.049 | 0.202 | 1.17 | 0.236 | 110 |
| Left Edge | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.120 | 0.183 | 1.17 | 0.214 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | -0.021 | 0.070 | 1.17 | 0.082 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.066 | 0.170 | 1.22 | 0.207 | / |
| Front Side | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.052 | 0.174 | 1.22 | 0.212 | / |
| Left Edge | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.080 | 0.156 | 1.22 | 0.190 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 0 | 20850/2510 | 17.80 | 16.95 | 0.110 | 0.067 | 1.22 | 0.082 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front Side | SIM 2 | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.025 | 0.189 | 1.17 | 0.221 | / |
| Front Side | Battery 2 | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | 0.150 | 0.191 | 1.17 | 0.223 | / |
| Front Side | Battery 3 | 1RB | 50 | 21100/2535 | 18.80 | 18.13 | -0.010 | 0.182 | 1.17 | 0.212 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| **Measurement Variability** | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek | 21100/2535 | 0.969 | 0.938 | 1.03 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 24: LTE Band 12 (20MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK, Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.020 | 0.836 | 1.13 | 0.945 | / |
| | | 1RB | 0 | 23095/707.5 | 24.00 | 23.45 | 0.006 | 0.811 | 1.14 | 0.920 | / |
| | | 1RB | 25 | 23060/704 | 24.00 | 23.32 | -0.020 | 0.751 | 1.17 | 0.878 | / |
| Left Tilt | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | -0.010 | 0.810 | 1.13 | 0.915 | / |
| | | 1RB | 0 | 23095/707.5 | 24.00 | 23.45 | -0.030 | 0.786 | 1.14 | 0.892 | / |
| | | 1RB | 25 | 23060/704 | 24.00 | 23.32 | -0.040 | 0.742 | 1.17 | 0.868 | / |
| Right Cheek | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.070 | 1.270 | 1.13 | 1.435 | 111 |
| | | 1RB | 0 | 23095/707.5 | 24.00 | 23.45 | 0.020 | 1.165 | 1.14 | 1.322 | / |
| | | 1RB | 25 | 23060/704 | 24.00 | 23.32 | -0.050 | 1.008 | 1.17 | 1.179 | / |
| Right Tilt | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | -0.010 | 1.165 | 1.13 | 1.316 | / |
| | | 1RB | 0 | 23095/707.5 | 24.00 | 23.45 | 0.020 | 0.975 | 1.14 | 1.107 | / |
| | | 1RB | 25 | 23060/704 | 24.00 | 23.32 | 0.060 | 0.865 | 1.17 | 1.012 | / |
| Left Cheek | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | -0.120 | 0.828 | 1.08 | 0.891 | / |
| | | 50%RB | 0 | 23095/707.5 | 23.40 | 21.96 | -0.020 | 0.669 | 1.39 | 0.932 | / |
| | | 50%RB | 13 | 23060/704 | 23.40 | 22.13 | 0.110 | 0.727 | 1.34 | 0.974 | / |
| Left Tilt | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | 0.050 | 0.740 | 1.08 | 0.797 | / |
| Right Cheek | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | 0.010 | 1.075 | 1.08 | 1.157 | / |
| | | 50%RB | 0 | 23095/707.5 | 23.40 | 21.96 | 0.060 | 0.813 | 1.39 | 1.133 | / |
| | | 50%RB | 13 | 23060/704 | 23.40 | 22.13 | -0.110 | 0.970 | 1.34 | 1.299 | / |
| Right Tilt | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | 0.010 | 1.075 | 1.08 | 1.157 | / |
| | | 50%RB | 0 | 23095/707.5 | 23.40 | 21.96 | 0.030 | 0.751 | 1.39 | 1.046 | / |
| | | 50%RB | 13 | 23060/704 | 23.40 | 22.13 | -0.040 | 0.780 | 1.34 | 1.045 | / |
| Left Cheek | standard | 100%RB | 0 | 23130/711 | 23.40 | 22.52 | 0.090 | 0.730 | 1.22 | 0.894 | / |
| | | 100%RB | 0 | 23095/707.5 | 23.40 | 21.43 | -0.040 | 0.722 | 1.57 | 1.136 | / |
| | | 100%RB | 0 | 23060/704 | 23.40 | 21.89 | 0.010 | 0.714 | 1.42 | 1.011 | / |
| Left Tilt | standard | 100%RB | 0 | 23130/711 | 23.40 | 22.52 | 0.020 | 0.710 | 1.22 | 0.869 | / |
| | | 100%RB | 0 | 23095/707.5 | 23.40 | 21.43 | 0.060 | 0.702 | 1.57 | 1.105 | / |
| | | 100%RB | 0 | 23060/704 | 23.40 | 21.89 | 0.120 | 0.689 | 1.42 | 0.975 | / |
| Right Cheek | standard | 100%RB | 0 | 23130/711 | 23.40 | 22.52 | 0.150 | 0.890 | 1.22 | 1.090 | / |
| | | 100%RB | 0 | 23095/707.5 | 23.40 | 21.43 | 0.010 | 0.790 | 1.57 | 1.243 | / |
| | | 100%RB | 0 | 23060/704 | 23.40 | 21.89 | -0.030 | 0.770 | 1.42 | 1.090 | / |
| Right Tilt | standard | 100%RB | 0 | 23130/711 | 23.40 | 22.52 | 0.060 | 0.760 | 1.22 | 0.931 | / |
| | | 100%RB | 0 | 23095/707.5 | 23.40 | 21.43 | -0.020 | 0.670 | 1.57 | 1.055 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 100%RB | 0 | 23060/704 | 23.40 | 21.89 | 0.130 | 0.620 | 1.42 | 0.878 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 23130/711 | 24.00 | 23.47 | -0.010 | 1.210 | 1.13 | 1.367 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.010 | 1.090 | 1.13 | 1.231 | / |
| Right Cheek | Battery 3 | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.120 | 1.130 | 1.13 | 1.277 | / |
| Right Cheek | Repeated | 1RB | 25 | 23130/711 | 24.00 | 23.47 | -0.040 | 1.210 | 1.13 | 1.367 | / |
| **Head SAR For Simultaneous Transmission (QPSK, Power Reduce)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 23130/711 | 23.50 | 22.68 | 0.014 | 0.626 | 1.21 | 0.756 | / |
| Left Tilt | standard | 1RB | 25 | 23130/711 | 23.50 | 22.68 | 0.004 | 0.600 | 1.21 | 0.725 | / |
| Right Cheek | standard | 1RB | 25 | 23130/711 | 23.50 | 22.68 | -0.024 | 1.040 | 1.21 | 1.256 | 112 |
| | | 1RB | 0 | 23095/707.5 | 23.50 | 22.37 | 0.030 | 0.955 | 1.30 | 1.239 | / |
| | | 1RB | 25 | 23060/704 | 23.50 | 22.31 | -0.010 | 0.798 | 1.32 | 1.050 | / |
| Right Tilt | standard | 1RB | 25 | 23130/711 | 23.50 | 22.68 | 0.004 | 0.827 | 1.21 | 0.999 | / |
| | | 1RB | 0 | 23095/707.5 | 23.50 | 22.37 | 0.014 | 0.765 | 1.30 | 0.992 | / |
| | | 1RB | 25 | 23060/704 | 23.50 | 22.31 | 0.027 | 0.655 | 1.32 | 0.861 | / |
| Left Cheek | standard | 50%RB | 13 | 23130/711 | 22.50 | 22.34 | -0.033 | 0.618 | 1.04 | 0.641 | / |
| Left Tilt | standard | 50%RB | 13 | 23130/711 | 22.50 | 22.34 | 0.024 | 0.530 | 1.04 | 0.550 | / |
| Right Cheek | standard | 50%RB | 13 | 23130/711 | 22.50 | 22.34 | 0.010 | 0.833 | 1.04 | 0.864 | / |
| | | 50%RB | 0 | 23095/707.5 | 22.50 | 21.20 | 0.027 | 0.603 | 1.35 | 0.813 | / |
| | | 50%RB | 13 | 23060/704 | 22.50 | 21.34 | -0.030 | 0.760 | 1.31 | 0.993 | / |
| Right Tilt | standard | 50%RB | 13 | 23130/711 | 22.50 | 22.34 | 0.010 | 0.815 | 1.04 | 0.846 | / |
| | | 50%RB | 0 | 23095/707.5 | 22.50 | 21.20 | 0.017 | 0.541 | 1.35 | 0.730 | / |
| | | 50%RB | 13 | 23060/704 | 22.50 | 21.34 | -0.006 | 0.570 | 1.31 | 0.745 | / |
| Right Cheek | standard | 100%RB | 0 | 23130/711 | 22.50 | 21.72 | 0.057 | 0.660 | 1.20 | 0.790 | / |
| Right Tilt | standard | 100%RB | 0 | 23130/711 | 22.50 | 21.72 | 0.027 | 0.550 | 1.20 | 0.658 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 23130/711 | 23.50 | 22.68 | 0.004 | 0.980 | 1.21 | 1.184 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 23130/711 | 23.50 | 22.68 | 0.010 | 0.987 | 1.21 | 1.192 | / |
| Right Cheek | Battery 3 | 1RB | 25 | 23130/711 | 23.50 | 22.68 | 0.047 | 0.962 | 1.21 | 1.162 | / |
| Right Cheek | Repeated | 1RB | 25 | 23130/711 | 23.50 | 22.68 | 0.034 | 0.997 | 1.21 | 1.204 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.090 | 0.354 | 1.13 | 0.400 | 113 |
| Front Side | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | -0.030 | 0.294 | 1.13 | 0.332 | / |
| Back Side | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | 0.050 | 0.335 | 1.08 | 0.361 | / |
| Front Side | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | -0.110 | 0.279 | 1.08 | 0.300 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.010 | 0.621 | 1.13 | 0.702 | 114 |
| Front Side | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | -0.010 | 0.467 | 1.13 | 0.528 | / |
| Left Edge | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.080 | 0.394 | 1.13 | 0.445 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.040 | 0.357 | 1.13 | 0.403 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Back Side | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | 0.030 | 0.572 | 1.08 | 0.616 | / |
| Front Side | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | -0.130 | 0.451 | 1.08 | 0.485 | / |
| Left Edge | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | -0.050 | 0.518 | 1.08 | 0.558 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 13 | 23130/711 | 23.40 | 23.08 | -0.030 | 0.329 | 1.08 | 0.354 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.010 | 0.593 | 1.13 | 0.670 | / |
| Back Side | Battery 2 | 1RB | 25 | 23130/711 | 24.00 | 23.47 | -0.090 | 0.561 | 1.13 | 0.634 | / |
| Back Side | Battery 3 | 1RB | 25 | 23130/711 | 24.00 | 23.47 | 0.020 | 0.564 | 1.13 | 0.637 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 23130/711 | 1.270 | 1.210 | 1.05 |
| Right Cheek (Reduce Power) | 23130/711 | 1.040 | 0.997 | 1.04 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 25: LTE Band 17 (10MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK, Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 23800/711 | 23.80 | 23.37 | 0.020 | 0.950 | 1.10 | 1.049 | / |
| | | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.012 | 0.900 | 1.09 | 0.982 | / |
| | | 1RB | 25 | 23780/709 | 23.80 | 23.38 | 0.011 | 0.870 | 1.10 | 0.958 | / |
| Left Tilt | standard | 1RB | 25 | 23800/711 | 23.80 | 23.37 | -0.010 | 0.880 | 1.10 | 0.972 | / |
| | | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.010 | 0.840 | 1.09 | 0.917 | / |
| | | 1RB | 25 | 23780/709 | 23.80 | 23.38 | 0.045 | 0.830 | 1.10 | 0.914 | / |
| Right Cheek | standard | 1RB | 25 | 23800/711 | 23.80 | 23.37 | 0.010 | 1.303 | 1.10 | 1.439 | / |
| | | 1RB | 25 | 23790/710 | 23.80 | 23.42 | -0.190 | 1.140 | 1.09 | 1.244 | / |
| | | 1RB | 25 | 23780/709 | 23.80 | 23.38 | -0.023 | 1.100 | 1.10 | 1.212 | / |
| Right Tilt | standard | 1RB | 25 | 23800/711 | 23.80 | 23.37 | -0.030 | 1.180 | 1.10 | 1.303 | / |
| | | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.170 | 1.090 | 1.09 | 1.190 | / |
| | | 1RB | 25 | 23780/709 | 23.80 | 23.38 | -0.020 | 0.999 | 1.10 | 1.100 | / |
| Left Cheek | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.030 | 0.830 | 1.11 | 0.921 | / |
| | | 50%RB | 25 | 23790/710 | 23.00 | 22.40 | 0.024 | 0.820 | 1.15 | 0.941 | / |
| | | 50%RB | 13 | 23780/709 | 23.00 | 22.24 | 0.010 | 0.750 | 1.19 | 0.893 | / |
| Left Tilt | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | -0.036 | 0.740 | 1.11 | 0.821 | / |
| | | 50%RB | 25 | 23790/710 | 23.00 | 22.40 | -0.024 | 0.726 | 1.15 | 0.834 | / |
| | | 50%RB | 13 | 23780/709 | 23.00 | 22.24 | -0.090 | 0.718 | 1.19 | 0.855 | / |
| Right Cheek | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.020 | 1.170 | 1.11 | 1.298 | / |
| | | 50%RB | 25 | 23790/710 | 23.00 | 22.40 | 0.010 | 1.110 | 1.15 | 1.274 | / |
| | | 50%RB | 13 | 23780/709 | 23.00 | 22.24 | 0.031 | 1.010 | 1.19 | 1.203 | / |
| Right Tilt | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.027 | 0.980 | 1.11 | 1.087 | / |
| | | 50%RB | 25 | 23790/710 | 23.00 | 22.40 | -0.130 | 0.970 | 1.15 | 1.114 | / |
| | | 50%RB | 13 | 23780/709 | 23.00 | 22.24 | 0.140 | 0.960 | 1.19 | 1.144 | / |
| Left Cheek | standard | 100%RB | 0 | 23800/711 | 23.00 | 22.38 | 0.090 | 0.793 | 1.15 | 0.915 | / |
| | | 100%RB | 0 | 23790/710 | 23.00 | 22.36 | -0.060 | 0.750 | 1.16 | 0.869 | / |
| | | 100%RB | 0 | 23780/709 | 23.00 | 22.31 | -0.040 | 0.710 | 1.17 | 0.832 | / |
| Left Tilt | standard | 100%RB | 0 | 23800/711 | 23.00 | 22.38 | 0.028 | 0.732 | 1.15 | 0.844 | / |
| | | 100%RB | 0 | 23790/710 | 23.00 | 22.36 | 0.110 | 0.721 | 1.16 | 0.835 | / |
| | | 100%RB | 0 | 23780/709 | 23.00 | 22.31 | 0.045 | 0.710 | 1.17 | 0.832 | / |
| Right Cheek | standard | 100%RB | 0 | 23800/711 | 23.00 | 22.38 | -0.020 | 1.120 | 1.15 | 1.292 | / |
| | | 100%RB | 0 | 23790/710 | 23.00 | 22.36 | 0.110 | 1.080 | 1.16 | 1.251 | / |
| | | 100%RB | 0 | 23780/709 | 23.00 | 22.31 | 0.190 | 1.020 | 1.17 | 1.196 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Right Tilt | standard | 100%RB | 0 | 23800/711 | 23.00 | 22.38 | -0.150 | 1.050 | 1.15 | 1.211 | / |
| | | 100%RB | 0 | 23790/710 | 23.00 | 22.36 | 0.090 | 0.920 | 1.16 | 1.066 | / |
| | | 100%RB | 0 | 23780/709 | 23.00 | 22.31 | 0.010 | 0.890 | 1.17 | 1.043 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 23800/711 | 23.80 | 23.37 | 0.040 | 1.304 | 1.10 | 1.440 | 115 |
| Right Cheek | No Holder | 1RB | 25 | 23800/711 | 23.80 | 23.37 | 0.120 | 1.270 | 1.10 | 1.402 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 23800/711 | 23.80 | 23.37 | 0.080 | 1.200 | 1.10 | 1.325 | / |
| Right Cheek | Battery 3 | 1RB | 25 | 23800/711 | 23.80 | 23.37 | 0.020 | 1.230 | 1.10 | 1.358 | / |
| Right Cheek | Repeated | 1RB | 25 | 23800/711 | 23.80 | 23.37 | -0.090 | 1.290 | 1.10 | 1.424 | / |
| **Head SAR For Simultaneous Transmission (QPSK, Power Reduce)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 25 | 23790/710 | 23.00 | 22.48 | 0.009 | 0.656 | 1.13 | 0.739 | / |
| Left Tilt | standard | 1RB | 25 | 23790/710 | 23.00 | 22.48 | 0.007 | 0.613 | 1.13 | 0.691 | / |
| Right Cheek | standard | 1RB | 25 | 23800/711 | 23.00 | 22.34 | -0.060 | 0.973 | 1.16 | 1.133 | 116 |
| | | 1RB | 25 | 23790/710 | 23.00 | 22.48 | -0.139 | 0.832 | 1.13 | 0.938 | / |
| | | 1RB | 25 | 23780/709 | 23.00 | 22.37 | -0.017 | 0.803 | 1.16 | 0.928 | / |
| Right Tilt | standard | 1RB | 25 | 23800/711 | 23.00 | 22.34 | -0.022 | 0.861 | 1.16 | 1.002 | / |
| | | 1RB | 25 | 23790/710 | 23.00 | 22.48 | 0.124 | 0.795 | 1.13 | 0.896 | / |
| | | 1RB | 25 | 23780/709 | 23.00 | 22.37 | -0.015 | 0.729 | 1.16 | 0.843 | / |
| Left Cheek | standard | 50%RB | 13 | 23800/711 | 22.00 | 21.59 | 0.022 | 0.505 | 1.10 | 0.555 | / |
| Left Tilt | standard | 50%RB | 13 | 23800/711 | 22.00 | 21.59 | -0.026 | 0.439 | 1.10 | 0.482 | / |
| Right Cheek | standard | 50%RB | 13 | 23800/711 | 22.00 | 21.59 | 0.015 | 0.754 | 1.10 | 0.829 | / |
| | | 50%RB | 13 | 23790/710 | 22.00 | 21.39 | 0.023 | 0.729 | 1.15 | 0.839 | / |
| | | 50%RB | 13 | 23780/709 | 22.00 | 21.27 | 0.070 | 0.718 | 1.18 | 0.849 | / |
| Right Tilt | standard | 50%RB | 13 | 23800/711 | 22.00 | 21.59 | 0.020 | 0.615 | 1.10 | 0.676 | / |
| Right Cheek | standard | 100%RB | 0 | 23800/711 | 22.00 | 21.45 | -0.015 | 0.717 | 1.14 | 0.814 | / |
| | | 100%RB | 0 | 23790/710 | 22.00 | 21.41 | -0.090 | 0.709 | 1.15 | 0.812 | / |
| | | 100%RB | 0 | 23780/709 | 22.00 | 21.31 | 0.050 | 0.698 | 1.17 | 0.818 | / |
| Right Tilt | standard | 100%RB | 0 | 23800/711 | 22.00 | 21.45 | -0.110 | 0.646 | 1.14 | 0.733 | / |
| Right Cheek | SIM 2 | 1RB | 25 | 23800/711 | 23.00 | 22.34 | 0.029 | 0.966 | 1.16 | 1.125 | / |
| Right Cheek | Battery 2 | 1RB | 25 | 23800/711 | 23.00 | 22.34 | 0.059 | 0.876 | 1.16 | 1.020 | / |
| Right Cheek | Battery 3 | 1RB | 25 | 23800/711 | 23.00 | 22.34 | 0.015 | 0.898 | 1.16 | 1.045 | / |
| Right Cheek | Repeated | 1RB | 25 | 23800/711 | 23.00 | 22.34 | -0.024 | 0.951 | 1.16 | 1.107 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.020 | 0.347 | 1.09 | 0.379 | 117 |
| Front Side | standard | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.130 | 0.294 | 1.09 | 0.321 | / |
| Back Side | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.035 | 0.299 | 1.11 | 0.332 | / |
| Front Side | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.078 | 0.260 | 1.11 | 0.288 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.013 | 0.599 | 1.09 | 0.654 | 118 |
| Front Side | standard | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.050 | 0.482 | 1.09 | 0.526 | / |
| Left Edge | standard | 1RB | 25 | 23790/710 | 23.80 | 23.42 | -0.023 | 0.402 | 1.09 | 0.439 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 25 | 23790/710 | 23.80 | 23.42 | -0.056 | 0.407 | 1.09 | 0.444 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.030 | 0.481 | 1.11 | 0.534 | / |
| Front Side | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.020 | 0.387 | 1.11 | 0.429 | / |
| Left Edge | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | -0.010 | 0.335 | 1.11 | 0.372 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 13 | 23800/711 | 23.00 | 22.55 | 0.045 | 0.339 | 1.11 | 0.376 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.021 | 0.545 | 1.09 | 0.595 | / |
| Back Side | Battery 2 | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.090 | 0.529 | 1.09 | 0.577 | / |
| Back Side | Battery 3 | 1RB | 25 | 23790/710 | 23.80 | 23.42 | 0.170 | 0.567 | 1.09 | 0.619 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

5. According to TCBC workshop 2016-10-12-4.3 RF Exposure General Issues 101216 - KC，When the highest reported SAR of an antenna is > 1.2 W/kg, holder perturbation verification is required for each antenna, using the highest SAR configuration among all applicable frequency bands.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 23800/711 | 1.304 | 1.290 | 1.01 |
| Right Cheek (Reduce Power) | 23800/711 | 0.973 | 0.951 | 1.02 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 26: LTE Band 26 (15MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK, Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | 0.000 | 0.680 | 1.20 | 0.818 | / |
| | | 1RB | 38 | 26865/831.5 | 24.00 | 23.03 | 0.020 | 0.610 | 1.25 | 0.763 | / |
| | | 1RB | 38 | 26775/822.5 | 24.00 | 22.90 | 0.120 | 0.570 | 1.29 | 0.734 | / |
| Left Tilt | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | 0.020 | 0.599 | 1.20 | 0.720 | / |
| Right Cheek | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | -0.060 | 0.695 | 1.20 | 0.836 | / |
| | | 1RB | 38 | 26865/831.5 | 24.00 | 23.03 | 0.030 | 0.640 | 1.25 | 0.800 | / |
| | | 1RB | 38 | 26775/822.5 | 24.00 | 22.90 | 0.010 | 0.550 | 1.29 | 0.709 | / |
| Right Tilt | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | -0.190 | 0.666 | 1.20 | 0.801 | / |
| | | 1RB | 38 | 26865/831.5 | 24.00 | 23.03 | 0.080 | 0.620 | 1.25 | 0.775 | / |
| | | 1RB | 38 | 26775/822.5 | 24.00 | 22.90 | -0.090 | 0.520 | 1.29 | 0.670 | / |
| Left Cheek | standard | 50%RB | 18 | 26965/841.5 | 24.00 | 23.09 | 0.021 | 0.660 | 1.23 | 0.814 | / |
| | | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.099 | 0.689 | 1.23 | 0.846 | / |
| | | 50%RB | 39 | 26775/822.5 | 24.00 | 22.70 | 0.050 | 0.590 | 1.35 | 0.796 | / |
| Left Tilt | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.087 | 0.576 | 1.23 | 0.707 | / |
| Right Cheek | standard | 50%RB | 18 | 26965/841.5 | 24.00 | 23.09 | -0.090 | 0.721 | 1.23 | 0.889 | / |
| | | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.030 | 0.764 | 1.23 | 0.938 | 119 |
| | | 50%RB | 39 | 26775/822.5 | 24.00 | 22.70 | 0.120 | 0.687 | 1.35 | 0.927 | / |
| Right Tilt | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | -0.120 | 0.425 | 1.23 | 0.522 | / |
| Left Cheek | standard | 100%RB | 0 | 26865/831.5 | 24.00 | 22.93 | 0.104 | 0.577 | 1.28 | 0.738 | / |
| Right Cheek | standard | 100%RB | 0 | 26865/831.5 | 24.00 | 22.93 | 0.088 | 0.601 | 1.28 | 0.769 | / |
| Right Tilt | standard | 100%RB | 0 | 26865/831.5 | 24.00 | 22.93 | 0.061 | 0.584 | 1.28 | 0.747 | / |
| Right Cheek | SIM 2 | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.028 | 0.759 | 1.23 | 0.932 | / |
| Right Cheek | Battery 2 | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.021 | 0.749 | 1.23 | 0.919 | / |
| Right Cheek | Battery 3 | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.120 | 0.737 | 1.23 | 0.905 | / |
| **Head SAR For Simultaneous Transmission (QPSK, Power Reduce)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 38 | 26965/841.5 | 23.00 | 22.31 | 0.072 | 0.487 | 1.17 | 0.571 | / |
| Left Tilt | standard | 1RB | 38 | 26965/841.5 | 23.00 | 22.31 | 0.027 | 0.402 | 1.17 | 0.471 | / |
| Right Cheek | standard | 1RB | 38 | 26965/841.5 | 23.00 | 22.31 | -0.130 | 0.634 | 1.17 | 0.743 | 120 |
| Right Tilt | standard | 1RB | 38 | 26965/841.5 | 23.00 | 22.31 | -0.078 | 0.483 | 1.17 | 0.566 | / |
| Left Cheek | standard | 50%RB | 0 | 26865/831.5 | 22.50 | 21.99 | 0.067 | 0.525 | 1.12 | 0.590 | / |
| Left Tilt | standard | 50%RB | 0 | 26865/831.5 | 22.50 | 21.99 | 0.061 | 0.411 | 1.12 | 0.462 | / |
| Right Cheek | standard | 50%RB | 0 | 26865/831.5 | 22.50 | 21.99 | 0.070 | 0.590 | 1.12 | 0.664 | / |
| Right Tilt | standard | 50%RB | 0 | 26865/831.5 | 22.50 | 21.99 | -0.043 | 0.249 | 1.12 | 0.280 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Right Cheek | SIM 2 | 1RB | 38 | 26965/841.5 | 23.00 | 22.31 | 0.031 | 0.618 | 1.17 | 0.724 | / |
| Right Cheek | Battery 2 | 1RB | 38 | 26965/841.5 | 23.00 | 22.31 | 0.028 | 0.597 | 1.17 | 0.700 | / |
| Right Cheek | Battery 3 | 1RB | 38 | 26965/841.5 | 23.00 | 22.31 | 0.077 | 0.565 | 1.17 | 0.662 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | -0.030 | 0.175 | 1.20 | 0.210 | 121 |
| Front Side | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | 0.088 | 0.145 | 1.20 | 0.174 | / |
| Back Side | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | -0.050 | 0.161 | 1.23 | 0.198 | / |
| Front Side | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.130 | 0.074 | 1.23 | 0.091 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | 0.000 | 0.391 | 1.20 | 0.470 | 122 |
| Front Side | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | -0.150 | 0.240 | 1.20 | 0.289 | / |
| Left Edge | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | 0.050 | 0.156 | 1.20 | 0.188 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | -0.060 | 0.257 | 1.20 | 0.309 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | -0.040 | 0.332 | 1.23 | 0.408 | / |
| Front Side | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | -0.082 | 0.190 | 1.23 | 0.233 | / |
| Left Edge | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | -0.036 | 0.175 | 1.23 | 0.215 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 0 | 26865/831.5 | 24.00 | 23.11 | 0.054 | 0.230 | 1.23 | 0.282 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | 0.086 | 0.385 | 1.20 | 0.463 | / |
| Back Side | Battery 2 | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | -0.040 | 0.352 | 1.20 | 0.423 | / |
| Back Side | Battery 3 | 1RB | 38 | 26965/841.5 | 24.00 | 23.20 | 0.030 | 0.334 | 1.20 | 0.402 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 27: LTE Band 38 (20MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK, Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | -0.059 | 0.448 | 1.11 | 0.497 | / |
| Left Tilt | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | -0.090 | 0.497 | 1.11 | 0.551 | / |
| Right Cheek | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | -0.028 | 1.230 | 1.11 | 1.364 | / |
| | | 1RB | 50 | 38000/2595 | 19.00 | 18.54 | 0.110 | 1.250 | 1.11 | 1.390 | 123 |
| | | 1RB | 50 | 37850/2580 | 19.00 | 18.24 | 0.026 | 0.970 | 1.19 | 1.156 | / |
| Right Tilt | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.050 | 1.130 | 1.11 | 1.253 | / |
| | | 1RB | 50 | 38000/2595 | 19.00 | 18.54 | 0.040 | 1.130 | 1.11 | 1.256 | / |
| | | 1RB | 50 | 37850/2580 | 19.00 | 18.24 | 0.040 | 0.849 | 1.19 | 1.011 | / |
| Left Cheek | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | -0.140 | 0.350 | 1.10 | 0.385 | / |
| Left Tilt | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.070 | 0.397 | 1.10 | 0.436 | / |
| Right Cheek | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.026 | 0.932 | 1.10 | 1.024 | / |
| | | 50%RB | 25 | 38000/2595 | 18.00 | 17.53 | 0.170 | 0.988 | 1.11 | 1.101 | / |
| | | 50%RB | 0 | 37850/2580 | 18.00 | 17.14 | 0.020 | 0.697 | 1.22 | 0.850 | / |
| Right Tilt | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.080 | 0.842 | 1.10 | 0.925 | / |
| | | 50%RB | 25 | 38000/2595 | 18.00 | 17.53 | -0.020 | 0.901 | 1.11 | 1.004 | / |
| | | 50%RB | 0 | 37850/2580 | 18.00 | 17.14 | 0.070 | 0.646 | 1.22 | 0.787 | / |
| Right Cheek | standard | 100%RB | 0 | 38150/2610 | 18.00 | 17.47 | 0.030 | 0.912 | 1.13 | 1.030 | / |
| | | 100%RB | 0 | 38000/2595 | 18.00 | 17.36 | 0.090 | 0.903 | 1.16 | 1.046 | / |
| | | 100%RB | 0 | 37850/2580 | 18.00 | 16.98 | -0.170 | 0.869 | 1.26 | 1.099 | / |
| Right Tilt | standard | 100%RB | 0 | 38150/2610 | 18.00 | 17.47 | 0.050 | 0.829 | 1.13 | 0.937 | / |
| | | 100%RB | 0 | 38000/2595 | 18.00 | 17.36 | -0.160 | 0.854 | 1.16 | 0.990 | / |
| | | 100%RB | 0 | 37850/2580 | 18.00 | 16.98 | -0.090 | 0.836 | 1.26 | 1.057 | / |
| Right Cheek | SIM 2 | 1RB | 50 | 38000/2595 | 19.00 | 18.54 | 0.080 | 1.180 | 1.11 | 1.312 | / |
| Right Cheek | Battery 2 | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.010 | 1.140 | 1.11 | 1.264 | / |
| Right Cheek | Battery 2 | 1RB | 50 | 38000/2595 | 19.00 | 18.54 | 0.070 | 1.100 | 1.11 | 1.223 | / |
| Right Cheek | Battery 3 | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.122 | 1.090 | 1.11 | 1.209 | / |
| Right Cheek | Battery 3 | 1RB | 50 | 38000/2595 | 19.00 | 18.54 | 0.010 | 1.160 | 1.11 | 1.290 | / |
| Right Cheek | Repeated | 1RB | 50 | 38000/2595 | 19.00 | 18.54 | 0.017 | 1.180 | 1.11 | 1.312 | / |
| **Head SAR For Simultaneous Transmission (QPSK, Power Reduce)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 50 | 38150/2610 | 18.00 | 17.39 | 0.054 | 0.307 | 1.15 | 0.353 | / |
| Left Tilt | standard | 1RB | 50 | 38150/2610 | 18.00 | 17.39 | 0.038 | 0.332 | 1.15 | 0.382 | / |
| Right Cheek | standard | 1RB | 50 | 38150/2610 | 18.00 | 17.39 | 0.069 | 0.698 | 1.15 | 0.803 | / |
| | | 1RB | 50 | 38000/2595 | 18.00 | 17.35 | 0.026 | 0.709 | 1.16 | 0.823 | / |
| | | 1RB | 50 | 37850/2580 | 18.00 | 17.02 | 0.096 | 0.568 | 1.25 | 0.712 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Right Tilt | standard | 1RB | 50 | 38150/2610 | 18.00 | 17.39 | 0.108 | 0.648 | 1.15 | 0.746 | / |
| Left Cheek | standard | 50%RB | 25 | 38150/2610 | 17.00 | 16.39 | 0.013 | 0.258 | 1.15 | 0.297 | / |
| Left Tilt | standard | 50%RB | 25 | 38150/2610 | 17.00 | 16.39 | 0.118 | 0.282 | 1.15 | 0.325 | / |
| Right Cheek | standard | 50%RB | 25 | 38150/2610 | 17.00 | 16.39 | 0.096 | 0.549 | 1.15 | 0.632 | / |
| Right Tilt | standard | 50%RB | 25 | 38150/2610 | 17.00 | 16.39 | 0.123 | 0.504 | 1.15 | 0.580 | / |
| Right Cheek | standard | 100%RB | 0 | 38150/2610 | 17.00 | 16.28 | 0.026 | 0.429 | 1.18 | 0.506 | / |
| Right Cheek | SIM 2 | 1RB | 50 | 38000/2595 | 18.00 | 17.35 | 0.123 | 0.673 | 1.16 | 0.782 | / |
| Right Cheek | Battery 2 | 1RB | 50 | 38000/2595 | 18.00 | 17.35 | 0.180 | 0.834 | 1.16 | 0.969 | / |
| Right Cheek | Battery 3 | 1RB | 50 | 38000/2595 | 18.00 | 17.35 | 0.026 | 0.846 | 1.16 | 0.983 | 124 |
| Right Cheek | Repeated | 1RB | 50 | 38000/2595 | 18.00 | 17.35 | 0.072 | 0.757 | 1.16 | 0.879 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | -0.060 | 0.153 | 1.11 | 0.170 | 125 |
| Front Side | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.018 | 0.132 | 1.11 | 0.146 | / |
| Back Side | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.020 | 0.116 | 1.10 | 0.127 | / |
| Front Side | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.057 | 0.092 | 1.10 | 0.101 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.060 | 0.274 | 1.11 | 0.304 | 126 |
| Front Side | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | -0.030 | 0.181 | 1.11 | 0.201 | / |
| Left Edge | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.120 | 0.158 | 1.11 | 0.175 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.081 | 0.031 | 1.11 | 0.035 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.052 | 0.200 | 1.10 | 0.220 | / |
| Front Side | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | -0.119 | 0.132 | 1.10 | 0.145 | / |
| Left Edge | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.042 | 0.107 | 1.10 | 0.118 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 25 | 38150/2610 | 18.00 | 17.59 | 0.097 | 0.021 | 1.10 | 0.023 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.018 | 0.266 | 1.11 | 0.295 | / |
| Back Side | Battery 2 | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.044 | 0.272 | 1.11 | 0.302 | / |
| Back Side | Battery 3 | 1RB | 50 | 38150/2610 | 19.00 | 18.55 | 0.029 | 0.225 | 1.11 | 0.250 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 38000/2595 | 1.250 | 1.180 | 1.06 |
| Right Cheek (Reduce Power) | 38000/2595 | 0.846 | 0.757 | 1.12 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 28: LTE Band 41 (20MHz, Second-antenna)**

| Test Position | Cover Type | RB size | RB offset | Channel/ Frequency (MHz) | Maximum Allowed Power (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (QPSK, Full Power)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.010 | 0.571 | 1.07 | 0.613 | / |
| Left Tilt | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | -0.120 | 0.554 | 1.07 | 0.595 | / |
| Right Cheek | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.030 | 1.290 | 1.07 | 1.385 | 127 |
| | | 1RB | 50 | 40620/2593 | 18.00 | 17.61 | 0.023 | 1.210 | 1.09 | 1.324 | / |
| | | 1RB | 0 | 40340/2565 | 18.00 | 17.24 | 0.045 | 1.056 | 1.19 | 1.258 | / |
| Right Tilt | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | -0.040 | 1.037 | 1.07 | 1.114 | / |
| | | 1RB | 50 | 40620/2593 | 18.00 | 17.61 | 0.150 | 0.943 | 1.09 | 1.032 | / |
| | | 1RB | 0 | 40340/2565 | 18.00 | 17.24 | 0.110 | 0.905 | 1.19 | 1.078 | / |
| Left Cheek | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | 0.061 | 0.449 | 1.09 | 0.490 | / |
| Left Tilt | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | -0.013 | 0.438 | 1.09 | 0.478 | / |
| Right Cheek | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | 0.110 | 1.028 | 1.09 | 1.122 | / |
| | | 50%RB | 0 | 40620/2593 | 17.00 | 16.59 | 0.030 | 0.956 | 1.10 | 1.051 | / |
| | | 50%RB | 25 | 40340/2565 | 17.00 | 16.14 | 0.100 | 0.742 | 1.22 | 0.904 | / |
| Right Tilt | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | 0.020 | 0.907 | 1.09 | 0.990 | / |
| | | 50%RB | 0 | 40620/2593 | 17.00 | 16.59 | -0.080 | 0.867 | 1.10 | 0.953 | / |
| | | 50%RB | 25 | 40340/2565 | 17.00 | 16.14 | -0.130 | 0.818 | 1.22 | 0.997 | / |
| Right Cheek | standard | 100%RB | 0 | 41140/2645 | 17.00 | 16.44 | 0.029 | 0.880 | 1.14 | 1.001 | / |
| | | 100%RB | 0 | 40620/2593 | 17.00 | 16.39 | 0.060 | 0.790 | 1.15 | 0.909 | / |
| | | 100%RB | 0 | 40340/2565 | 17.00 | 16.01 | -0.020 | 0.782 | 1.26 | 0.982 | / |
| Right Tilt | standard | 100%RB | 0 | 41140/2645 | 17.00 | 16.44 | -0.026 | 0.863 | 1.14 | 0.982 | / |
| | | 100%RB | 0 | 40620/2593 | 17.00 | 16.39 | 0.180 | 0.835 | 1.15 | 0.961 | / |
| | | 100%RB | 0 | 40340/2565 | 17.00 | 16.01 | -0.120 | 0.841 | 1.26 | 1.056 | / |
| Right Cheek | SIM 2 | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.044 | 1.220 | 1.07 | 1.310 | / |
| Right Cheek | Battery 2 | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.150 | 0.946 | 1.07 | 1.016 | / |
| Right Cheek | Battery 2 | 1RB | 50 | 40620/2593 | 18.00 | 17.61 | 0.048 | 1.112 | 1.09 | 1.216 | / |
| Right Cheek | Battery 3 | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | -0.020 | 1.020 | 1.07 | 1.095 | / |
| Right Cheek | Battery 3 | 1RB | 50 | 40620/2593 | 18.00 | 17.61 | 0.018 | 1.107 | 1.09 | 1.211 | / |
| Right Cheek | Repeated | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.146 | 1.180 | 1.07 | 1.267 | / |
| **Head SAR For Simultaneous Transmission (QPSK, Power Reduce)** | | | | | | | | | | | |
| Left Cheek | standard | 1RB | 99 | 41140/2645 | 17.00 | 16.61 | 0.005 | 0.262 | 1.09 | 0.287 | / |
| Left Tilt | standard | 1RB | 99 | 41140/2645 | 17.00 | 16.61 | -0.060 | 0.254 | 1.09 | 0.278 | / |
| Right Cheek | standard | 1RB | 99 | 41140/2645 | 17.00 | 16.61 | 0.140 | 0.606 | 1.09 | 0.663 | 128 |
| Right Tilt | standard | 1RB | 99 | 41140/2645 | 17.00 | 16.61 | -0.020 | 0.495 | 1.09 | 0.542 | / |
| Left Cheek | standard | 50%RB | 25 | 41140/2645 | 16.00 | 15.50 | 0.030 | 0.201 | 1.12 | 0.226 | / |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Left Tilt | standard | 50%RB | 25 | 41140/2645 | 16.00 | 15.50 | -0.006 | 0.196 | 1.12 | 0.220 | / |
| Right Cheek | standard | 50%RB | 25 | 41140/2645 | 16.00 | 15.50 | 0.055 | 0.491 | 1.12 | 0.551 | / |
| Right Tilt | standard | 50%RB | 25 | 41140/2645 | 16.00 | 15.50 | 0.010 | 0.430 | 1.12 | 0.482 | / |
| Right Cheek | SIM 2 | 1RB | 99 | 41140/2645 | 17.00 | 16.61 | 0.002 | 0.587 | 1.09 | 0.642 | / |
| Right Cheek | Battery 2 | 1RB | 99 | 41140/2645 | 17.00 | 16.61 | 0.022 | 0.604 | 1.09 | 0.661 | / |
| Right Cheek | Battery 3 | 1RB | 99 | 41140/2645 | 17.00 | 16.61 | 0.100 | 0.606 | 1.09 | 0.663 | / |
| **Body-worn (QPSK, Distance 15mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | -0.090 | 0.105 | 1.07 | 0.113 | / |
| Front Side | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.040 | 0.128 | 1.07 | 0.137 | 129 |
| Back Side | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | -0.110 | 0.077 | 1.09 | 0.084 | / |
| Front Side | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | -0.050 | 0.094 | 1.09 | 0.103 | / |
| **Hotspot (QPSK, Distance 10mm)** | | | | | | | | | | | |
| Back Side | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.021 | 0.229 | 1.07 | 0.246 | 130 |
| Front Side | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.022 | 0.187 | 1.07 | 0.201 | / |
| Left Edge | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.151 | 0.195 | 1.07 | 0.209 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.142 | 0.092 | 1.07 | 0.098 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | 0.116 | 0.186 | 1.09 | 0.203 | / |
| Front Side | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | 0.107 | 0.137 | 1.09 | 0.150 | / |
| Left Edge | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | 0.079 | 0.140 | 1.09 | 0.153 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 50%RB | 25 | 41140/2645 | 17.00 | 16.62 | 0.035 | 0.060 | 1.09 | 0.066 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | SIM 2 | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.120 | 0.208 | 1.07 | 0.223 | / |
| Back Side | Battery 2 | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | -0.140 | 0.211 | 1.07 | 0.227 | / |
| Back Side | Battery 3 | 1RB | 99 | 41140/2645 | 18.00 | 17.69 | 0.090 | 0.202 | 1.07 | 0.217 | / |

Note: 1.The value with blue color is the maximum SAR Value of each test band.

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is not required for such test configuration(s).

3. For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are ≥ 0.8 W/kg.

4. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| Measurement Variability | | | | |
|---|---|---|---|---|
| **Test Position** | **Channel/ Frequency(MHz)** | **MAX Measured $SAR_{1g}$ (W/kg)** | **1st Repeated $SAR_{1g}$ (W/kg)** | **Ratio** |
| Right Cheek (Full Power) | 41140/2645 | 1.290 | 1.180 | 1.09 |

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

**Table 29: Wi-Fi (2.4G)**

**Antenna 1**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11b | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | | |
| Left Cheek | standard | 11/2462 | DSSS | 1:1 | 0.521 | 17.00 | 15.69 | 0.060 | 0.555 | 1.35 | 0.750 | 131 |
| Left Tilt | standard | 11/2462 | DSSS | 1:1 | 0.458 | 17.00 | 15.69 | 0.010 | 0.535 | 1.35 | 0.723 | / |
| Right Cheek | standard | 11/2462 | DSSS | 1:1 | 0.077 | 17.00 | 15.69 | 0.019 | 0.098 | 1.35 | 0.132 | / |
| Right Tilt | standard | 11/2462 | DSSS | 1:1 | 0.074 | 17.00 | 15.69 | 0.054 | 0.095 | 1.35 | 0.129 | / |
| Left Cheek | Battery 2 | 11/2462 | DSSS | 1:1 | 0.489 | 17.00 | 15.69 | -0.010 | 0.525 | 1.35 | 0.710 | / |
| Left Cheek | Battery 3 | 11/2462 | DSSS | 1:1 | 0.466 | 17.00 | 15.69 | 0.090 | 0.518 | 1.35 | 0.700 | / |
| **Head SAR For Simultaneous Transmission (Power Reduce)** | | | | | | | | | | | | |
| Left Cheek | standard | 11/2462 | DSSS | 1:1 | 0.335 | 13.00 | 12.65 | 0.154 | 0.344 | 1.08 | 0.373 | 132 |
| Left Tilt | standard | 11/2462 | DSSS | 1:1 | 0.310 | 13.00 | 12.65 | 0.047 | 0.318 | 1.08 | 0.345 | / |
| Right Cheek | standard | 11/2462 | DSSS | 1:1 | 0.072 | 13.00 | 12.65 | -0.140 | 0.076 | 1.08 | 0.082 | / |
| Right Tilt | standard | 11/2462 | DSSS | 1:1 | 0.065 | 13.00 | 12.65 | 0.012 | 0.069 | 1.08 | 0.075 | / |
| Left Cheek | Battery 2 | 11/2462 | DSSS | 1:1 | 0.324 | 13.00 | 12.65 | 0.090 | 0.329 | 1.08 | 0.357 | / |
| Left Cheek | Battery 3 | 11/2462 | DSSS | 1:1 | 0.311 | 13.00 | 12.65 | 0.120 | 0.317 | 1.08 | 0.344 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 11/2462 | DSSS | 1:1 | 0.048 | 17.00 | 15.69 | 0.066 | 0.049 | 1.35 | 0.067 | 133 |
| Front Side | standard | 11/2462 | DSSS | 1:1 | 0.036 | 17.00 | 15.69 | 0.016 | 0.037 | 1.35 | 0.050 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | 11/2462 | DSSS | 1:1 | 0.101 | 17.00 | 15.69 | 0.064 | 0.110 | 1.35 | 0.149 | 134 |
| Front Side | standard | 11/2462 | DSSS | 1:1 | 0.068 | 17.00 | 15.69 | 0.020 | 0.072 | 1.35 | 0.097 | / |
| Left Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | standard | 11/2462 | DSSS | 1:1 | 0.092 | 17.00 | 15.69 | 0.007 | 0.096 | 1.35 | 0.130 | / |
| Top Edge | standard | 11/2462 | DSSS | 1:1 | 0.034 | 17.00 | 15.69 | 0.036 | 0.037 | 1.35 | 0.050 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | Battery 2 | 11/2462 | DSSS | 1:1 | 0.091 | 17.00 | 15.69 | -0.050 | 0.099 | 1.35 | 0.134 | / |
| Back Side | Battery 3 | 11/2462 | DSSS | 1:1 | 0.095 | 17.00 | 15.69 | 0.160 | 0.104 | 1.35 | 0.141 | / |

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| MAX Adjusted SAR | | | | | | | |
|---|---|---|---|---|---|---|---|
| Mode | Test Position | Channel/ Frequency(MHz) | MAX Measured $SAR_{1g}$ (W/kg) | 802.11b Tune-up limit (dBm) | Tune-up limit (dBm) | Scaling Factor | Adjusted $SAR_{1g}$ (W/kg) |
| 802.11g | Left Cheek | 11/2462 | 0.555 | 17.00 | 15.50 | 0.71 | 0.393 |
| 802.11n HT20 | Left Cheek | 11/2462 | 0.555 | 17.00 | 14.50 | 0.56 | 0.312 |
| Note: SAR is not required for OFDM 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. | | | | | | | |

**Antenna 2**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11b | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | | |
| Left Cheek | standard | 6/2437 | DSSS | 1:1 | 0.159 | 14.00 | 12.74 | -0.099 | 0.178 | 1.34 | 0.238 | / |
| Left Tilt | standard | 6/2437 | DSSS | 1:1 | 0.145 | 14.00 | 12.74 | 0.100 | 0.147 | 1.34 | 0.196 | / |
| Right Cheek | standard | 6/2437 | DSSS | 1:1 | 0.401 | 14.00 | 12.74 | 0.070 | 0.428 | 1.34 | 0.572 | / |
| Right Tilt | standard | 6/2437 | DSSS | 1:1 | 0.280 | 14.00 | 12.74 | 0.023 | 0.336 | 1.34 | 0.449 | / |
| Right Cheek | Battery 2 | 6/2437 | DSSS | 1:1 | 0.394 | 14.00 | 12.74 | 0.029 | 0.442 | 1.34 | 0.591 | 135 |
| Right Cheek | Battery 3 | 6/2437 | DSSS | 1:1 | 0.271 | 14.00 | 12.74 | 0.099 | 0.264 | 1.34 | 0.353 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | 6/2437 | DSSS | 1:1 | 0.117 | 14.00 | 12.74 | -0.020 | 0.114 | 1.34 | 0.152 | 136 |
| Front Side | standard | 6/2437 | DSSS | 1:1 | 0.075 | 14.00 | 12.74 | 0.027 | 0.075 | 1.34 | 0.100 | / |
| Left Edge | standard | 6/2437 | DSSS | 1:1 | 0.093 | 14.00 | 12.74 | 0.070 | 0.098 | 1.34 | 0.131 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | standard | 6/2437 | DSSS | 1:1 | 0.048 | 14.00 | 12.74 | 0.033 | 0.048 | 1.34 | 0.064 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | Battery 2 | 6/2437 | DSSS | 1:1 | 0.107 | 14.00 | 12.74 | 0.029 | 0.104 | 1.34 | 0.139 | / |
| Back Side | Battery 3 | 6/2437 | DSSS | 1:1 | 0.102 | 14.00 | 12.74 | 0.045 | 0.092 | 1.34 | 0.123 | / |

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

| MAX Adjusted SAR | | | | | | | |
|---|---|---|---|---|---|---|---|
| Mode | Test Position | Channel/ Frequency(MHz) | MAX Measured $SAR_{1g}$ (W/kg) | 802.11b Tune-up limit (dBm) | Tune-up limit (dBm) | Scaling Factor | Adjusted $SAR_{1g}$ (W/kg) |
| 802.11g | Right Cheek | 6/2437 | 0.442 | 14.00 | 13.00 | 0.79 | 0.351 |
| 802.11n HT20 | Right Cheek | 6/2437 | 0.442 | 14.00 | 12.00 | 0.63 | 0.279 |
| Note: SAR is not required for OFDM 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. | | | | | | | |

**MIMO**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11g | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | | |
| Left Cheek | standard | 11/2462 | OFDM | 1:1 | 0.362 | 16.50 | 16.29 | 0.028 | 0.369 | 1.05 | 0.387 | 137 |
| Left Tilt | standard | 11/2462 | OFDM | 1:1 | 0.189 | 16.50 | 16.29 | 0.043 | 0.233 | 1.05 | 0.244 | / |
| Right Cheek | standard | 11/2462 | OFDM | 1:1 | 0.308 | 16.50 | 16.29 | -0.080 | 0.329 | 1.05 | 0.345 | / |
| Right Tilt | standard | 11/2462 | OFDM | 1:1 | 0.227 | 16.50 | 16.29 | 0.016 | 0.213 | 1.05 | 0.223 | / |
| Left Cheek | Battery 2 | 11/2462 | OFDM | 1:1 | 0.358 | 16.50 | 16.29 | 0.140 | 0.354 | 1.05 | 0.371 | / |
| Left Cheek | Battery 3 | 11/2462 | OFDM | 1:1 | 0.344 | 16.50 | 16.29 | 0.090 | 0.349 | 1.05 | 0.366 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 11/2462 | OFDM | 1:1 | 0.044 | 16.50 | 16.29 | 0.034 | 0.045 | 1.05 | 0.047 | 138 |
| Front Side | standard | 11/2462 | OFDM | 1:1 | 0.037 | 16.50 | 16.29 | 0.033 | 0.038 | 1.05 | 0.040 | / |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | 11/2462 | OFDM | 1:1 | 0.077 | 16.50 | 16.29 | 0.150 | 0.118 | 1.05 | 0.124 | 139 |
| Front Side | standard | 11/2462 | OFDM | 1:1 | 0.059 | 16.50 | 16.29 | -0.028 | 0.064 | 1.05 | 0.067 | / |
| Left Edge | standard | 11/2462 | OFDM | 1:1 | 0.039 | 16.50 | 16.29 | 0.111 | 0.039 | 1.05 | 0.041 | / |
| Right Edge | standard | 11/2462 | OFDM | 1:1 | 0.076 | 16.50 | 16.29 | 0.091 | 0.082 | 1.05 | 0.086 | / |
| Top Edge | standard | 11/2462 | OFDM | 1:1 | 0.045 | 16.50 | 16.29 | 0.062 | 0.047 | 1.05 | 0.049 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | Battery 2 | 11/2462 | OFDM | 1:1 | 0.096 | 16.50 | 16.29 | 0.142 | 0.106 | 1.05 | 0.111 | / |
| Back Side | Battery 3 | 11/2462 | OFDM | 1:1 | 0.102 | 16.50 | 16.29 | 0.009 | 0.112 | 1.05 | 0.118 | / |

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 30: Wi-Fi (5G, U-NII-2A)**

**Antenna 1**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | | |
| Left Cheek | standard | 64/5320 | OFDM | 1:1 | 0.341 | 13.50 | 12.68 | 0.158 | 0.321 | 1.21 | 0.388 | 140 |
| Left Tilt | standard | 64/5320 | OFDM | 1:1 | 0.234 | 13.50 | 12.68 | 0.116 | 0.289 | 1.21 | 0.349 | / |
| Right Cheek | standard | 64/5320 | OFDM | 1:1 | 0.091 | 13.50 | 12.68 | 0.145 | 0.153 | 1.21 | 0.185 | / |
| Right Tilt | standard | 64/5320 | OFDM | 1:1 | 0.064 | 13.50 | 12.68 | 0.146 | 0.142 | 1.21 | 0.172 | / |
| Left Cheek | Battery 2 | 64/5320 | OFDM | 1:1 | 0.336 | 13.50 | 12.68 | 0.100 | 0.313 | 1.21 | 0.378 | / |
| Left Cheek | Battery 3 | 64/5320 | OFDM | 1:1 | 0.242 | 13.50 | 12.68 | 0.037 | 0.254 | 1.21 | 0.307 | / |
| **Head SAR For Simultaneous Transmission (Power Reduce)** | | | | | | | | | | | | |
| Left Cheek | standard | 64/5320 | OFDM | 1:1 | 0.287 | 12.00 | 11.64 | 0.027 | 0.272 | 1.09 | 0.296 | 141 |
| Left Tilt | standard | 64/5320 | OFDM | 1:1 | 0.253 | 12.00 | 11.64 | 0.090 | 0.243 | 1.09 | 0.264 | / |
| Right Cheek | standard | 64/5320 | OFDM | 1:1 | 0.113 | 12.00 | 11.64 | 0.160 | 0.123 | 1.09 | 0.134 | / |
| Right Tilt | standard | 64/5320 | OFDM | 1:1 | 0.102 | 12.00 | 11.64 | 0.022 | 0.113 | 1.09 | 0.123 | / |
| Left Cheek | Battery 2 | 64/5320 | OFDM | 1:1 | 0.259 | 12.00 | 11.64 | 0.040 | 0.268 | 1.09 | 0.291 | / |
| Left Cheek | Battery 3 | 64/5320 | OFDM | 1:1 | 0.119 | 12.00 | 11.64 | -0.020 | 0.131 | 1.09 | 0.142 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 64/5320 | OFDM | 1:1 | 0.007 | 13.50 | 12.68 | 0.047 | 0.008 | 1.21 | 0.010 | / |
| Front Side | standard | 64/5320 | OFDM | 1:1 | 0.009 | 13.50 | 12.68 | 0.089 | 0.010 | 1.21 | 0.012 | 142 |
| **Test Position** | **Cover Type** | **Channel/ Frequency (MHz)** | **Mode 802.11a** | **Duty Cycle** | **Area Scan Max.SAR (W/Kg)** | **Tune-up limit (dBm)** | **Conducted Power (dBm)** | **Drift (dB)** | **Measured $SAR_{10g}$ (W/kg)** | **Scaling Factor** | **Reported $SAR_{10g}$ (W/kg)** | **Plot No.** |
| **Product specific 10-g SAR (Distance 0mm)** | | | | | | | | | | | | |
| Back Side | standard | 64/5320 | OFDM | 1:1 | 0.187 | 13.50 | 12.68 | 0.110 | 0.206 | 1.21 | 0.249 | 143 |
| Front Side | standard | 64/5320 | OFDM | 1:1 | 0.160 | 13.50 | 12.68 | -0.060 | 0.181 | 1.21 | 0.219 | / |
| Left Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | standard | 64/5320 | OFDM | 1:1 | 0.147 | 13.50 | 12.68 | 0.170 | 0.165 | 1.21 | 0.199 | / |
| Top Edge | standard | 64/5320 | OFDM | 1:1 | 0.135 | 13.50 | 12.68 | 0.050 | 0.131 | 1.21 | 0.158 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | Battery 2 | 64/5320 | OFDM | 1:1 | 0.161 | 13.50 | 12.68 | -0.030 | 0.194 | 1.21 | 0.234 | / |
| Back Side | Battery 3 | 64/5320 | OFDM | 1:1 | 0.154 | 13.50 | 12.68 | 0.020 | 0.182 | 1.21 | 0.220 | / |
| Note: 1. The value with blue color is the maximum SAR Value of each test band. | | | | | | | | | | | | |

**Antenna 2**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | 52/5260 | OFDM | 1:1 | 0.044 | 10.50 | 8.82 | 0.022 | 0.048 | 1.47 | 0.071 | / |
| Left Tilt | standard | 52/5260 | OFDM | 1:1 | 0.049 | 10.50 | 8.82 | 0.036 | 0.052 | 1.47 | 0.077 | / |
| Right Cheek | standard | 52/5260 | OFDM | 1:1 | 0.125 | 10.50 | 8.82 | 0.072 | 0.101 | 1.47 | 0.149 | / |
| Right Tilt | standard | 52/5260 | OFDM | 1:1 | 0.171 | 10.50 | 8.82 | 0.029 | 0.119 | 1.47 | 0.175 | / |
| Right Tilt | Battery 2 | 52/5260 | OFDM | 1:1 | 0.223 | 10.50 | 8.82 | 0.131 | 0.199 | 1.47 | 0.293 | 144 |
| Right Tilt | Battery 3 | 52/5260 | OFDM | 1:1 | 0.118 | 10.50 | 8.82 | 0.042 | 0.160 | 1.47 | 0.236 | / |
| **Product specific 10-g SAR (Distance 0mm)** | | | | | | | | | | | | |
| Back Edge | Standard | 52/5260 | OFDM | 1:1 | 0.004 | 10.50 | 8.82 | -0.010 | 0.004 | 1.47 | 0.006 | / |
| Front Edge | Standard | 52/5260 | OFDM | 1:1 | 0.130 | 10.50 | 8.82 | 0.018 | 0.133 | 1.47 | 0.196 | 145 |
| Left Edge | Standard | 52/5260 | OFDM | 1:1 | 0.004 | 10.50 | 8.82 | 0.000 | 0.004 | 1.47 | 0.006 | / |
| Right Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | / |
| Top Edge | Standard | 52/5260 | OFDM | 1:1 | 0.006 | 10.50 | 8.82 | 0.002 | 0.007 | 1.47 | 0.010 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | / |
| Front Edge | Battery 2 | 52/5260 | OFDM | 1:1 | 0.128 | 10.50 | 8.82 | 0.046 | 0.120 | 1.47 | 0.177 | / |
| Front Edge | Battery 3 | 52/5260 | OFDM | 1:1 | 0.135 | 10.50 | 8.82 | 0.081 | 0.127 | 1.47 | 0.187 | / |
| Note: 1. The value with blue color is the maximum SAR Value of each test band. | | | | | | | | | | | | |

**MIMO**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | 56/5280 | CDD | 1:1 | 0.245 | 14.50 | 14.02 | 0.105 | 0.265 | 1.12 | 0.296 | 146 |
| Left Tilt | standard | 56/5280 | CDD | 1:1 | 0.166 | 14.50 | 14.02 | 0.022 | 0.245 | 1.12 | 0.274 | / |
| Right Cheek | standard | 56/5280 | CDD | 1:1 | 0.208 | 14.50 | 14.02 | 0.150 | 0.197 | 1.12 | 0.220 | / |
| Right Tilt | standard | 56/5280 | CDD | 1:1 | 0.209 | 14.50 | 14.02 | 0.095 | 0.244 | 1.12 | 0.273 | / |
| Left Cheek | Battery 2 | 56/5280 | CDD | 1:1 | 0.234 | 14.50 | 14.02 | 0.090 | 0.261 | 1.12 | 0.292 | / |
| Left Cheek | Battery 3 | 56/5280 | CDD | 1:1 | 0.192 | 14.50 | 14.02 | 0.030 | 0.237 | 1.12 | 0.265 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 56/5280 | CDD | 1:1 | 0.007 | 14.50 | 14.02 | 0.100 | 0.009 | 1.12 | 0.010 | / |
| Front Side | standard | 56/5280 | CDD | 1:1 | 0.024 | 14.50 | 14.02 | 0.100 | 0.039 | 1.12 | 0.044 | 147 |
| **Test Position** | **Cover Type** | **Channel/ Frequency (MHz)** | **Mode 802.11a** | **Duty Cycle** | **Area Scan Max.SAR (W/Kg)** | **Tune-up limit (dBm)** | **Conducted Power (dBm)** | **Drift (dB)** | **Measured $SAR_{10g}$ (W/kg)** | **Scaling Factor** | **Reported $SAR_{10g}$ (W/kg)** | **Plot No.** |
| **Product specific 10-g SAR (Distance 0mm)** | | | | | | | | | | | | |
| Back Side | standard | 56/5280 | CDD | 1:1 | 0.161 | 14.50 | 14.02 | 0.100 | 0.195 | 1.12 | 0.218 | 148 |
| Front Side | standard | 56/5280 | CDD | 1:1 | 0.175 | 14.50 | 14.02 | 0.000 | 0.168 | 1.12 | 0.188 | / |
| Left Edge | standard | 56/5280 | CDD | 1:1 | 0.011 | 14.50 | 14.02 | 0.100 | 0.023 | 1.12 | 0.026 | / |
| Right Edge | standard | 56/5280 | CDD | 1:1 | 0.108 | 14.50 | 14.02 | 0.020 | 0.175 | 1.12 | 0.195 | / |
| Top Edge | standard | 56/5280 | CDD | 1:1 | 0.095 | 14.50 | 14.02 | 0.052 | 0.118 | 1.12 | 0.132 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Back Side | Battery 2 | 56/5280 | CDD | 1:1 | 0.140 | 14.50 | 14.02 | 0.048 | 0.186 | 1.12 | 0.208 | / |
| Back Side | Battery 3 | 56/5280 | CDD | 1:1 | 0.124 | 14.50 | 14.02 | 0.033 | 0.160 | 1.12 | 0.179 | / |
| Note: 1. The value with blue color is the maximum SAR Value of each test band. | | | | | | | | | | | | |

**Table 31: Wi-Fi (5G, U-NII-1)**

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, each band is tested independently for SAR.

**Antenna 1**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | 36/5180 | OFDM | 1:1 | 0.021 | 13.50 | 12.49 | 0.010 | 0.016 | 1.26 | 0.020 | / |
| Front Side | standard | 36/5180 | OFDM | 1:1 | 0.067 | 13.50 | 12.49 | 0.060 | 0.054 | 1.26 | 0.068 | / |
| Left Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | standard | 36/5180 | OFDM | 1:1 | 0.149 | 13.50 | 12.49 | 0.023 | 0.106 | 1.26 | 0.134 | 149 |
| Top Edge | standard | 36/5180 | OFDM | 1:1 | 0.041 | 13.50 | 12.49 | 0.045 | 0.037 | 1.26 | 0.047 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | Battery 2 | 36/5180 | OFDM | 1:1 | 0.071 | 13.50 | 12.49 | 0.060 | 0.071 | 1.26 | 0.090 | / |
| Right Edge | Battery 3 | 36/5180 | OFDM | 1:1 | 0.070 | 13.50 | 12.49 | -0.080 | 0.062 | 1.26 | 0.078 | / |

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2.According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**MIMO**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | 48/5240 | OFDM | 1:1 | 0.117 | 14.50 | 13.80 | -0.026 | 0.128 | 1.17 | 0.150 | / |
| Front Side | standard | 48/5240 | OFDM | 1:1 | 0.105 | 14.50 | 13.80 | 0.028 | 0.090 | 1.17 | 0.106 | / |
| Left Edge | standard | 48/5240 | OFDM | 1:1 | 0.024 | 14.50 | 13.80 | -0.015 | 0.017 | 1.17 | 0.020 | / |
| Right Edge | standard | 48/5240 | OFDM | 1:1 | 0.176 | 14.50 | 13.80 | 0.194 | 0.152 | 1.17 | 0.179 | 150 |
| Top Edge | standard | 48/5240 | OFDM | 1:1 | 0.076 | 14.50 | 13.80 | 0.028 | 0.093 | 1.17 | 0.109 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | Battery 2 | 48/5240 | OFDM | 1:1 | 0.134 | 14.50 | 13.80 | 0.136 | 0.136 | 1.17 | 0.160 | / |
| Right Edge | Battery 3 | 48/5240 | OFDM | 1:1 | 0.670 | 14.50 | 13.80 | 0.171 | 0.077 | 1.17 | 0.090 | / |

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2.According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Table 32: Wi-Fi (5G, U-NII-2C)**

**Antenna 1**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | | |
| Left Cheek | standard | 100/5500 | OFDM | 1:1 | 0.219 | 13.50 | 12.23 | 0.037 | 0.274 | 1.34 | 0.367 | 151 |
| Left Tilt | standard | 100/5500 | OFDM | 1:1 | 0.202 | 13.50 | 12.23 | 0.073 | 0.232 | 1.34 | 0.311 | / |
| Right Cheek | standard | 100/5500 | OFDM | 1:1 | 0.096 | 13.50 | 12.23 | 0.070 | 0.110 | 1.34 | 0.147 | / |
| Right Tilt | standard | 100/5500 | OFDM | 1:1 | 0.084 | 13.50 | 12.23 | 0.020 | 0.100 | 1.34 | 0.134 | / |
| Left Cheek | Battery 2 | 100/5500 | OFDM | 1:1 | 0.211 | 13.50 | 12.23 | 0.016 | 0.266 | 1.34 | 0.356 | / |
| Left Cheek | Battery 3 | 100/5500 | OFDM | 1:1 | 0.221 | 13.50 | 12.23 | 0.023 | 0.215 | 1.34 | 0.288 | / |
| **Head SAR For Simultaneous Transmission (Power Reduce)** | | | | | | | | | | | | |
| Left Cheek | standard | 100/5500 | OFDM | 1:1 | 0.296 | 11.50 | 11.14 | 0.029 | 0.287 | 1.09 | 0.312 | / |
| Left Tilt | standard | 100/5500 | OFDM | 1:1 | 0.163 | 11.50 | 11.14 | 0.056 | 0.179 | 1.09 | 0.194 | / |
| Right Cheek | standard | 100/5500 | OFDM | 1:1 | 0.067 | 11.50 | 11.14 | 0.054 | 0.085 | 1.09 | 0.092 | / |
| Right Tilt | standard | 100/5500 | OFDM | 1:1 | 0.059 | 11.50 | 11.14 | 0.015 | 0.077 | 1.09 | 0.084 | / |
| Left Cheek | Battery 2 | 100/5500 | OFDM | 1:1 | 0.287 | 11.50 | 11.14 | 0.194 | 0.300 | 1.09 | 0.326 | 152 |
| Left Cheek | Battery 3 | 100/5500 | OFDM | 1:1 | 0.151 | 11.50 | 11.14 | 0.033 | 0.123 | 1.09 | 0.134 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 100/5500 | OFDM | 1:1 | 0.031 | 13.50 | 12.23 | -0.010 | 0.025 | 1.34 | 0.034 | / |
| Front Side | standard | 100/5500 | OFDM | 1:1 | 0.061 | 13.50 | 12.23 | 0.090 | 0.055 | 1.34 | 0.074 | 153 |
| **Test Position** | **Cover Type** | **Channel/ Frequency (MHz)** | **Mode 802.11a** | **Duty Cycle** | **Area Scan Max.SAR (W/Kg)** | **Tune-up limit (dBm)** | **Conducted Power (dBm)** | **Drift (dB)** | **Measured $SAR_{10g}$ (W/kg)** | **Scaling Factor** | **Reported $SAR_{10g}$ (W/kg)** | **Plot No.** |
| **Product specific 10-g SAR (Distance 0mm)** | | | | | | | | | | | | |
| Back Side | standard | 100/5500 | OFDM | 1:1 | 0.091 | 13.50 | 12.23 | -0.040 | 0.100 | 1.34 | 0.134 | / |
| Front Side | standard | 100/5500 | OFDM | 1:1 | 0.192 | 13.50 | 12.23 | -0.110 | 0.208 | 1.34 | 0.279 | 154 |
| Left Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | standard | 100/5500 | OFDM | 1:1 | 0.165 | 13.50 | 12.23 | -0.016 | 0.099 | 1.34 | 0.133 | / |
| Top Edge | standard | 100/5500 | OFDM | 1:1 | 0.125 | 13.50 | 12.23 | 0.077 | 0.121 | 1.34 | 0.162 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front Side | Battery 2 | 100/5500 | OFDM | 1:1 | 0.228 | 13.50 | 12.23 | 0.011 | 0.201 | 1.34 | 0.269 | / |
| Front Side | Battery 3 | 100/5500 | OFDM | 1:1 | 0.178 | 13.50 | 12.23 | 0.007 | 0.170 | 1.34 | 0.228 | / |
| Note: 1. The value with blue color is the maximum SAR Value of each test band. | | | | | | | | | | | | |

**Antenna 2**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | 132/5660 | OFDM | 1:1 | 0.065 | 9.50 | 8.75 | 0.013 | 0.064 | 1.19 | 0.076 | / |
| Left Tilt | standard | 132/5660 | OFDM | 1:1 | 0.052 | 9.50 | 8.75 | 0.021 | 0.063 | 1.19 | 0.075 | / |
| Right Cheek | standard | 132/5660 | OFDM | 1:1 | 0.078 | 9.50 | 8.75 | 0.037 | 0.081 | 1.19 | 0.096 | / |
| Right Tilt | standard | 132/5660 | OFDM | 1:1 | 0.082 | 9.50 | 8.75 | 0.041 | 0.084 | 1.19 | 0.099 | / |
| Right Tilt | Battery 2 | 132/5660 | OFDM | 1:1 | 0.112 | 9.50 | 8.75 | 0.012 | 0.102 | 1.19 | 0.121 | 155 |
| Right Tilt | Battery 3 | 132/5660 | OFDM | 1:1 | 0.099 | 9.50 | 8.75 | 0.041 | 0.096 | 1.19 | 0.114 | / |
| **Product specific 10-g SAR (Distance 0mm)** | | | | | | | | | | | | |
| Back Edge | Standard | 132/5660 | OFDM | 1:1 | 0.002 | 9.50 | 8.75 | 0.032 | 0.002 | 1.19 | 0.002 | / |
| Front Edge | Standard | 132/5660 | OFDM | 1:1 | 0.047 | 9.50 | 8.75 | 0.027 | 0.036 | 1.19 | 0.043 | / |
| Left Edge | Standard | 132/5660 | OFDM | 1:1 | 0.008 | 9.50 | 8.75 | 0.019 | 0.009 | 1.19 | 0.010 | / |
| Right Edge | N/A | N/A | OFDM | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | Standard | 132/5660 | OFDM | 1:1 | 0.008 | 9.50 | 8.75 | 0.008 | 0.008 | 1.19 | 0.009 | / |
| Bottom Edge | N/A | N/A | OFDM | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front Edge | Battery 2 | 132/5660 | OFDM | 1:1 | 0.078 | 9.50 | 8.75 | 0.052 | 0.091 | 1.19 | 0.108 | 156 |
| Front Edge | Battery 3 | 132/5660 | OFDM | 1:1 | 0.084 | 9.50 | 8.75 | 0.078 | 0.077 | 1.19 | 0.092 | / |
| Note: 1. The value with blue color is the maximum SAR Value of each test band. | | | | | | | | | | | | |

**MIMO**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | 116/5580 | CDD | 1:1 | 0.384 | 14.00 | 13.57 | 0.023 | 0.373 | 1.10 | 0.412 | / |
| Left Tilt | standard | 116/5580 | CDD | 1:1 | 0.366 | 14.00 | 13.57 | 0.135 | 0.275 | 1.10 | 0.304 | / |
| Right Cheek | standard | 116/5580 | CDD | 1:1 | 0.171 | 14.00 | 13.57 | 0.021 | 0.177 | 1.10 | 0.195 | / |
| Right Tilt | standard | 116/5580 | CDD | 1:1 | 0.209 | 14.00 | 13.57 | 0.018 | 0.147 | 1.10 | 0.162 | / |
| Left Cheek | Battery 2 | 116/5580 | CDD | 1:1 | 0.439 | 14.00 | 13.57 | 0.118 | 0.429 | 1.10 | 0.474 | 157 |
| Left Cheek | Battery 3 | 116/5580 | CDD | 1:1 | 0.206 | 14.00 | 13.57 | 0.198 | 0.204 | 1.10 | 0.225 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 116/5580 | CDD | 1:1 | 0.025 | 14.00 | 13.57 | 0.009 | 0.009 | 1.10 | 0.010 | / |
| Front Side | standard | 116/5580 | CDD | 1:1 | 0.014 | 14.00 | 13.57 | 0.110 | 0.025 | 1.10 | 0.027 | 158 |
| **Test Position** | **Cover Type** | **Channel/ Frequency (MHz)** | **Mode 802.11a** | **Duty Cycle** | **Area Scan Max.SAR (W/Kg)** | **Tune-up limit (dBm)** | **Conducted Power (dBm)** | **Drift (dB)** | **Measured $SAR_{10g}$ (W/kg)** | **Scaling Factor** | **Reported $SAR_{10g}$ (W/kg)** | **Plot No.** |
| **Product specific 10-g SAR (Distance 0mm)** | | | | | | | | | | | | |
| Back Side | standard | 116/5580 | CDD | 1:1 | 0.187 | 14.00 | 13.57 | 0.097 | 0.191 | 1.10 | 0.211 | / |
| Front Side | standard | 116/5580 | CDD | 1:1 | 0.195 | 14.00 | 13.57 | 0.101 | 0.219 | 1.10 | 0.242 | 159 |
| Left Edge | standard | 116/5580 | CDD | 1:1 | 0.007 | 14.00 | 13.57 | 0.079 | 0.015 | 1.10 | 0.017 | / |
| Right Edge | standard | 116/5580 | CDD | 1:1 | 0.104 | 14.00 | 13.57 | 0.149 | 0.150 | 1.10 | 0.166 | / |
| Top Edge | standard | 116/5580 | CDD | 1:1 | 0.158 | 14.00 | 13.57 | -0.011 | 0.148 | 1.10 | 0.163 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front Side | Battery 2 | 116/5580 | CDD | 1:1 | 0.244 | 14.00 | 13.57 | 0.072 | 0.216 | 1.10 | 0.238 | / |
| Front Side | Battery 3 | 116/5580 | CDD | 1:1 | 0.196 | 14.00 | 13.57 | 0.011 | 0.187 | 1.10 | 0.206 | / |
| Note: 1. The value with blue color is the maximum SAR Value of each test band. | | | | | | | | | | | | |

**Table 33: Wi-Fi (5G, U-NII-3)**

**Antenna 1**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR (Full Power)** | | | | | | | | | | | | |
| Left Cheek | standard | 157/5785 | OFDM | 1:1 | 0.198 | 13.50 | 12.29 | 0.037 | 0.250 | 1.32 | 0.330 | 160 |
| Left Tilt | standard | 157/5785 | OFDM | 1:1 | 0.137 | 13.50 | 12.29 | 0.020 | 0.194 | 1.32 | 0.256 | / |
| Right Cheek | standard | 157/5785 | OFDM | 1:1 | 0.064 | 13.50 | 12.29 | 0.065 | 0.112 | 1.32 | 0.148 | / |
| Right Tilt | standard | 157/5785 | OFDM | 1:1 | 0.041 | 13.50 | 12.29 | 0.076 | 0.107 | 1.32 | 0.141 | / |
| Left Cheek | Battery 2 | 157/5785 | OFDM | 1:1 | 0.251 | 13.50 | 12.29 | 0.030 | 0.247 | 1.32 | 0.326 | / |
| Left Cheek | Battery 3 | 157/5785 | OFDM | 1:1 | 0.166 | 13.50 | 12.29 | 0.090 | 0.186 | 1.32 | 0.246 | / |
| **Head SAR For Simultaneous Transmission (Power Reduce)** | | | | | | | | | | | | |
| Left Cheek | standard | 157/5785 | OFDM | 1:1 | 0.212 | 12.00 | 11.28 | 0.186 | 0.213 | 1.18 | 0.251 | / |
| Left Tilt | standard | 157/5785 | OFDM | 1:1 | 0.162 | 12.00 | 11.28 | 0.004 | 0.156 | 1.18 | 0.184 | / |
| Right Cheek | standard | 157/5785 | OFDM | 1:1 | 0.089 | 12.00 | 11.28 | 0.044 | 0.085 | 1.18 | 0.100 | / |
| Right Tilt | standard | 157/5785 | OFDM | 1:1 | 0.085 | 12.00 | 11.28 | 0.053 | 0.080 | 1.18 | 0.094 | / |
| Left Cheek | Battery 2 | 157/5785 | OFDM | 1:1 | 0.219 | 12.00 | 11.28 | 0.029 | 0.225 | 1.18 | 0.266 | 161 |
| Left Cheek | Battery 3 | 157/5785 | OFDM | 1:1 | 0.155 | 12.00 | 11.28 | 0.020 | 0.151 | 1.18 | 0.178 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 157/5785 | OFDM | 1:1 | 0.004 | 13.50 | 12.29 | 0.109 | 0.005 | 1.32 | 0.007 | / |
| Front Side | standard | 157/5785 | OFDM | 1:1 | 0.009 | 13.50 | 12.29 | 0.022 | 0.010 | 1.32 | 0.013 | 162 |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | 157/5785 | OFDM | 1:1 | 0.036 | 13.50 | 12.29 | 0.011 | 0.034 | 1.32 | 0.045 | / |
| Front Side | standard | 157/5785 | OFDM | 1:1 | 0.041 | 13.50 | 12.29 | 0.021 | 0.039 | 1.32 | 0.052 | / |
| Left Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | standard | 157/5785 | OFDM | 1:1 | 0.074 | 13.50 | 12.29 | -0.011 | 0.071 | 1.32 | 0.094 | 163 |
| Top Edge | standard | 157/5785 | OFDM | 1:1 | 0.032 | 13.50 | 12.29 | 0.021 | 0.028 | 1.32 | 0.037 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Right Edge | Battery 2 | 157/5785 | OFDM | 1:1 | 0.066 | 13.50 | 12.29 | 0.110 | 0.069 | 1.32 | 0.091 | / |
| Right Edge | Battery 3 | 157/5785 | OFDM | 1:1 | 0.061 | 13.50 | 12.29 | 0.080 | 0.064 | 1.32 | 0.085 | / |

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

**Antenna 2**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | 165/5825 | OFDM | 1:1 | 0.012 | 9.50 | 8.78 | 0.100 | 0.011 | 1.18 | 0.013 | / |
| Left Tilt | standard | 165/5825 | OFDM | 1:1 | 0.013 | 9.50 | 8.78 | 0.008 | 0.027 | 1.18 | 0.032 | / |
| Right Cheek | standard | 165/5825 | OFDM | 1:1 | 0.049 | 9.50 | 8.78 | 0.048 | 0.062 | 1.18 | 0.073 | 164 |
| Right Tilt | standard | 165/5825 | OFDM | 1:1 | 0.056 | 9.50 | 8.78 | 0.154 | 0.034 | 1.18 | 0.040 | / |
| Right Cheek | Battery 2 | 165/5825 | OFDM | 1:1 | 0.049 | 9.50 | 8.78 | 0.000 | 0.048 | 1.18 | 0.057 | / |
| Right Cheek | Battery 3 | 165/5825 | OFDM | 1:1 | 0.055 | 9.50 | 8.78 | 0.100 | 0.053 | 1.18 | 0.062 | / |
| **Product specific 10-g SAR (Distance 0mm)** | | | | | | | | | | | | |
| Back Edge | Standard | 165/5825 | OFDM | 1:1 | 0.063 | 9.50 | 8.78 | 0.008 | 0.061 | 1.18 | 0.072 | / |
| Front Edge | Standard | 165/5825 | OFDM | 1:1 | 0.065 | 9.50 | 8.78 | 0.048 | 0.065 | 1.18 | 0.077 | 165 |
| Left Edge | Standard | 165/5825 | OFDM | 1:1 | 0.062 | 9.50 | 8.78 | 0.100 | 0.062 | 1.18 | 0.073 | / |
| Right Edge | Standard | 165/5825 | OFDM | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Top Edge | Standard | 165/5825 | OFDM | 1:1 | 0.065 | 9.50 | 8.78 | 0.020 | 0.064 | 1.18 | 0.076 | / |
| Bottom Edge | Standard | 165/5825 | OFDM | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front Edge | Battery 2 | 165/5825 | OFDM | 1:1 | 0.064 | 9.50 | 8.78 | 0.065 | 0.058 | 1.18 | 0.068 | / |
| Front Edge | Battery 3 | 165/5825 | OFDM | 1:1 | 0.065 | 9.50 | 8.78 | 0.076 | 0.064 | 1.18 | 0.075 | / |
| Note: 1. The value with blue color is the maximum SAR Value of each test band. | | | | | | | | | | | | |

**MIMO**

| Test Position | Cover Type | Channel/ Frequency (MHz) | Mode 802.11a | Duty Cycle | Area Scan Max.SAR (W/Kg) | Tune-up limit (dBm) | Conducted Power (dBm) | Drift (dB) | Measured $SAR_{1g}$ (W/kg) | Scaling Factor | Reported $SAR_{1g}$ (W/kg) | Plot No. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Head SAR** | | | | | | | | | | | | |
| Left Cheek | standard | 157/5785 | CDD | 1:1 | 0.184 | 14.50 | 13.60 | 0.023 | 0.273 | 1.23 | 0.336 | / |
| Left Tilt | standard | 157/5785 | CDD | 1:1 | 0.166 | 14.50 | 13.60 | 0.056 | 0.239 | 1.23 | 0.294 | / |
| Right Cheek | standard | 157/5785 | CDD | 1:1 | 0.066 | 14.50 | 13.60 | 0.070 | 0.120 | 1.23 | 0.148 | / |
| Right Tilt | standard | 157/5785 | CDD | 1:1 | 0.040 | 14.50 | 13.60 | 0.088 | 0.088 | 1.23 | 0.108 | / |
| Left Cheek | Battery 2 | 157/5785 | CDD | 1:1 | 0.322 | 14.50 | 13.60 | 0.192 | 0.303 | 1.23 | 0.373 | 166 |
| Left Cheek | Battery 3 | 157/5785 | CDD | 1:1 | 0.225 | 14.50 | 13.60 | 0.080 | 0.233 | 1.23 | 0.287 | / |
| **Body-worn (Distance 15mm)** | | | | | | | | | | | | |
| Back Side | standard | 157/5785 | CDD | 1:1 | 0.009 | 14.50 | 13.60 | 0.008 | 0.004 | 1.23 | 0.005 | / |
| Front Side | standard | 157/5785 | CDD | 1:1 | 0.025 | 14.50 | 13.60 | -0.012 | 0.034 | 1.23 | 0.041 | 167 |
| **Hotspot (Distance 10mm)** | | | | | | | | | | | | |
| Back Side | standard | 157/5785 | CDD | 1:1 | 0.009 | 14.50 | 13.60 | 0.078 | 0.013 | 1.23 | 0.016 | / |
| Front Side | standard | 157/5785 | CDD | 1:1 | 0.067 | 14.50 | 13.60 | 0.100 | 0.039 | 1.23 | 0.048 | 168 |
| Left Edge | standard | 157/5785 | CDD | 1:1 | 0.003 | 14.50 | 13.60 | 0.020 | 0.003 | 1.23 | 0.004 | / |
| Right Edge | standard | 157/5785 | CDD | 1:1 | 0.025 | 14.50 | 13.60 | 0.021 | 0.018 | 1.23 | 0.022 | / |
| Top Edge | standard | 157/5785 | CDD | 1:1 | 0.008 | 14.50 | 13.60 | 0.038 | 0.007 | 1.23 | 0.009 | / |
| Bottom Edge | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front Side | Battery 2 | 157/5785 | CDD | 1:1 | 0.050 | 14.50 | 13.60 | 0.021 | 0.036 | 1.23 | 0.044 | / |
| Front Side | Battery 3 | 157/5785 | CDD | 1:1 | 0.044 | 14.50 | 13.60 | 0.027 | 0.032 | 1.23 | 0.039 | / |

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. According to 648474 D04 Handset SAR v01r03，For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, 10-g extremity SAR is no required.

## 10.4 Simultaneous Transmission Analysis

| Simultaneous Tx Combination | Head | Body-worn (15mm) | Hotspot (10mm) | Product specific 10g SAR (0mm) |
|---|---|---|---|---|
| GSM Voice(Ant 1/ Ant 2) + BT | N/A | Yes | N/A | Yes |
| GSM DATA(Ant 1/ Ant 2) + BT | N/A | Yes | N/A | Yes |
| GSM Voice(Ant 1/ Ant 2) + Wi-Fi 2.4G (Ant 1) | Yes | Yes | N/A | Yes |
| GSM DATA(Ant 1/ Ant 2) + Wi-Fi 2.4G (Ant 1) | N/A | Yes | Yes | Yes |
| UMTS Voice(Ant 1/ Ant 2) + BT | N/A | Yes | N/A | Yes |
| UMTS Data(Ant 1/ Ant 2) + BT | N/A | Yes | N/A | Yes |
| UMTS Voice(Ant 1/ Ant 2) + Wi-Fi 2.4G (Ant 1) | Yes | Yes | N/A | Yes |
| UMTS Data (Ant 1/ Ant 2) + Wi-Fi 2.4G (Ant 1) | N/A | Yes | Yes | Yes |
| LTE (Ant 1/ Ant 2) + Wi-Fi 2.4G (Ant 1) | Yes | Yes | Yes | Yes |
| LTE (Ant 1/ Ant 2) + BT | N/A | Yes | N/A | Yes |
| GSM Voice(Ant 1) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | Yes | Yes | N/A | Yes |
| GSM Data (Ant 1) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | N/A | Yes | Yes | Yes |
| GSM Voice(Ant 2) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | Yes | Yes | N/A | Yes |
| GSM Data (Ant 2) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | N/A | Yes | Yes | Yes |
| UMTS Voice(Ant 1) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | Yes | Yes | N/A | Yes |
| UMTS Data (Ant 1) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | N/A | Yes | Yes | Yes |
| UMTS Voice (Ant 2) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | Yes | Yes | N/A | Yes |
| UMTS Data (Ant 2)+ Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | N/A | Yes | Yes | Yes |
| LTE (Ant 1) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | Yes | Yes | Yes | Yes |
| LTE (Ant 2) + Wi-Fi 5G (Ant 1/ Ant 2/ MIMO) | Yes | Yes | Yes | Yes |
| GSM Voice(Ant 1) +Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | Yes | Yes | N/A | Yes |
| GSM DATA(Ant 1) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | N/A | Yes | Yes | Yes |
| GSM Voice(Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | Yes | Yes | N/A | Yes |
| GSM DATA(Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | N/A | Yes | Yes | Yes |
| UMTSVoice (Ant 1) +Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | Yes | Yes | N/A | Yes |
| UMTS Data (Ant 1) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | N/A | Yes | Yes | Yes |
| UMTSVoice (Ant 2) +Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | Yes | Yes | N/A | Yes |
| UMTS Data (Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | N/A | Yes | Yes | Yes |
| LTE (Ant 1) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | Yes | Yes | Yes | Yes |
| LTE (Ant 2) + Wi-Fi 2.4G (Ant 1) + Wi-Fi 5G (Ant 2) | Yes | Yes | Yes | Yes |
| Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| GSM Voice(Ant 1) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| GSM DATA(Ant 1) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |

| | | | | |
|---|---|---|---|---|
| GSM Voice(Ant 2) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| GSM DATA(Ant 2) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| UMTS Voice(Ant 1) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| UMTS Data (Ant 1) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| UMTS Voice (Ant 2) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| UMTS Data (Ant 2)+ Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| LTE (Ant 1) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |
| LTE (Ant 2) + Wi-Fi 5G (Ant 2) + BT | N/A | Yes | N/A | Yes |

Note:
1) Wi-Fi 2.4G Ant 1 and Bluetooth can't transmit simultaneously.
2) Wi-Fi 2.4G Ant 2 and Bluetooth can't transmit simultaneously.
3) Wi-Fi 5G Ant 1 and Bluetooth can't transmit simultaneously.
4) Wi-Fi 5G Ant 2 and Bluetooth can transmit simultaneously.
5) Wi-Fi 2.4G has two Tx antennas. Wi-Fi 2.4G 802.11g/n support 2*2 CDD/MIMO function.
6) Wi-Fi 5G has two Tx antennas. Wi-Fi 5G 802.11 a/n/ac support 2*2 CDD/MIMO function.
7) Wi-Fi 2.4G& Wi-Fi 5G can't work at same mode, but they can transmit simultaneously at different modes (Wi-Fi station/hotspot) by using different Wi-Fi antennas.
8) Wi-Fi 2.4G Ant 2 and 2G&3G&4G second antenna (Ant 2) share the same Tx antenna and can't transmit simultaneously.
9) Wi-Fi 2.4G Ant 2 and 2G&3G&4G main antenna (Ant 1) can't transmit simultaneously.
10) 2G&3G&4G main antenna (Ant1) and second antenna (Ant 2) can't transmit simultaneously
11) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.
12) The device supports Wi-Fi VOIP function.
13) The device supports VOLTE function.
14) VOIP 3rd party applications may possibly be installed and used by the user.
15) Held to ear configurations are not applicable to Bluetooth and therefore were not considered for simultaneous transmission.
16) The device does not support DTM function.

**General Note:**

1. The Scaled SAR summation is calculated based on the same configuration and test position.
2. Per KDB 447498 D01, simultaneous transmission SAR is compliant if,

i) Scalar SAR summation < 1.6W/kg, simultaneously transmission SAR measurement is not necessary.

ii) SPLSR = (SAR1 + SAR2)^1.5 / (min. separation distance, mm), and the peak separation distance is determined from the square root of [(x1-x2)2 + (y1-y2)2 + (z1-z2)2], where (x1, y1, z1) and (x2, y2, z2) are the coordinates of the extrapolated peak SAR locations in the zoom scan.

iii) If SPLSR ≤ 0.04, simultaneously transmission SAR measurement is not necessary.

| Band | Configuration | | Frequency (MHz) | Maximum Power (dBm) | Separation Distance (mm) | Estimated SAR (W/kg) |
|---|---|---|---|---|---|---|
| Wi-Fi (2.4G) | Ant 2 | Body-worn | 2462 | 14.00 | 15 | 0.140 |
| Wi-Fi (U-NII-2A) | Ant 2 | Body-worn | 5350 | 10.50 | 15 | 0.231 |
| Wi-Fi (U-NII-1) | Ant 2 | Hotspot | 5350 | 10.50 | 10 | 0.347 |
| Wi-Fi (U-NII-2C) | Ant 2 | Body-worn | 5700 | 9.50 | 15 | 0.189 |
| Wi-Fi (U-NII-3) | Ant 2 | Body-worn | 5825 | 9.50 | 15 | 0.191 |
| | | Hotspot | 5825 | 9.50 | 10 | 0.287 |
| Bluetooth | Body-worn | | 2480 | 11.00 | 15 | 0.176 |
| | Product specific 10g SAR | | 2480 | 11.00 | 5 | 0.211 |
| For simultaneous transmission analysis, Bluetooth SAR is estimated per KDB 447498 D01 based on the formula below. (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. | | | | | | |

**The maximum $SAR_{1g}$ Value for Main- Antenna**

| Test Position / $SAR_{1g}$(W/kg) | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Body worn | | Hotspot | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Back Side | Front Side | Back Side | Front Side | Left Edge | Right Edge | Top Edge | Bottom Edge |
| GSM 850 | 0.336 | 0.188 | 0.334 | 0.181 | 0.379 | 0.368 | 0.545 | 0.522 | **0.195** | 0.345 | N/A | 0.224 |
| GSM 1900 | 0.211 | 0.176 | 0.488 | 0.151 | 0.180 | 0.181 | 0.474 | 0.375 | 0.077 | 0.336 | N/A | 0.331 |
| WCDMA Band II | 0.469 | 0.441 | 1.104 | 0.361 | 0.404 | 0.334 | 0.565 | 0.576 | 0.081 | 0.411 | N/A | 0.390 |
| WCDMA Band IV | 0.330 | 0.282 | 0.554 | 0.245 | 0.324 | 0.247 | 0.472 | 0.426 | 0.124 | 0.291 | N/A | 0.166 |
| WCDMA Band V | 0.271 | 0.183 | 0.408 | 0.163 | 0.275 | 0.265 | 0.408 | 0.304 | 0.142 | 0.343 | N/A | 0.230 |
| LTE FDD 2 | **0.540** | **0.489** | **1.322** | **0.387** | **0.528** | **0.403** | **1.028** | 0.679 | 0.159 | **0.671** | N/A | **0.758** |
| LTE FDD 4 | 0.263 | 0.207 | 0.482 | 0.198 | 0.287 | 0.189 | 0.442 | 0.353 | 0.094 | 0.214 | N/A | 0.175 |
| LTE FDD 5 | 0.110 | 0.093 | 0.382 | 0.190 | 0.273 | 0.196 | 0.382 | 0.283 | 0.133 | 0.166 | N/A | 0.197 |
| LTE FDD 7 | 0.167 | 0.181 | 0.353 | 0.114 | 0.250 | 0.229 | 0.287 | 0.333 | 0.038 | 0.220 | N/A | 0.301 |
| LTE FDD 12 | 0.097 | 0.089 | 0.181 | 0.092 | 0.204 | 0.133 | 0.254 | 0.227 | 0.119 | 0.222 | N/A | 0.159 |
| LTE FDD 17 | 0.127 | 0.118 | 0.115 | 0.129 | 0.199 | 0.124 | 0.317 | 0.224 | 0.079 | 0.243 | N/A | 0.175 |
| LTE FDD 26 | 0.254 | 0.105 | 0.265 | 0.186 | 0.259 | 0.250 | 0.311 | 0.261 | 0.085 | 0.238 | N/A | 0.182 |
| LTE TDD 38 | 0.106 | 0.143 | 0.230 | 0.074 | 0.137 | 0.177 | 0.496 | 0.675 | 0.035 | 0.461 | N/A | 0.476 |
| LTE TDD 41 | 0.169 | 0.160 | 0.400 | 0.095 | 0.184 | 0.236 | 0.535 | **0.728** | 0.095 | 0.507 | N/A | 0.514 |
| MAX. SAR1g | 0.540 | 0.489 | 1.322 | 0.387 | 0.528 | 0.403 | 1.028 | 0.728 | 0.195 | 0.671 | N/A | 0.758 |

**The maximum $SAR_{1g}$ Value for Second- Antenna**

| Test Position / $SAR_{1g}$(W/kg) | Left Cheek | Left Tilt | Right Cheek | Right Tilt | Body worn | | Hotspot | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Back Side | Front Side | Back Side | Front Side | Left Edge | Right Edge | Top Edge | Bottom Edge |
| GSM 850 | 0.845 | 0.803 | 1.103 | 1.033 | 0.261 | 0.227 | 0.552 | 0.411 | 0.414 | N/A | 0.401 | N/A |
| GSM 1900 | 0.573 | 0.495 | 1.052 | 0.771 | 0.105 | 0.093 | 0.232 | 0.207 | 0.258 | N/A | 0.176 | N/A |
| WCDMA Band II | 0.369 | 0.281 | 1.030 | 0.553 | 0.146 | 0.130 | 0.238 | 0.203 | 0.249 | N/A | 0.184 | N/A |
| WCDMA Band IV | 0.286 | 0.139 | 1.029 | 0.581 | 0.071 | 0.072 | 0.173 | 0.172 | 0.105 | N/A | 0.123 | N/A |
| WCDMA Band V | **0.881** | **0.834** | 1.246 | **1.127** | 0.257 | 0.188 | 0.468 | 0.187 | 0.253 | N/A | 0.292 | N/A |
| LTE FDD 2 | 0.353 | 0.305 | 0.895 | 0.693 | 0.169 | 0.131 | 0.266 | 0.238 | 0.237 | N/A | 0.205 | N/A |
| LTE FDD 4 | 0.331 | 0.424 | 1.043 | 1.042 | 0.086 | 0.082 | 0.179 | 0.183 | 0.201 | N/A | 0.185 | N/A |
| LTE FDD 5 | 0.573 | 0.661 | 1.162 | 0.602 | 0.235 | 0.201 | 0.431 | 0.362 | 0.242 | N/A | 0.314 | N/A |
| LTE FDD 7 | 0.464 | 0.439 | 1.131 | 1.118 | 0.095 | 0.099 | 0.207 | 0.236 | 0.214 | N/A | 0.082 | N/A |
| LTE FDD 12 | 0.756 | 0.725 | **1.256** | 0.999 | **0.400** | **0.332** | **0.702** | **0.528** | **0.558** | N/A | 0.403 | N/A |
| LTE FDD 17 | 0.739 | 0.691 | 1.133 | 1.002 | 0.379 | 0.321 | 0.654 | 0.526 | 0.439 | N/A | **0.444** | N/A |
| LTE FDD 26 | 0.590 | 0.471 | 0.743 | 0.566 | 0.210 | 0.174 | 0.470 | 0.289 | 0.215 | N/A | 0.309 | N/A |
| LTE TDD 38 | 0.353 | 0.382 | 0.983 | 0.746 | 0.170 | 0.146 | 0.304 | 0.201 | 0.175 | N/A | 0.035 | N/A |
| LTE TDD 41 | 0.287 | 0.278 | 0.663 | 0.542 | 0.113 | 0.137 | 0.246 | 0.201 | 0.209 | N/A | 0.098 | N/A |
| MAX. SAR1g | 0.881 | 0.834 | 1.256 | 1.127 | 0.400 | 0.332 | 0.702 | 0.528 | 0.558 | N/A | 0.444 | N/A |

**The maximum $SAR_{1g/10g}$ Value for Wi-Fi 5G (Ant 1)**

| Test Position / $SAR_{1g/10g}$(W/kg) | | Wi-Fi (U-NII-1& U-NII-2A) | Wi-Fi (U-NII-2C) | Wi-Fi (U-NII-3) | MAX. $SAR_{1g/10g}$ |
|---|---|---|---|---|---|
| Left, Cheek | | 0.296 | 0.326 | 0.266 | 0.326 |
| Left, Tilt | | 0.264 | 0.194 | 0.184 | 0.264 |
| Right, Cheek | | 0.134 | 0.092 | 0.100 | 0.134 |
| Right, Tilt | | 0.123 | 0.084 | 0.094 | 0.123 |
| Body worn 1g | Back Side | 0.010 | 0.034 | 0.007 | 0.034 |
| | Front Side | 0.012 | 0.074 | 0.013 | 0.074 |
| Hotspot 1g | Back Side | 0.020 | N/A | 0.045 | 0.045 |
| | Front Side | 0.068 | N/A | 0.052 | 0.068 |
| | Left Edge | N/A | N/A | N/A | N/A |
| | Right Edge | 0.134 | N/A | 0.094 | 0.134 |
| | Top Edge | 0.047 | N/A | 0.037 | 0.047 |
| | Bottom Edge | N/A | N/A | N/A | N/A |
| Product specific 10g SAR | Back Side | 0.249 | 0.134 | N/A | 0.249 |
| | Front Side | 0.219 | 0.279 | N/A | 0.279 |
| | Left Edge | N/A | N/A | N/A | N/A |
| | Right Edge | 0.199 | 0.133 | N/A | 0.199 |
| | Top Edge | 0.158 | 0.162 | N/A | 0.162 |
| | Bottom Edge | N/A | N/A | N/A | N/A |

**The maximum $SAR_{1g/10g}$ Value for Wi-Fi 5G (Ant 2)**

| Test Position / $SAR_{1g/10g}$(W/kg) | | Wi-Fi (U-NII-1& U-NII-2A) | Wi-Fi (U-NII-2C) | Wi-Fi (U-NII-3) | MAX. $SAR_{1g/10g}$ |
|---|---|---|---|---|---|
| Left, Cheek | | 0.071 | 0.076 | 0.013 | 0.076 |
| Left, Tilt | | 0.077 | 0.075 | 0.032 | 0.077 |
| Right, Cheek | | 0.149 | 0.096 | 0.073 | 0.149 |
| Right, Tilt | | 0.293 | 0.121 | 0.040 | 0.293 |
| Body worn 1g | Back Side | 0.231 | 0.189 | 0.191 | 0.231 |
| | Front Side | 0.231 | 0.189 | 0.191 | 0.231 |
| Hotspot 1g | Back Side | 0.347 | N/A | 0.287 | 0.347 |
| | Front Side | 0.347 | N/A | 0.287 | 0.347 |
| | Left Edge | 0.347 | N/A | 0.287 | 0.347 |
| | Right Edge | 0.347 | N/A | 0.287 | 0.347 |
| | Top Edge | 0.347 | N/A | 0.287 | 0.347 |
| | Bottom Edge | 0.347 | N/A | 0.287 | 0.347 |

| | | | | | |
|---|---|---|---|---|---|
| Product specific 10g SAR | Back Side | 0.006 | 0.002 | 0.072 | 0.072 |
| | Front Side | 0.196 | 0.108 | 0.077 | 0.196 |
| | Left Edge | 0.006 | 0.010 | 0.073 | 0.073 |
| | Right Edge | N/A | N/A | N/A | N/A |
| | Top Edge | 0.01 | 0.009 | 0.076 | 0.076 |
| | Bottom Edge | N/A | N/A | N/A | N/A |

**The maximum $SAR_{1g/10g}$ Value for Wi-Fi 5G (MIMO)**

| Test Position / $SAR_{1g/10g}$(W/kg) | | Wi-Fi (U-NII-1& U-NII-2A) | Wi-Fi (U-NII-2C) | Wi-Fi (U-NII-3) | MAX. $SAR_{1g/10g}$ |
|---|---|---|---|---|---|
| Left, Cheek | | 0.296 | 0.474 | 0.373 | 0.474 |
| Left, Tilt | | 0.274 | 0.304 | 0.294 | 0.304 |
| Right, Cheek | | 0.220 | 0.195 | 0.148 | 0.220 |
| Right, Tilt | | 0.273 | 0.162 | 0.108 | 0.273 |
| Body worn 1g | Back Side | 0.010 | 0.010 | 0.005 | 0.010 |
| | Front Side | 0.044 | 0.027 | 0.041 | 0.044 |
| Hotspot 1g | Back Side | 0.150 | N/A | 0.016 | 0.150 |
| | Front Side | 0.106 | N/A | 0.048 | 0.106 |
| | Left Edge | 0.020 | N/A | 0.004 | 0.020 |
| | Right Edge | 0.179 | N/A | 0.022 | 0.179 |
| | Top Edge | 0.109 | N/A | 0.009 | 0.109 |
| | Bottom Edge | N/A | N/A | N/A | N/A |
| Product specific 10g SAR | Back Side | 0.218 | 0.211 | N/A | 0.218 |
| | Front Side | 0.188 | 0.242 | N/A | 0.242 |
| | Left Edge | 0.026 | 0.017 | N/A | 0.026 |
| | Right Edge | 0.195 | 0.166 | N/A | 0.195 |
| | Top Edge | 0.132 | 0.163 | N/A | 0.163 |
| | Bottom Edge | N/A | N/A | N/A | N/A |

**About BT and Wi-Fi 5G (Ant 2) and Main-Antenna**

| Test Position \ $SAR_{1g/10g}$(W/kg) | | Main-antenna | Wi-Fi 5G (Ant 2) | BT | MAX. $\Sigma SAR_{1g/10g}$ |
|---|---|---|---|---|---|
| Body worn 1g | Back Side | 0.528 | 0.231 | 0.176 | 0.935 |
| | Front Side | 0.403 | 0.231 | 0.176 | 0.810 |
| Product specific 10g SAR | Back Side | N/A | 0.072 | 0.211 | 0.283 |
| | Front Side | N/A | 0.196 | 0.211 | 0.407 |
| | Left Edge | N/A | 0.073 | 0.211 | 0.284 |
| | Right Edge | N/A | N/A | 0.211 | 0.211 |
| | Top Edge | N/A | 0.076 | 0.211 | 0.287 |
| | Bottom Edge | N/A | N/A | 0.211 | 0.211 |
| Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.<br>2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed $SAR_{MAX}$ +Licensed $SAR_{MAX}$ | | | | | |

MAX. $\Sigma SAR_{1g}$ = 0.935 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for BT and Wi-Fi 5G (Ant 2) and Main-Antenna

**About BT and Wi-Fi 5G (Ant 2) and Second-Antenna**

| Test Position \ $SAR_{1g/10g}$(W/kg) | | Second -antenna | Wi-Fi 5G (Ant 2) | BT | MAX. $\Sigma SAR_{1g/10g}$ |
|---|---|---|---|---|---|
| Body worn 1g | Back Side | 0.400 | 0.231 | 0.176 | 0.807 |
| | Front Side | 0.332 | 0.231 | 0.176 | 0.739 |
| Product specific 10g SAR | Back Side | N/A | 0.072 | 0.211 | 0.283 |
| | Front Side | N/A | 0.196 | 0.211 | 0.407 |
| | Left Edge | N/A | 0.073 | 0.211 | 0.284 |
| | Right Edge | N/A | N/A | 0.211 | 0.211 |
| | Top Edge | N/A | 0.076 | 0.211 | 0.287 |
| | Bottom Edge | N/A | N/A | 0.211 | 0.211 |
| Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.<br>2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed $SAR_{MAX}$ +Licensed $SAR_{MAX}$ | | | | | |

MAX. $\Sigma SAR_{1g}$ = 0.807 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for BT and Wi-Fi 5G (Ant 2) and Second-Antenna

**About Wi-Fi 5G and Main-Antenna**

| Test Position / $SAR_{1g/10g}$(W/kg) | | Main-antenna | Wi-Fi 5G (Ant 1) | Wi-Fi 5G (Ant 2) | Wi-Fi 5G (MIMO) | MAX. $\Sigma SAR_{1g/10g}$ |
|---|---|---|---|---|---|---|
| Left, Cheek | | 0.540 | 0.326 | 0.076 | 0.474 | 1.014 |
| Left, Tilt | | 0.489 | 0.264 | 0.077 | 0.304 | 0.793 |
| Right, Cheek | | 1.322 | 0.134 | 0.149 | 0.220 | 1.542 |
| Right, Tilt | | 0.387 | 0.123 | 0.293 | 0.273 | 0.680 |
| Body worn 1g | Back Side | 0.528 | 0.034 | 0.231 | 0.010 | 0.759 |
| | Front Side | 0.403 | 0.074 | 0.231 | 0.044 | 0.634 |
| Hotspot 1g | Back Side | 1.028 | 0.045 | 0.347 | 0.150 | 1.375 |
| | Front Side | 0.728 | 0.068 | 0.347 | 0.106 | 1.075 |
| | Left Edge | 0.195 | N/A | 0.347 | 0.020 | 0.542 |
| | Right Edge | 0.671 | 0.134 | 0.347 | 0.179 | 1.018 |
| | Top Edge | N/A | 0.047 | 0.347 | 0.109 | 0.347 |
| | Bottom Edge | 0.758 | N/A | 0.347 | N/A | 1.105 |
| Product specific 10g SAR | Back Side | N/A | 0.249 | 0.072 | 0.218 | 0.249 |
| | Front Side | N/A | 0.279 | 0.196 | 0.242 | 0.279 |
| | Left Edge | N/A | N/A | 0.073 | 0.026 | 0.073 |
| | Right Edge | N/A | 0.199 | N/A | 0.195 | 0.199 |
| | Top Edge | N/A | 0.162 | 0.076 | 0.163 | 0.163 |
| | Bottom Edge | N/A | N/A | N/A | N/A | 0 |

Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.

2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed $SAR_{MAX}$ +Licensed $SAR_{MAX}$

MAX. $\Sigma SAR_{1g}$ = 1.542 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi 5G and Main-Antenna

**About Wi-Fi 5G and Second-Antenna**

| Test Position \ $SAR_{1g/10g}$(W/kg) | | Second -antenna | Wi-Fi 5G (Ant 1) | Wi-Fi 5G (Ant 2) | Wi-Fi 5G (MIMO) | MAX. $\Sigma SAR_{1g/10g}$ |
|---|---|---|---|---|---|---|
| Left, Cheek | | 0.881 | 0.326 | 0.076 | 0.474 | 1.355 |
| Left, Tilt | | 0.834 | 0.264 | 0.077 | 0.304 | 1.138 |
| Right, Cheek | | 1.256 | 0.134 | 0.149 | 0.220 | 1.476 |
| Right, Tilt | | 1.127 | 0.123 | 0.293 | 0.273 | 1.420 |
| Body worn 1g | Back Side | 0.400 | 0.034 | 0.231 | 0.010 | 0.631 |
| | Front Side | 0.332 | 0.074 | 0.231 | 0.044 | 0.563 |
| Hotspot 1g | Back Side | 0.702 | 0.045 | 0.347 | 0.150 | 1.049 |
| | Front Side | 0.528 | 0.068 | 0.347 | 0.106 | 0.875 |
| | Left Edge | 0.558 | N/A | 0.347 | 0.020 | 0.905 |
| | Right Edge | N/A | 0.134 | 0.347 | 0.179 | 0.347 |
| | Top Edge | 0.444 | 0.047 | 0.347 | 0.109 | 0.791 |
| | Bottom Edge | N/A | N/A | 0.347 | N/A | 0.347 |
| Product specific 10g SAR | Back Side | N/A | 0.249 | 0.072 | 0.218 | 0.249 |
| | Front Side | N/A | 0.279 | 0.196 | 0.242 | 0.279 |
| | Left Edge | N/A | N/A | 0.073 | 0.026 | 0.073 |
| | Right Edge | N/A | 0.199 | N/A | 0.195 | 0.199 |
| | Top Edge | N/A | 0.162 | 0.076 | 0.163 | 0.163 |
| | Bottom Edge | N/A | N/A | N/A | N/A | 0 |

Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.

2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed $SAR_{MAX}$ +Licensed $SAR_{MAX}$

MAX. $\Sigma SAR_{1g}$ = 1.476 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi 5G and Second-Antenna

**About Wi-Fi 2.4G (Ant1) and Wi-Fi 5G (Ant 2) and Main-Antenna**

| Test Position \ $SAR_{1g/10g}$(W/kg) | | Main-antenna | Wi-Fi 5G (Ant 2) | Wi-Fi 2.4G (Ant 1) | MAX. $\Sigma SAR_{1g/10g}$ |
|---|---|---|---|---|---|
| Left, Cheek | | 0.540 | 0.076 | 0.373 | 0.989 |
| Left, Tilt | | 0.489 | 0.077 | 0.345 | 0.911 |
| Right, Cheek | | 1.322 | 0.149 | 0.082 | 1.553 |
| Right, Tilt | | 0.387 | 0.293 | 0.075 | 0.755 |
| Body worn 1g | Back Side | 0.528 | 0.231 | 0.067 | 0.826 |
| | Front Side | 0.403 | 0.231 | 0.050 | 0.684 |
| Hotspot 1g | Back Side | 1.028 | 0.347 | 0.149 | 1.524 |
| | Front Side | 0.728 | 0.347 | 0.097 | 1.172 |
| | Left Edge | 0.195 | 0.347 | N/A | 0.542 |
| | Right Edge | 0.671 | 0.347 | 0.130 | 1.148 |
| | Top Edge | N/A | 0.347 | 0.050 | 0.397 |
| | Bottom Edge | 0.758 | 0.347 | N/A | 1.105 |
| Product specific 10g SAR | Back Side | N/A | 0.072 | N/A | 0.072 |
| | Front Side | N/A | 0.196 | N/A | 0.196 |
| | Left Edge | N/A | 0.073 | N/A | 0.073 |
| | Right Edge | N/A | N/A | N/A | N/A |
| | Top Edge | N/A | 0.076 | N/A | 0.076 |
| | Bottom Edge | N/A | N/A | N/A | N/A |

Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.

2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed $SAR_{MAX}$ +Licensed $SAR_{MAX}$

MAX. $\Sigma SAR_{1g}$ = 1.553 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi 2.4G (Ant1) and Wi-Fi 5G (Ant 2) and Main-Antenna

**About Wi-Fi 2.4G (Ant1) and Wi-Fi 5G (Ant 2) and Second-Antenna**

| Test Position \ $SAR_{1g/10g}$(W/kg) | | Second -antenna | Wi-Fi 5G (Ant 2) | Wi-Fi 2.4G (Ant 1) | MAX. $\Sigma SAR_{1g/10g}$ |
|---|---|---|---|---|---|
| Left, Cheek | | 0.881 | 0.076 | 0.373 | 1.330 |
| Left, Tilt | | 0.834 | 0.077 | 0.345 | 1.256 |
| Right, Cheek | | 1.256 | 0.149 | 0.082 | 1.487 |
| Right, Tilt | | 1.127 | 0.293 | 0.075 | 1.495 |
| Body worn 1g | Back Side | 0.400 | 0.231 | 0.067 | 0.698 |
| | Front Side | 0.332 | 0.231 | 0.050 | 0.613 |
| Hotspot 1g | Back Side | 0.702 | 0.347 | 0.149 | 1.198 |
| | Front Side | 0.528 | 0.347 | 0.097 | 0.972 |
| | Left Edge | 0.558 | 0.347 | N/A | 0.905 |
| | Right Edge | N/A | 0.347 | 0.130 | 0.477 |
| | Top Edge | 0.444 | 0.347 | 0.050 | 0.841 |
| | Bottom Edge | N/A | 0.347 | N/A | 0.347 |
| Product specific 10g SAR | Back Side | N/A | 0.072 | N/A | 0.072 |
| | Front Side | N/A | 0.196 | N/A | 0.196 |
| | Left Edge | N/A | 0.073 | N/A | 0.073 |
| | Right Edge | N/A | N/A | N/A | N/A |
| | Top Edge | N/A | 0.076 | N/A | 0.076 |
| | Bottom Edge | N/A | N/A | N/A | N/A |

Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value.

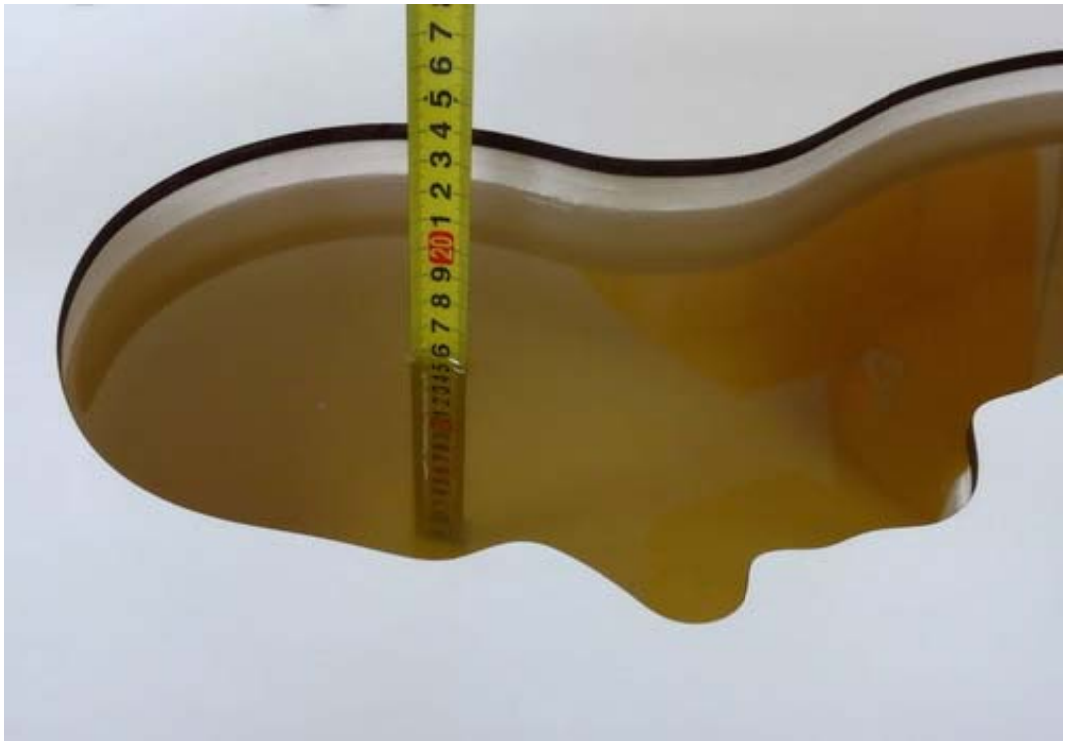
2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed $SAR_{MAX}$ +Licensed $SAR_{MAX}$

MAX. $\Sigma SAR_{1g}$ = 1.495 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi 2.4G (Ant1) and Wi-Fi 5G (Ant 2) and Second-Antenna

# 11 Measurement Uncertainty

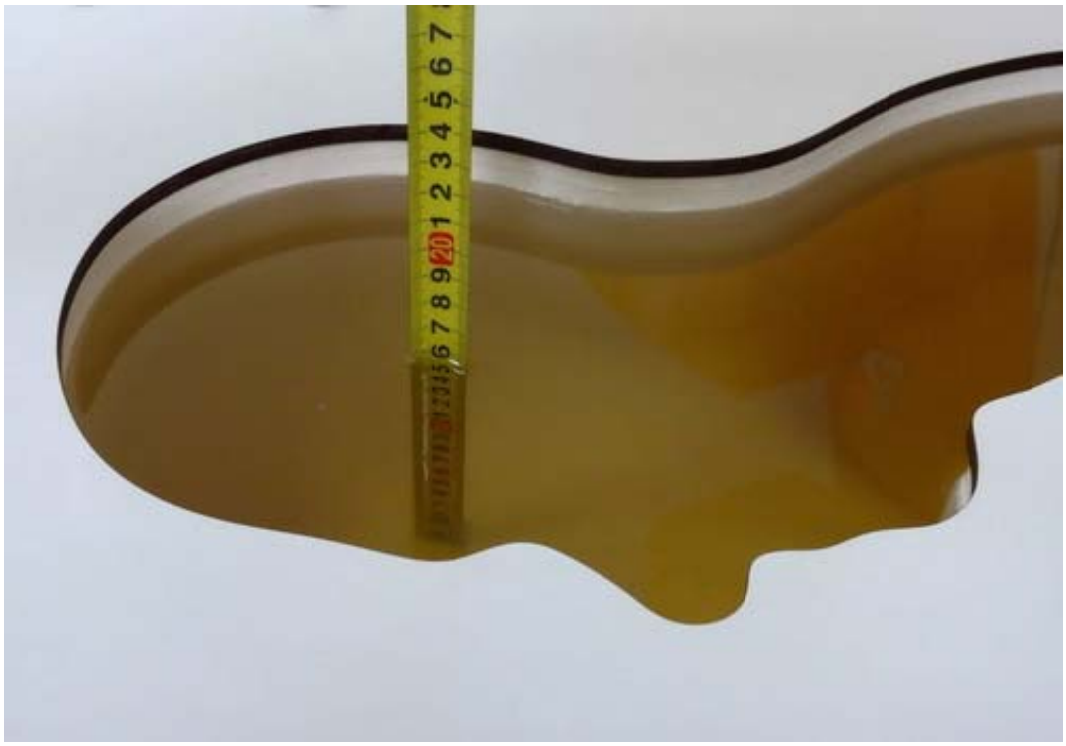
Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528- 2013 is not required in SAR reports submitted for equipment approval. This also applies to the 10-g SAR required for phablets in KDB Publication 648474.

# ANNEX A: Test Layout



Picture 3: Liquid depth in the head Phantom (750MHz, 15.3cm depth)

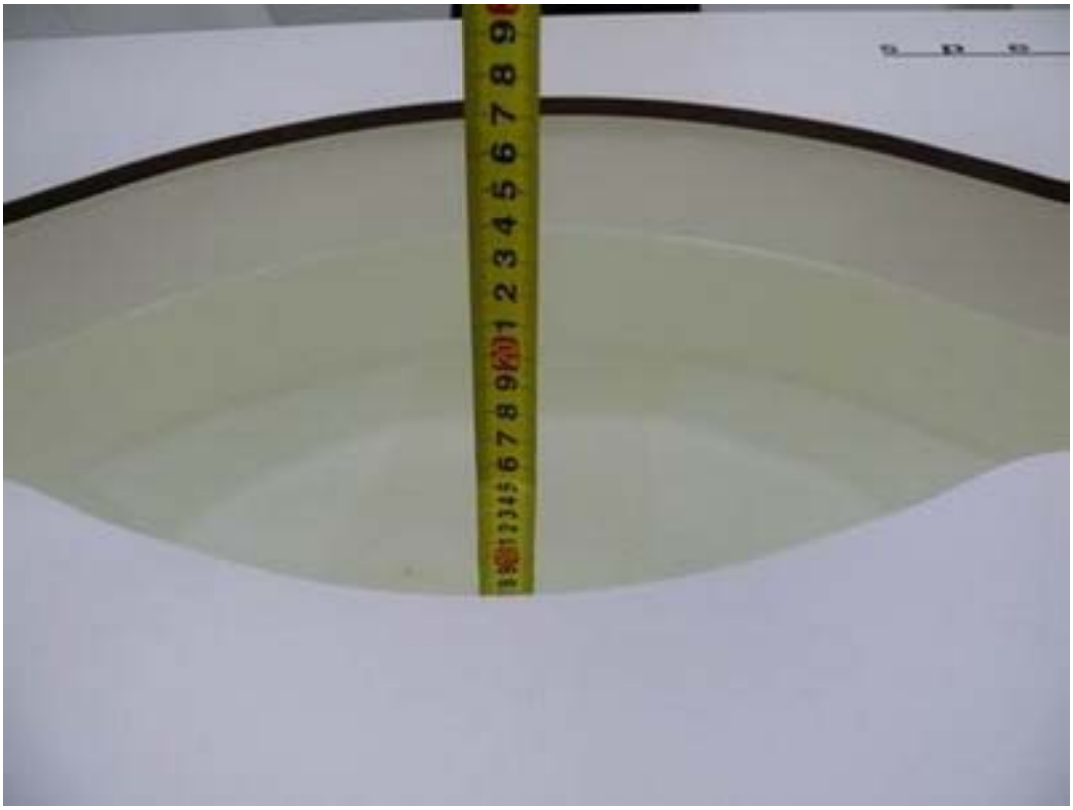
Picture 4: Liquid depth in the flat Phantom (750MHz, 15.4cm depth)



Picture 5: Liquid depth in the head Phantom (835MHz, 15.3cm depth)

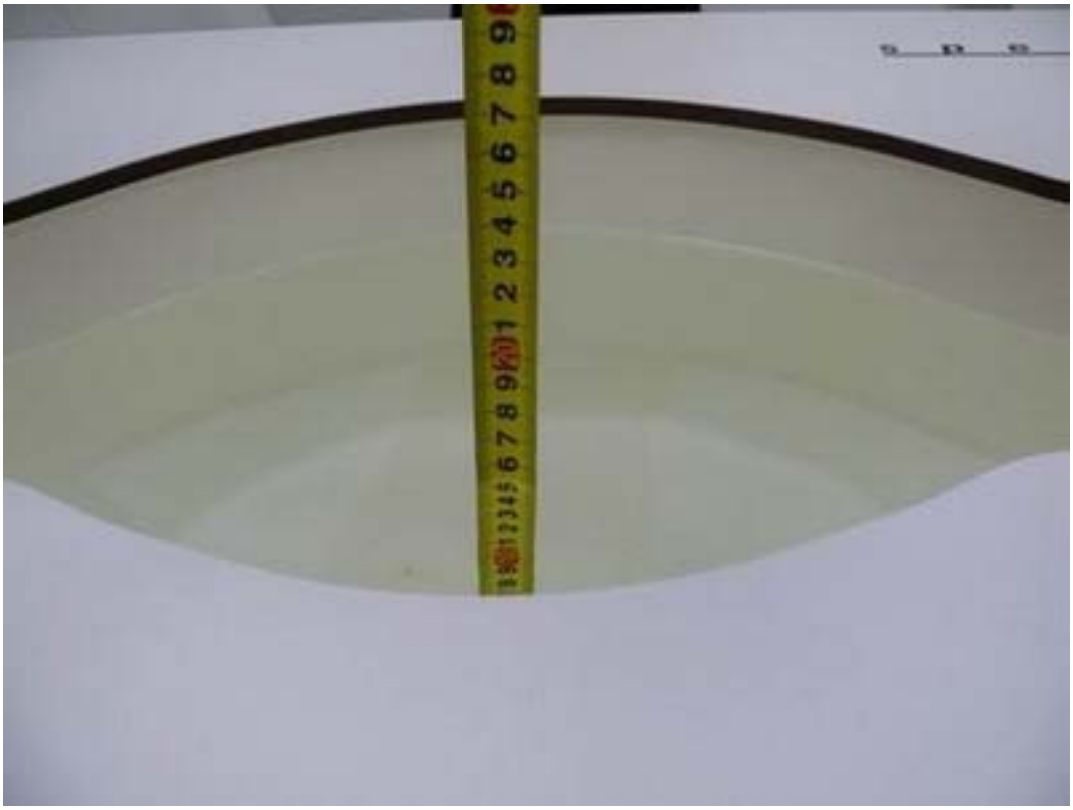
Picture 6: Liquid depth in the flat Phantom (835MHz, 15.4cm depth)

Picture 7: liquid depth in the head Phantom (1750 MHz, 15.3cm depth)



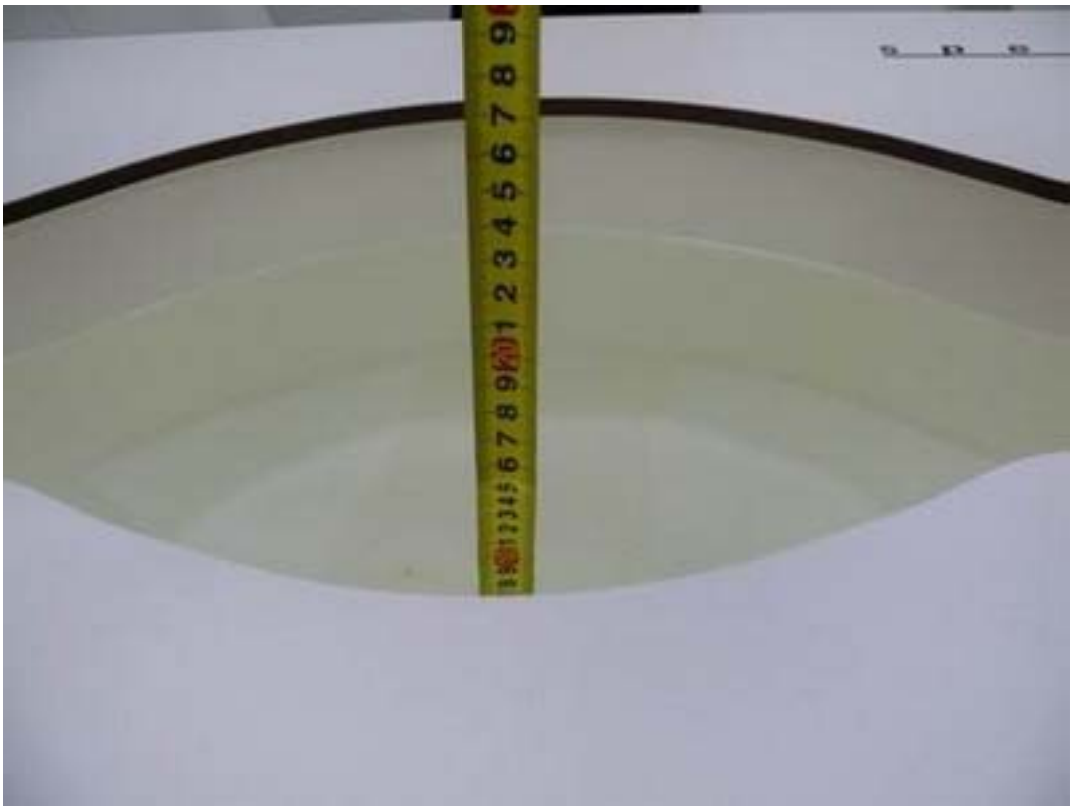
Picture 8: Liquid depth in the flat Phantom (1750 MHz, 15.2cm depth)

Picture 9: liquid depth in the head Phantom (1900 MHz, 15.3cm depth)



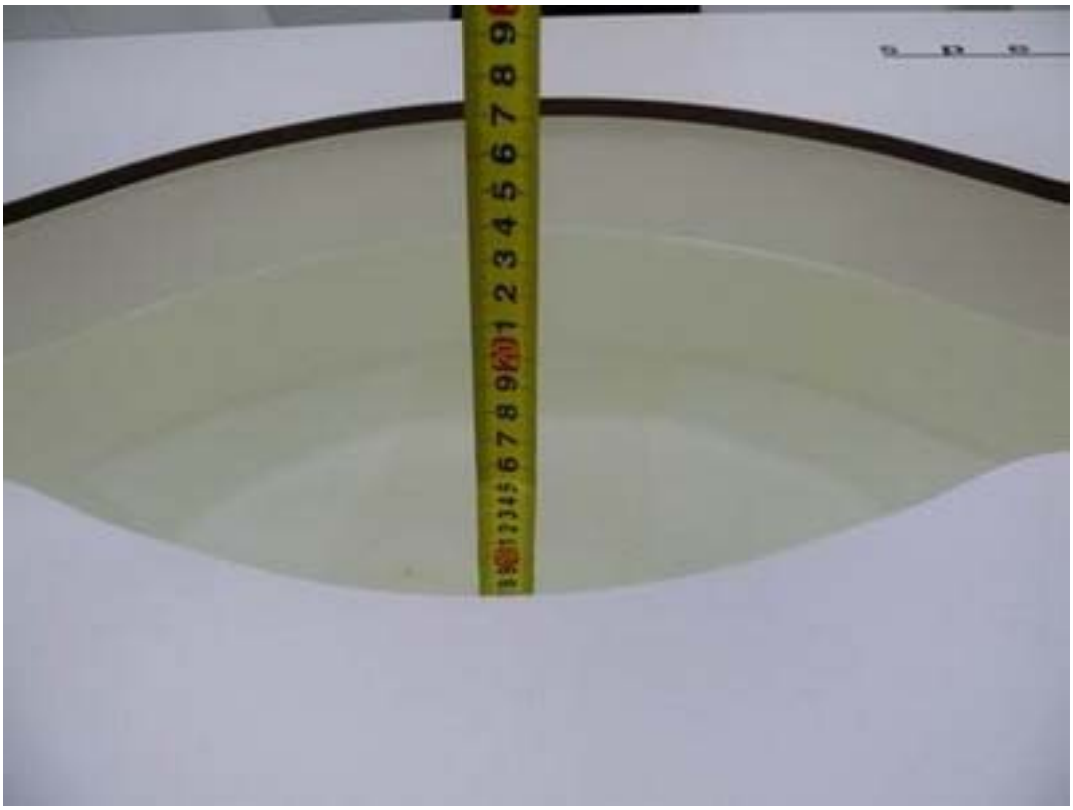
Picture 10: Liquid depth in the flat Phantom (1900 MHz, 15.2cm depth)

Picture 11: Liquid depth in the head Phantom (2450 MHz, 15.4cm depth)

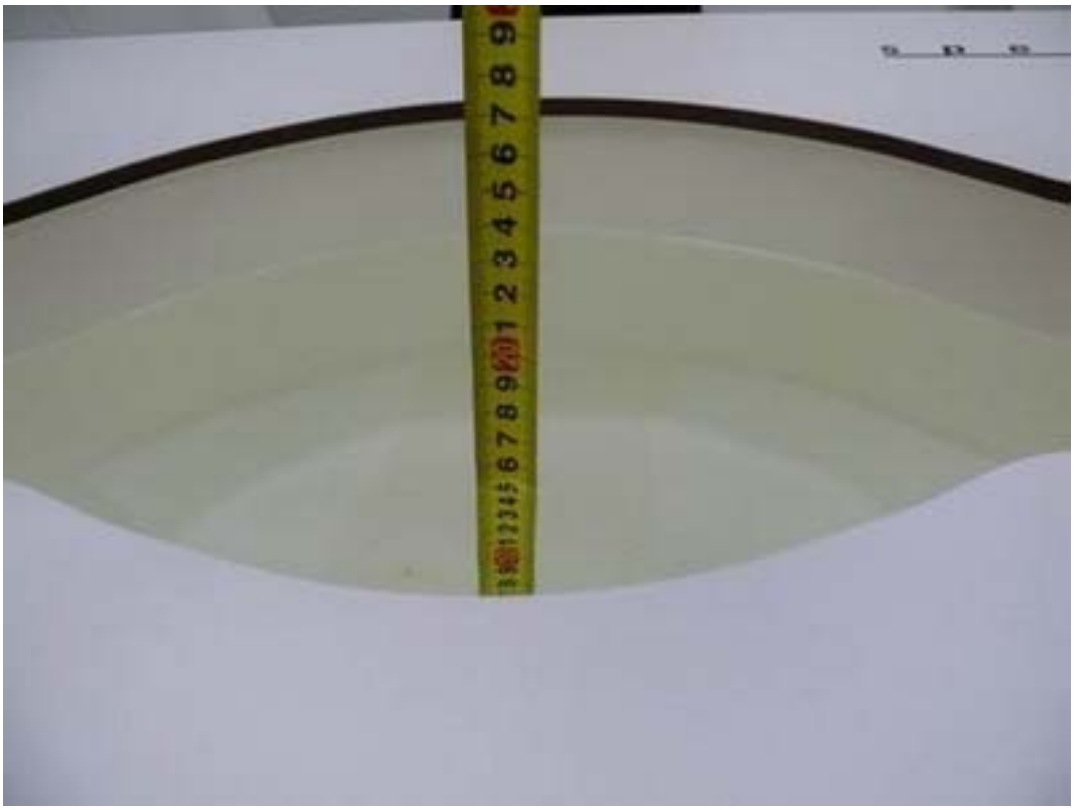


Picture 12: Liquid depth in the flat Phantom (2450 MHz, 15.3cm depth)

Picture 13: Liquid depth in the head Phantom (2600 MHz, 15.4cm depth)

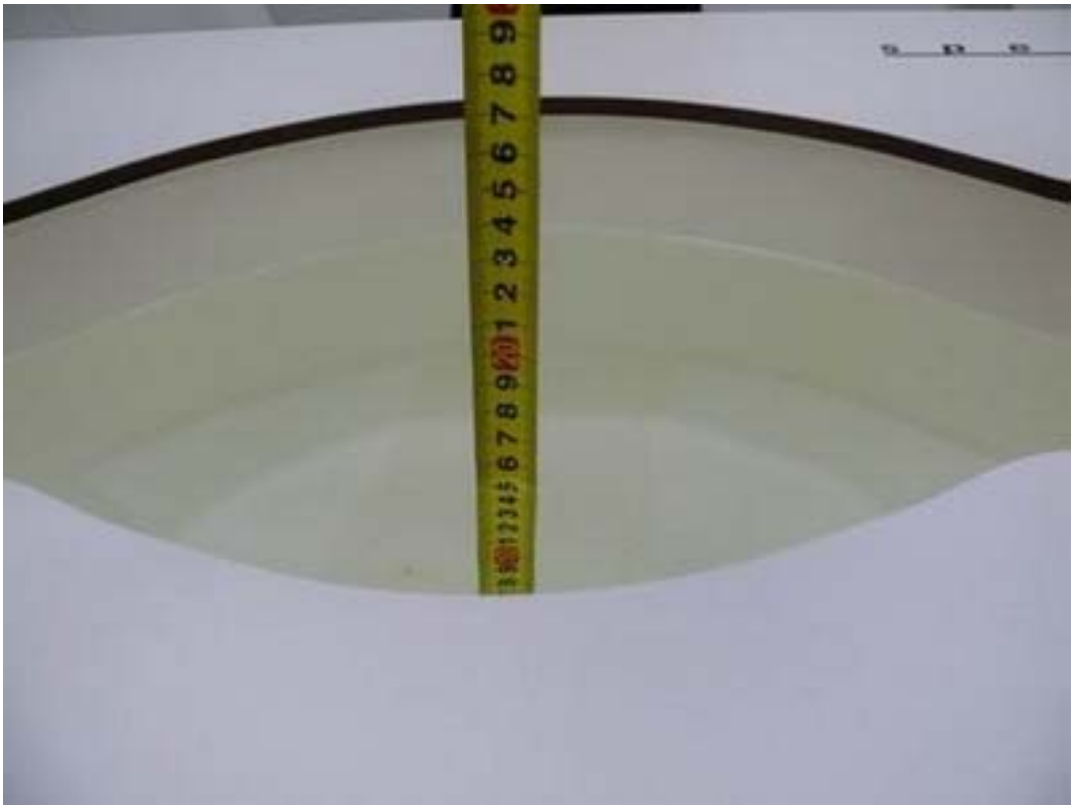


Picture 14: Liquid depth in the flat Phantom (2600 MHz, 15.3cm depth)



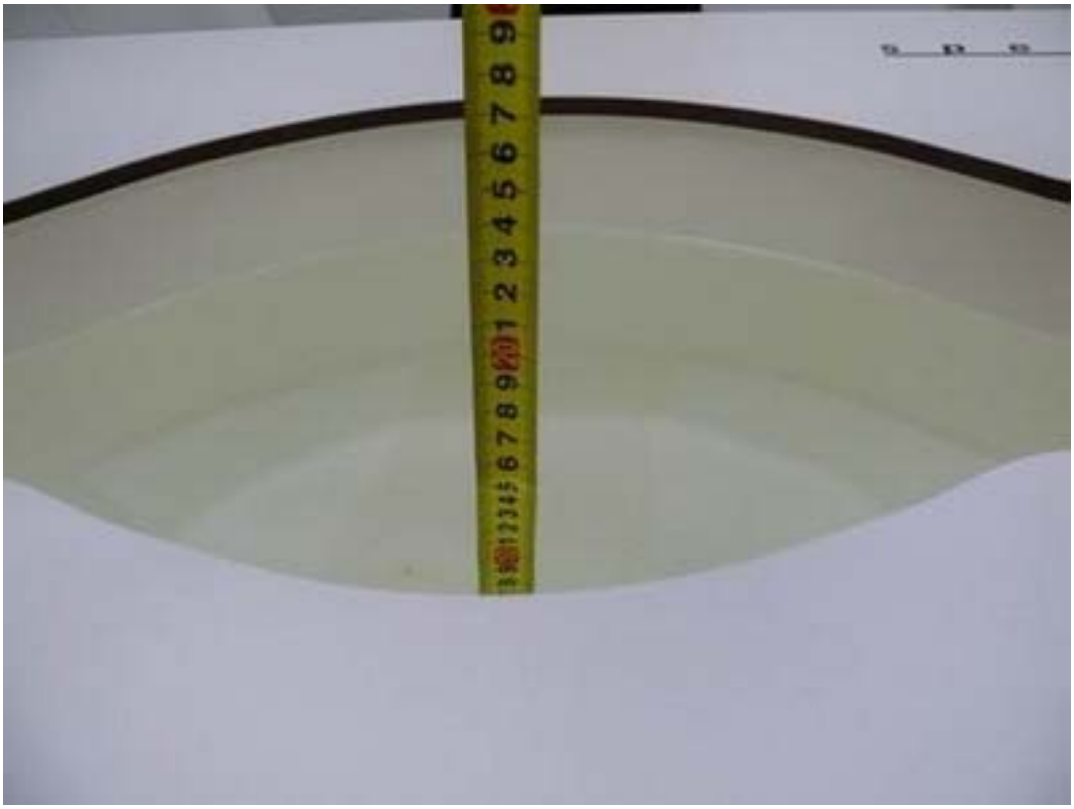
Picture 15: Liquid depth in the flat Phantom (5200 MHz, 15.3cm depth)

Picture 16: Liquid depth in the head Phantom (5300 MHz, 15.4cm depth)



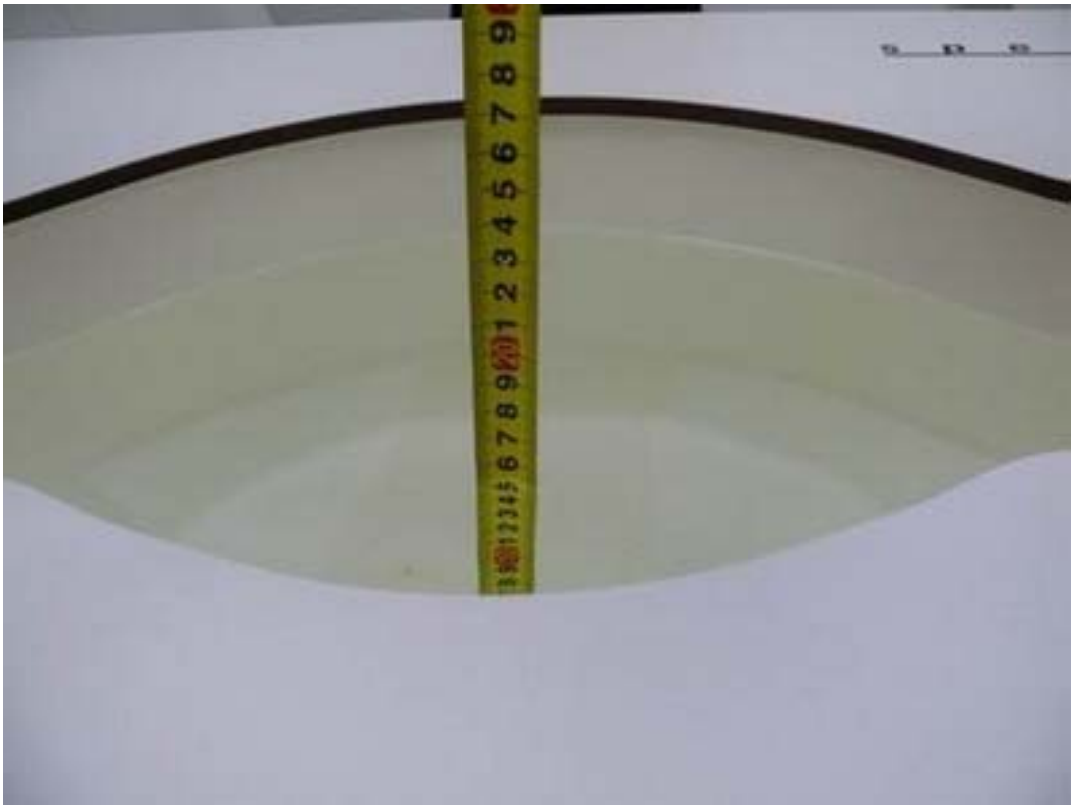
Picture 17: Liquid depth in the flat Phantom (5300 MHz, 15.3cm depth)

Picture 18: Liquid depth in the head Phantom (5600 MHz, 15.4cm depth)



Picture 19: Liquid depth in the flat Phantom (5600 MHz, 15.3cm depth)

Picture 20: Liquid depth in the head Phantom (5800 MHz, 15.1cm depth)



Picture 21: Liquid depth in the flat Phantom (5800 MHz, 15.0cm depth)

# ANNEX B: System Check Results

## Plot 1 System Performance Check at 750 MHz Head TSL

**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017**

Date: 11/30/2016

Communication System:CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.90 S/m; $\varepsilon_r$ = 41.1; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (6.63, 6.63, 6.63); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm,Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.29 W/kg

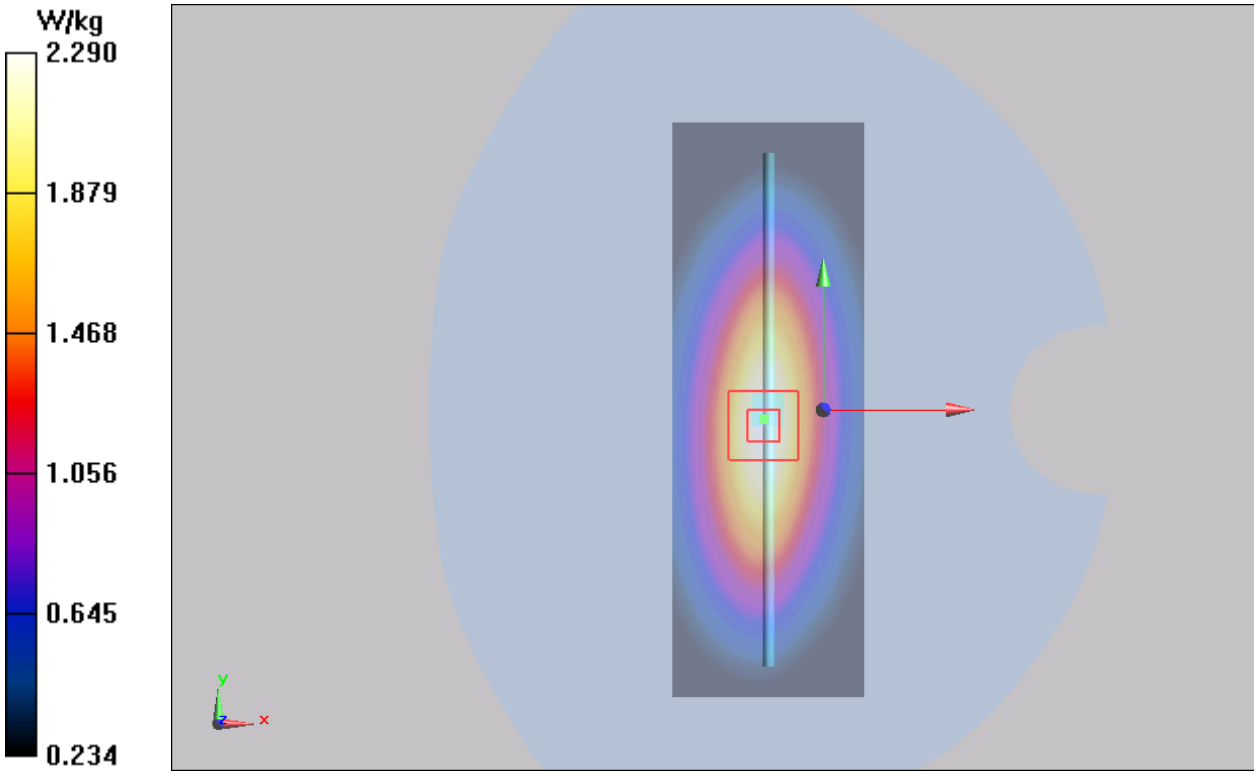
**d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.653 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.16 W/kg

**SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.41 W/kg**

Maximum value of SAR (measured) = 2.29 W/kg



## Plot 2 System Performance Check at 750 MHz Head TSL

**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017**

Date: 12/1/2016

Communication System:CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.87 S/m; $\varepsilon_r$ = 42.0; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (6.63, 6.63, 6.63); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm,Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.31 W/kg

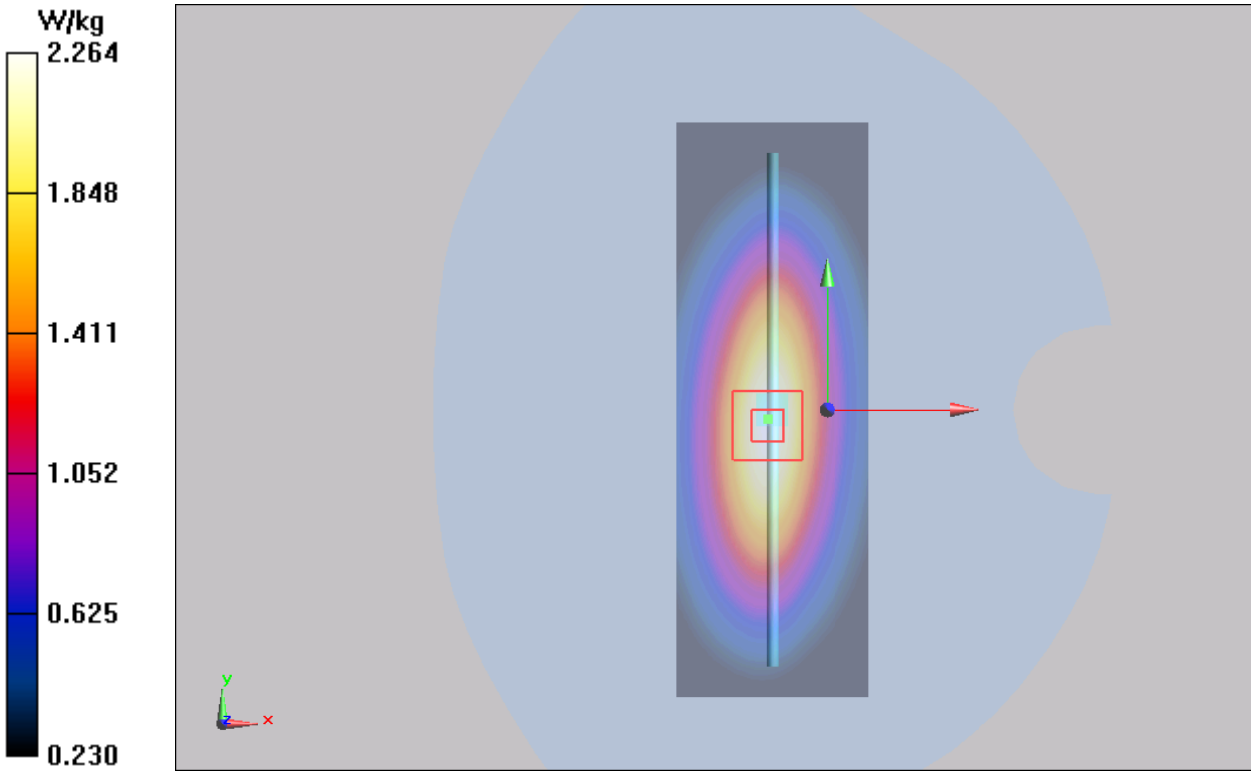
**d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.557 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 3.14 W/kg

**SAR(1 g) = 2.10 W/kg; SAR(10 g) = 1.37 W/kg**

Maximum value of SAR (measured) = 2.264 W/kg



## Plot 3 System Performance Check at 750 MHz Head TSL

**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017**

Date: 12/2/2016

Communication System:CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.89 S/m; $\varepsilon_r$ = 41.8; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (6.63, 6.63, 6.63); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm,Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.16 W/kg

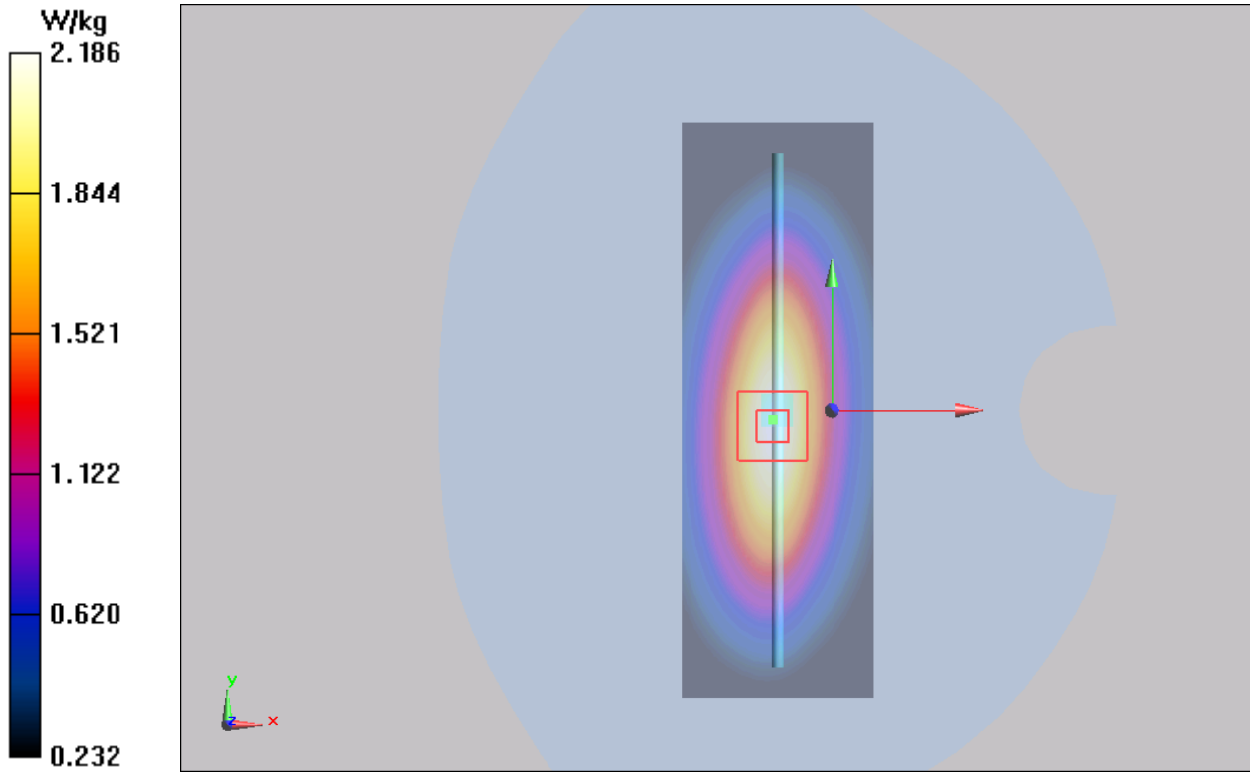
**d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.376 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 3.10 W/kg

**SAR(1 g) = 2.04 W/kg; SAR(10 g) = 1.34 W/kg**

Maximum value of SAR (measured) = 2.186 W/kg



## Plot 4 System Performance Check at 750 MHz Head TSL

**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017**

Date: 12/3/2016

Communication System:CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.87 S/m; $\varepsilon_r$ = 42.0; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (6.63, 6.63, 6.63); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm,Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.32 W/kg

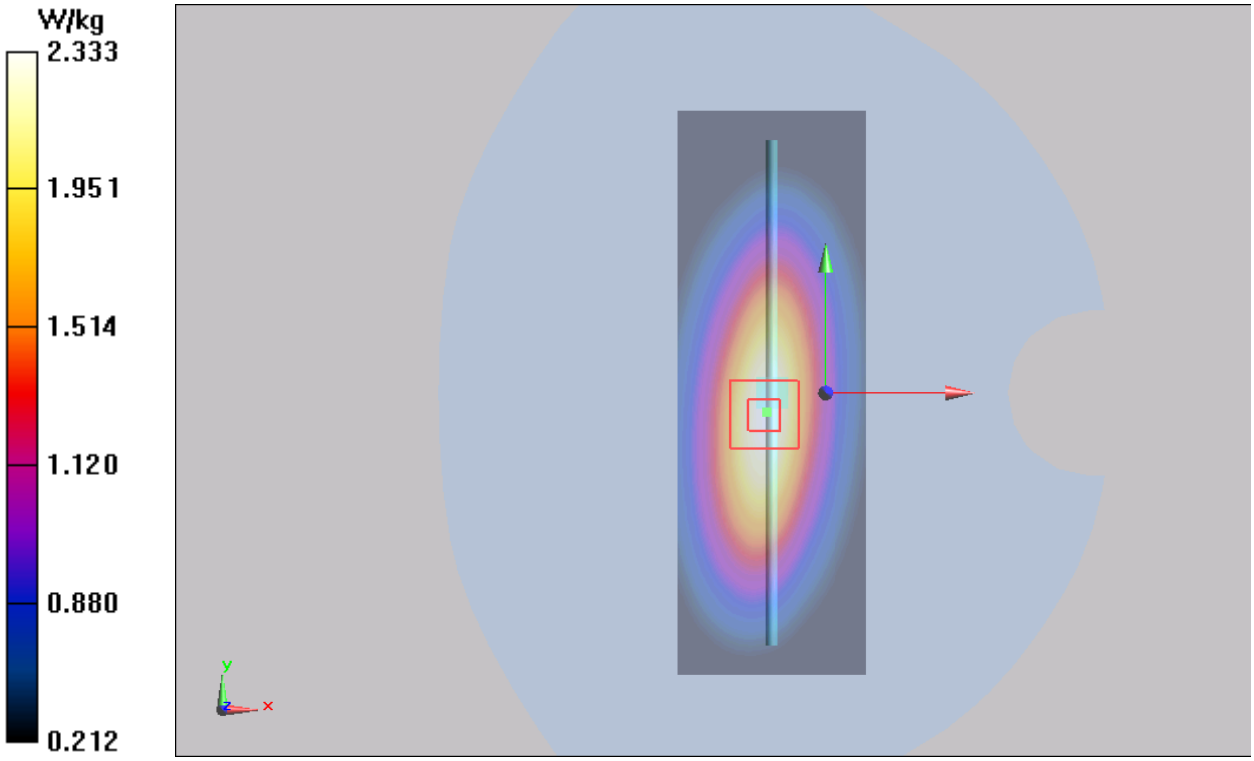
**d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 50.511 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 3.22 W/kg

**SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.40 W/kg**

Maximum value of SAR (measured) = 2.333 W/kg



## Plot 5 System Performance Check at 750 MHz Body TSL

**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017**

Date: 11/20/2016

Communication System:CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.95 S/m; $\varepsilon_r$ = 57.0; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.83, 5.83, 5.83); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.36 W/kg

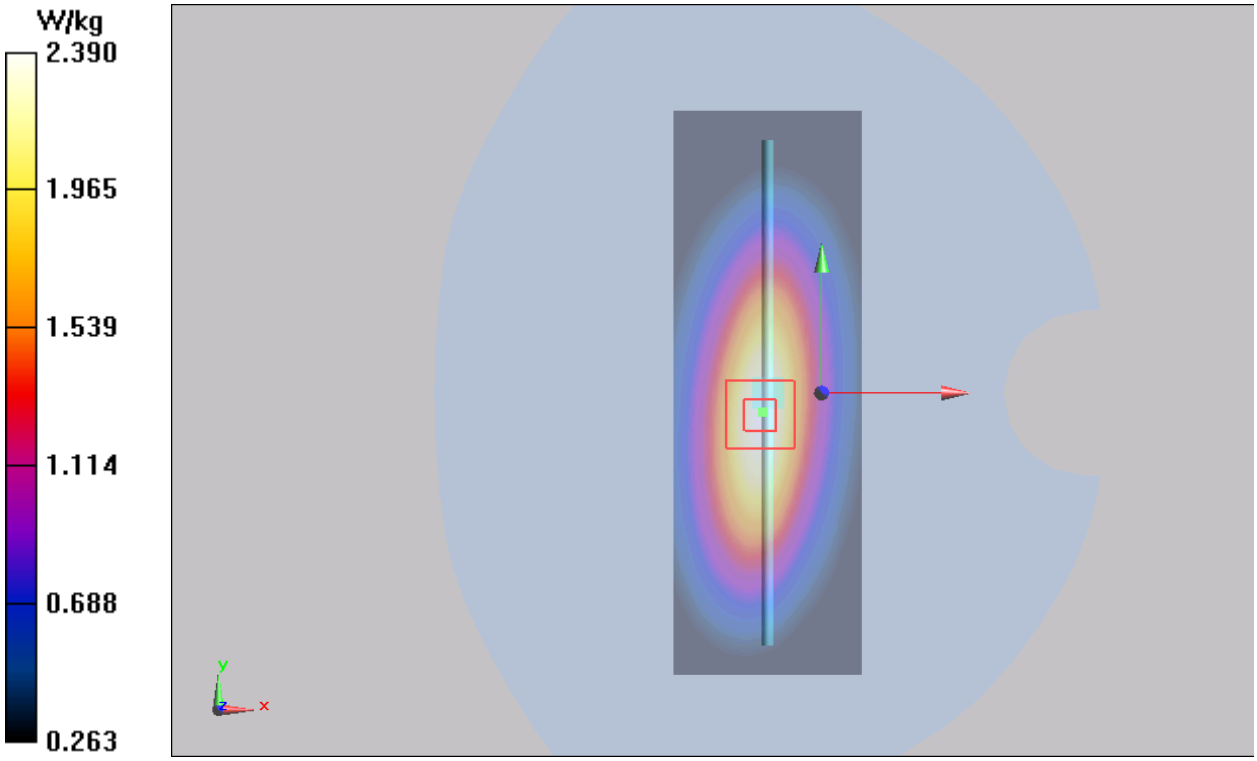
**d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 48.998 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.24 W/kg

**SAR(1 g) = 2.22 W/kg; SAR(10 g) = 1.49 W/kg**

Maximum value of SAR (measured) = 2.39 W/kg



## Plot 6 System Performance Check at 750 MHz Body TSL

**DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017**

Date: 11/21/2016

Communication System:CW (0); Frequency: 750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; $\sigma$ = 0.96 S/m; $\varepsilon_r$ = 54.5; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.83, 5.83, 5.83); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (41x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.34 W/kg

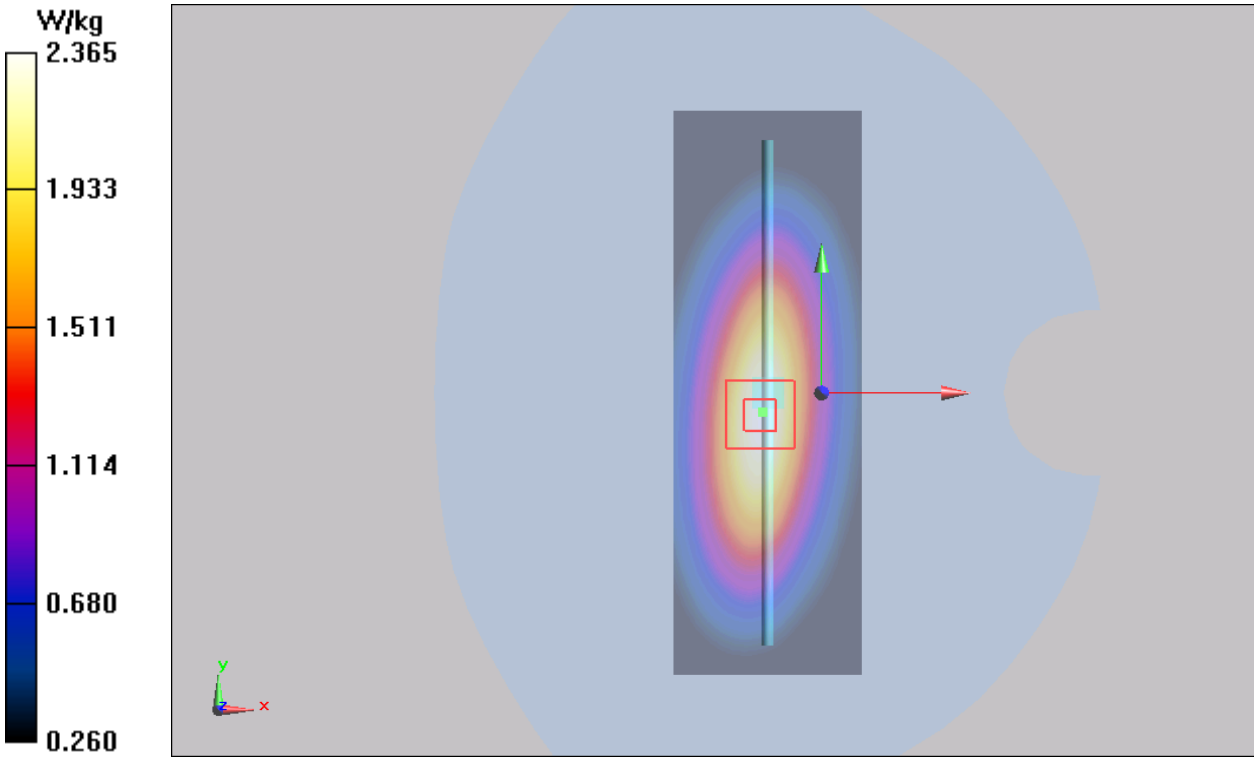
**d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 48.971 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.24 W/kg

**SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.46 W/kg**

Maximum value of SAR (measured) = 2.365 W/kg



## Plot 7 System Performance Check at 835 MHz Head TSL

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020**

Date: 11/24/2016

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 0.90 mho/m; $\varepsilon_r$ = 41.3; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(6.22, 6.22, 6.22); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (41x121x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.64 mW/g

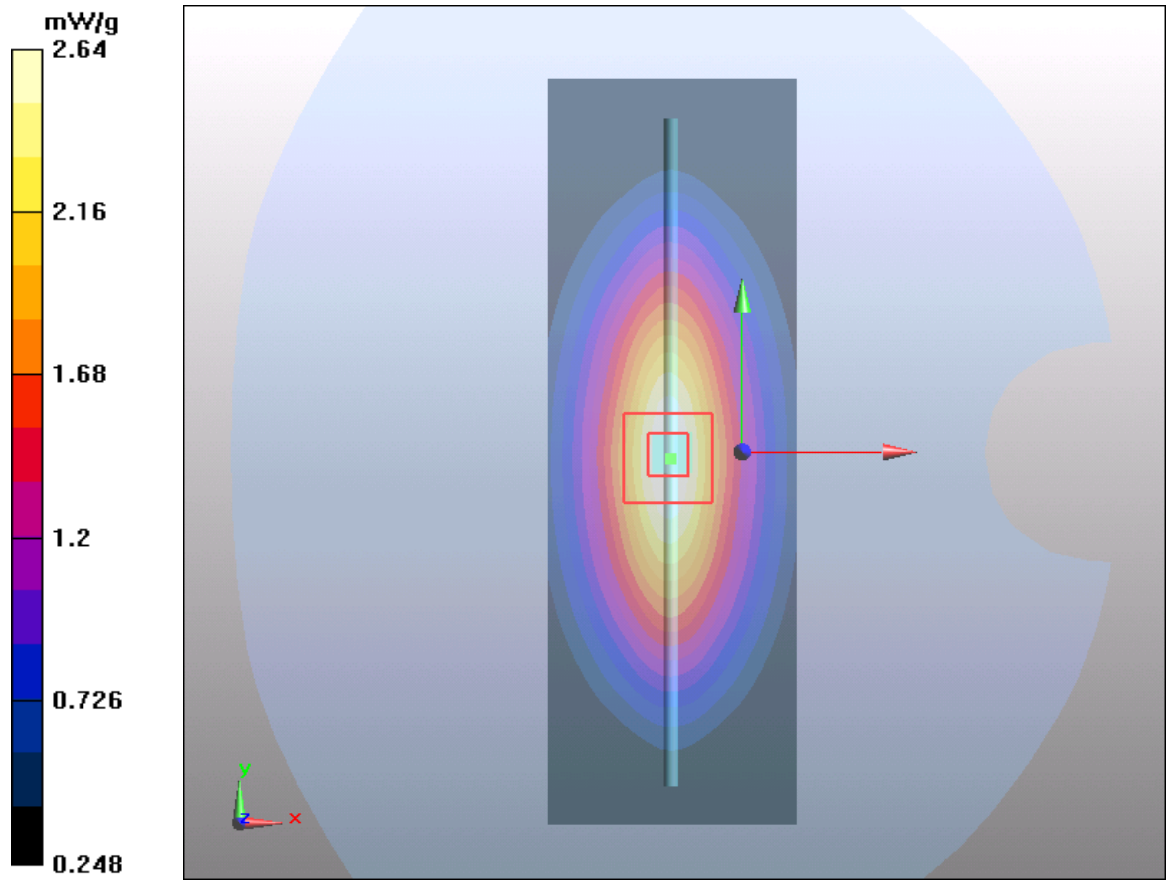
**d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.4 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 3.67 W/kg

**SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.6 mW/g**

Maximum value of SAR (measured) = 2.64 mW/g



## Plot 8 System Performance Check at 835 MHz Head TSL

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020**

Date: 11/25/2016

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 0.88 mho/m; $\varepsilon_r$ = 41.3; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(6.22, 6.22, 6.22); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (41x121x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.64 mW/g

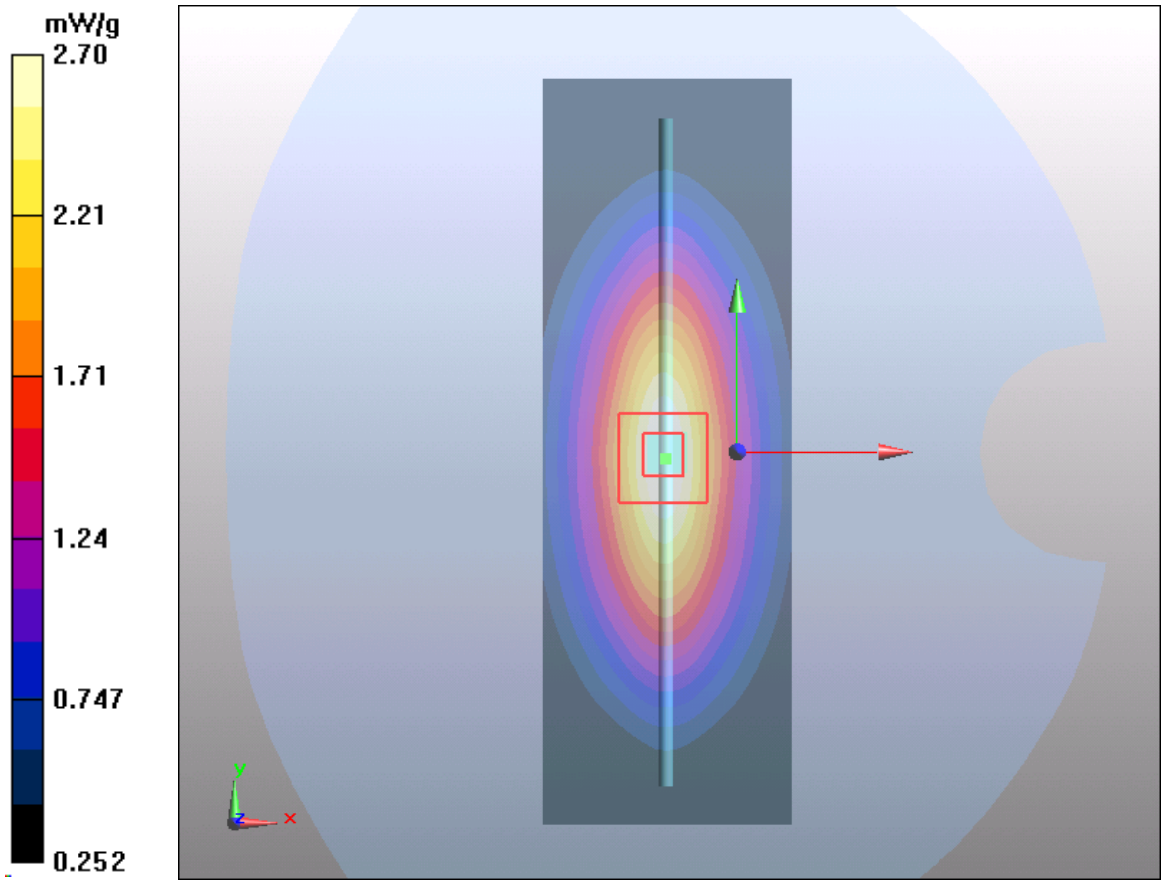
**d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.4 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 3.67 W/kg

**SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.65 mW/g**

Maximum value of SAR (measured) = 2.70 mW/g



## Plot 9 System Performance Check at 835 MHz Body TSL

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020**

Date: 11/22/2016

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 1.00 mho/m; $\varepsilon_r$ = 54.4; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.87, 5.87, 5.87); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (41x121x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.58 mW/g

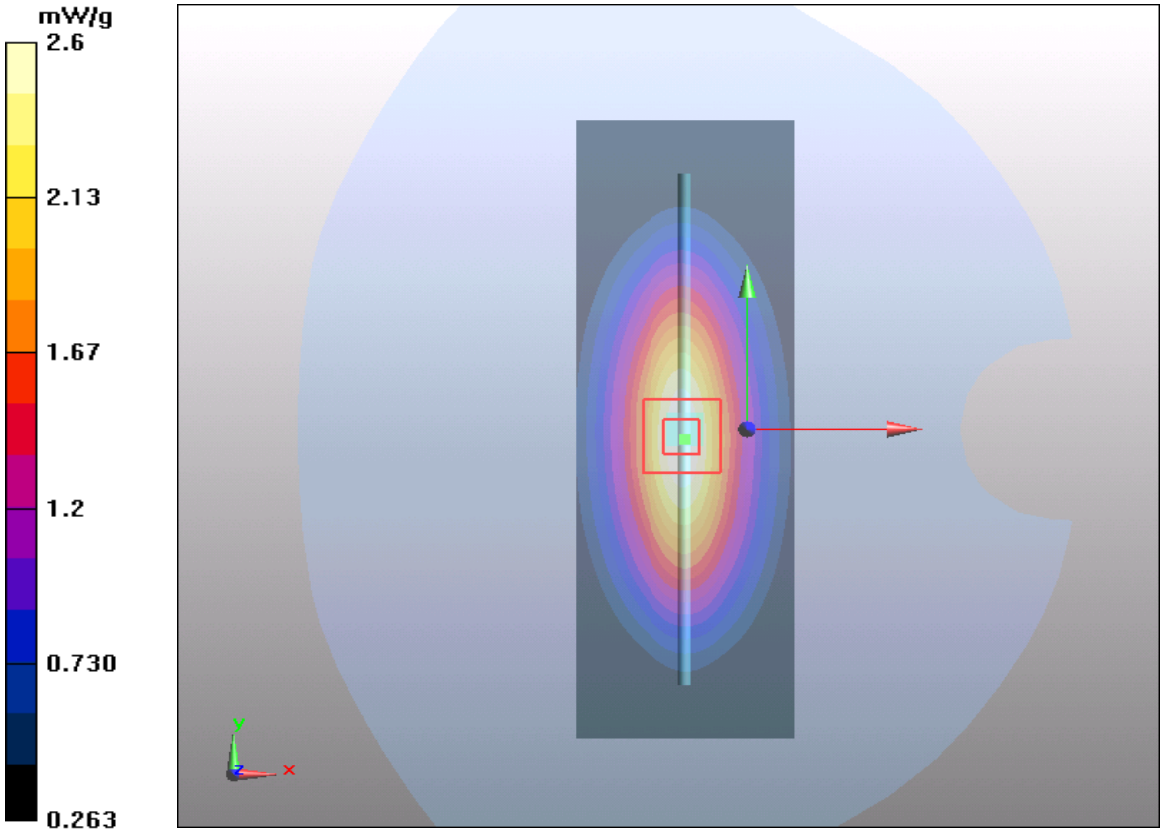
**d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.9 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 3.5 W/kg

**SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.6 mW/g**

Maximum value of SAR (measured) = 2.6 mW/g



## Plot 10 System Performance Check at 835 MHz Body TSL

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020**

Date: 11/23/2016

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 0.98 mho/m; $\varepsilon_r$ = 54.6; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.87, 5.87, 5.87); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (41x121x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.58 mW/g

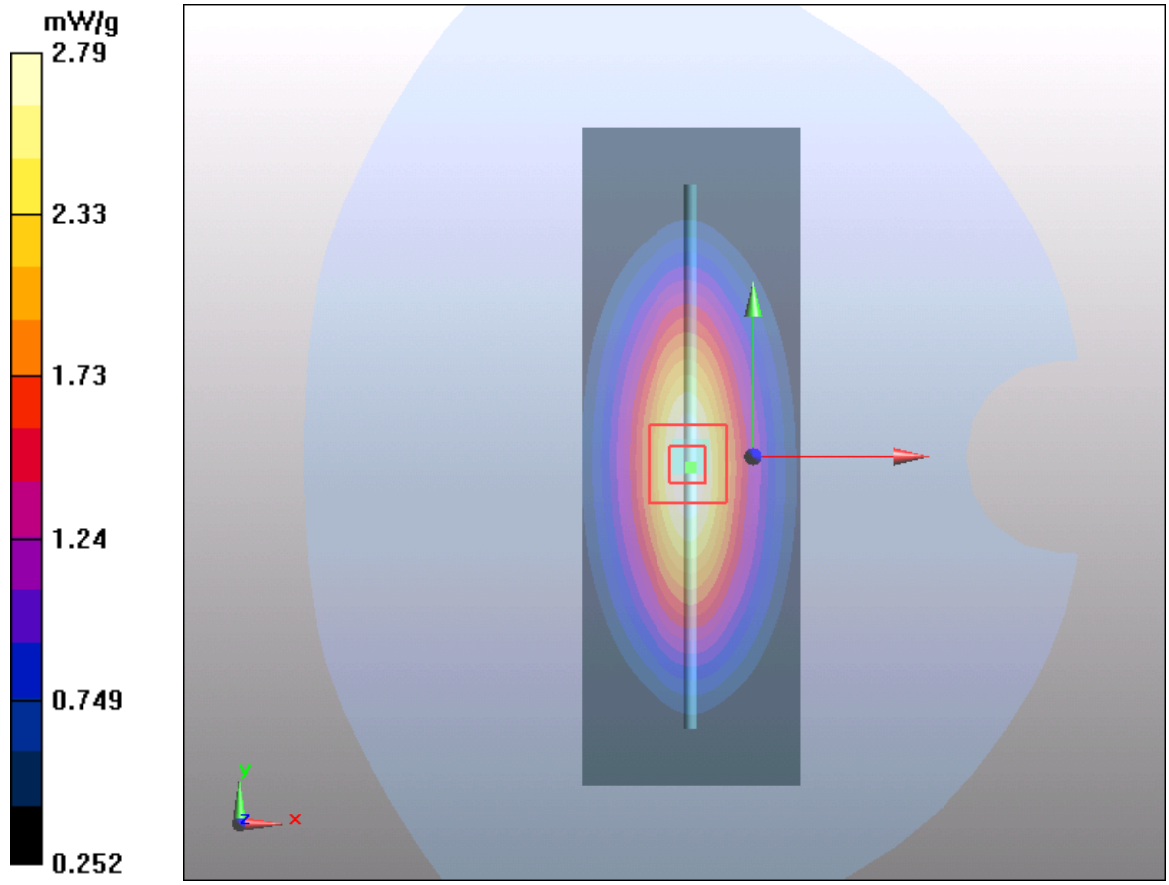
**d=15mm, Pin=250mW/Zoom Scan(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.9 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 3.5 W/kg

**SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.63 mW/g**

Maximum value of SAR (measured) = 2.79 mW/g



## Plot 11 System Performance Check at 835 MHz Body TSL

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020**

Date: 11/29/2016

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium parameters used: f = 835 MHz; $\sigma$ = 0.98 mho/m; $\varepsilon_r$ = 54.5; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.87, 5.87, 5.87); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=15mm, Pin=250mW/Area Scan (41x121x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.58 mW/g

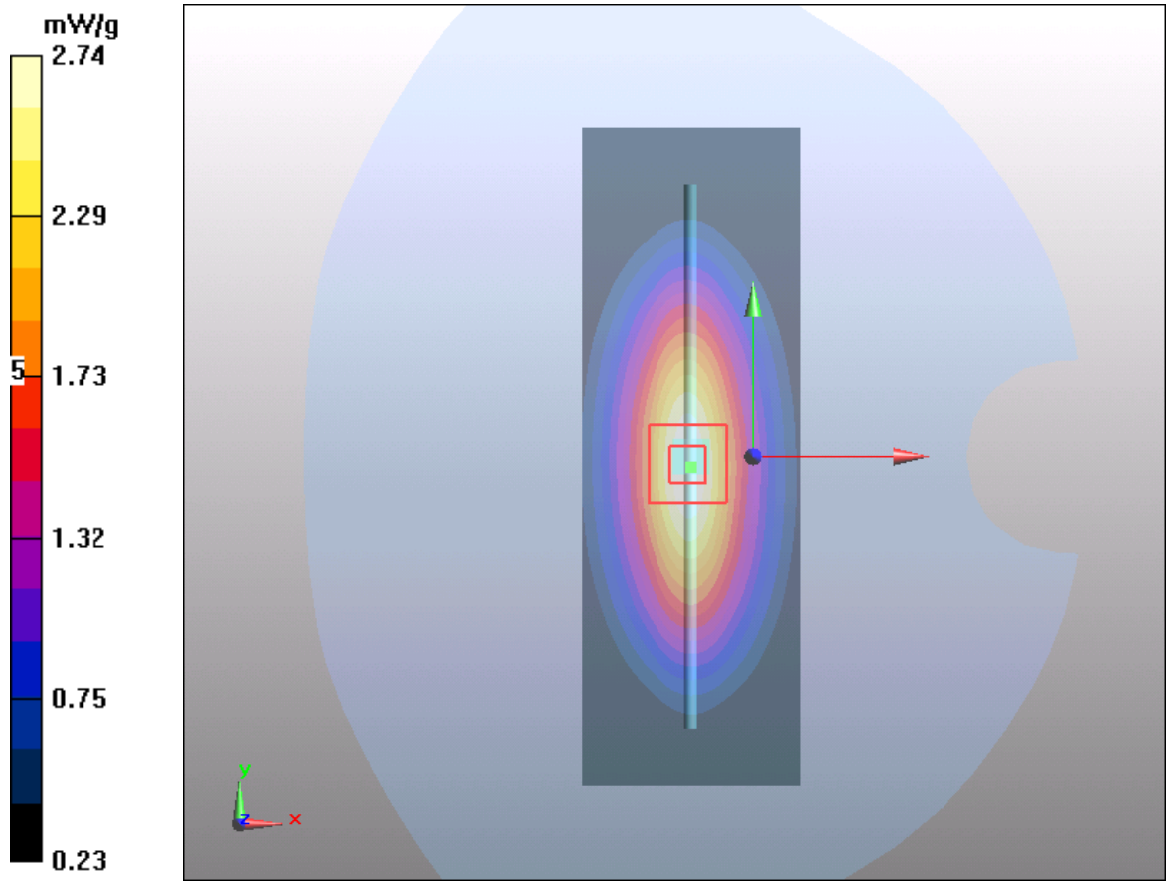
**d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.9 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 3.5 W/kg

**SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.63 mW/g**

Maximum value of SAR (measured) = 2.74 mW/g



## Plot 12 System Performance Check at 1750 MHz Head TSL

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1033**

Date: 11/26/2016

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.37 mho/m; $\varepsilon_r$ = 39.5; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.32, 5.32, 5.32); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (51x81x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 9.78 mW/g

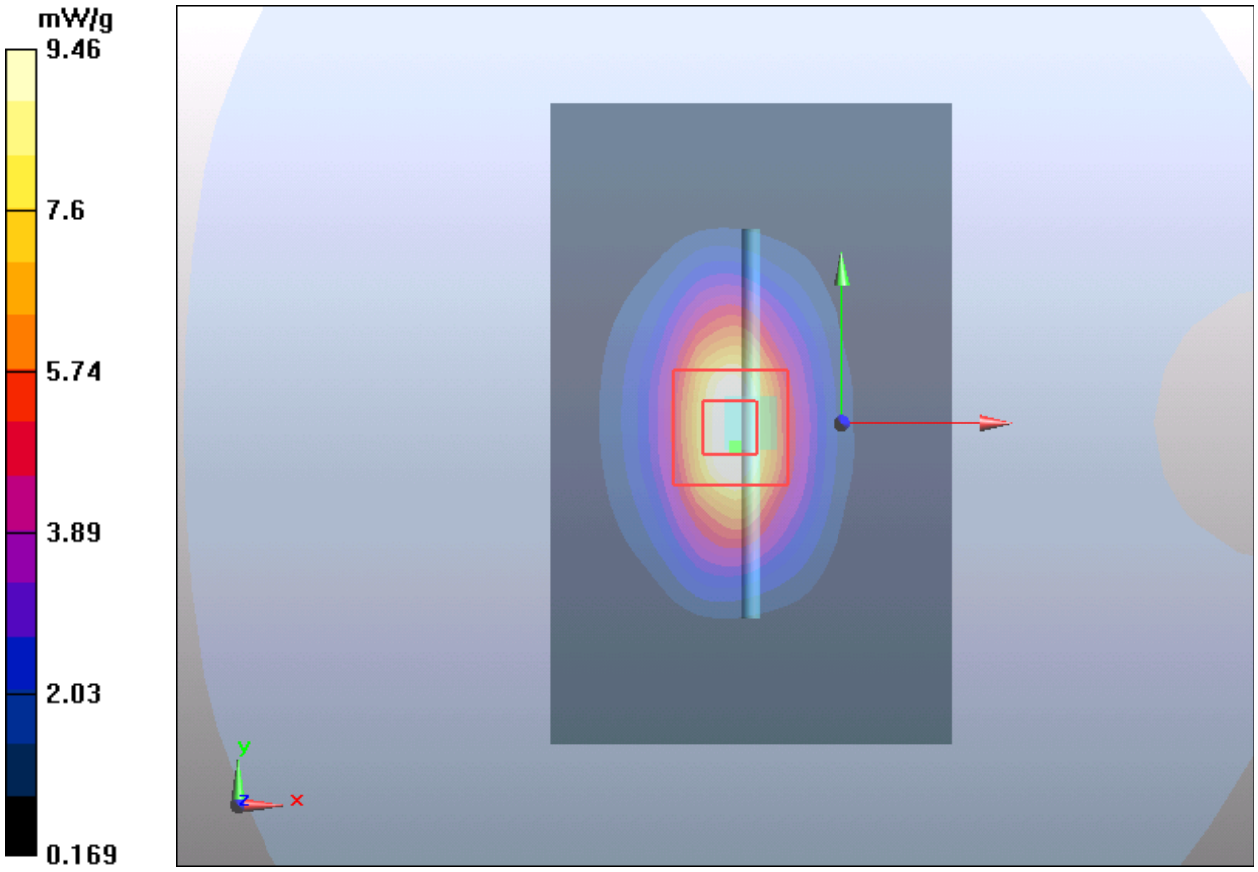
**d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 15.5 W/kg

**SAR(1 g) = 8.95 mW/g; SAR(10 g) = 4.5 mW/g**

Maximum value of SAR (measured) = 9.46 mW/g



## Plot 13 System Performance Check at 1750 MHz Head TSL

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1033**

Date: 12/11/2016

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.34 mho/m; $\varepsilon_r$ = 40.1; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.32, 5.32, 5.32); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (51x81x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 9.77 mW/g

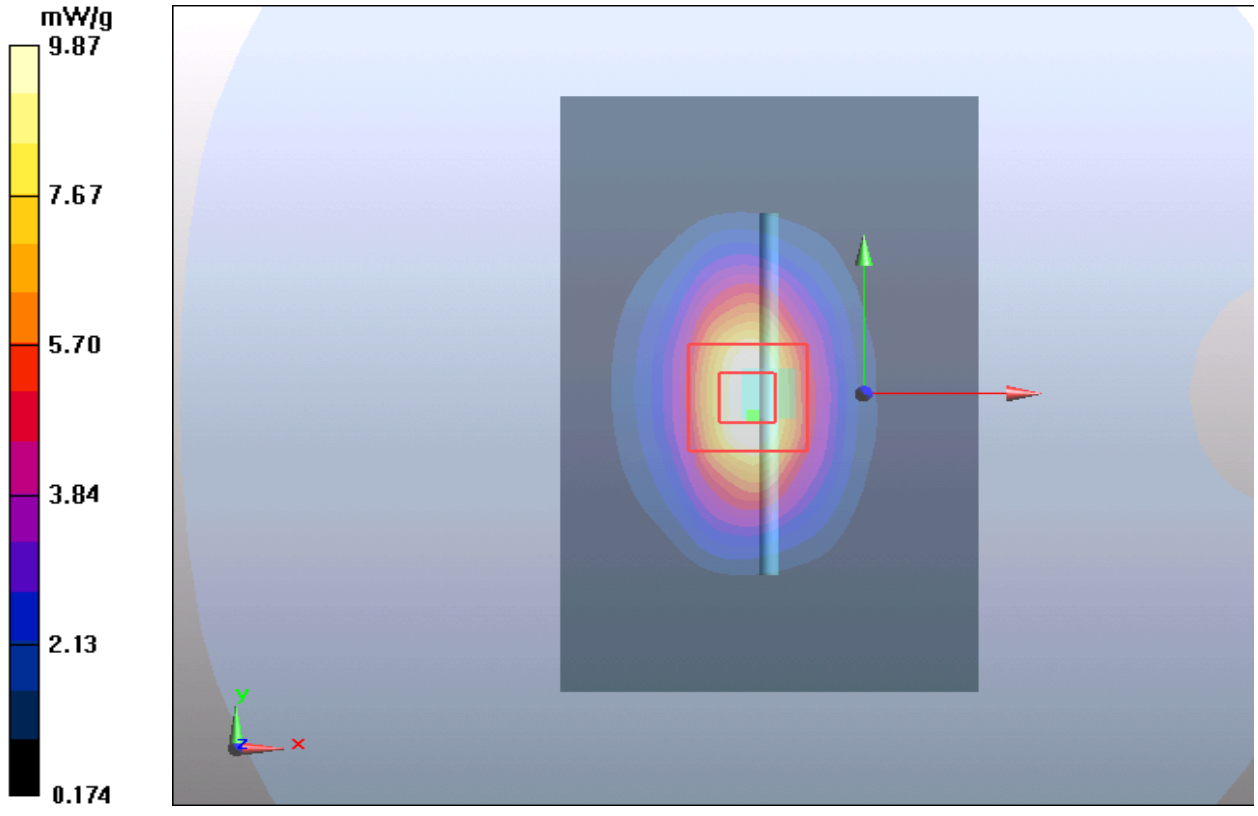
**d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 15.51 W/kg

**SAR(1 g) = 9.11 mW/g; SAR(10 g) = 4.77 mW/g**

Maximum value of SAR (measured) = 9.87 mW/g



## Plot 14 System Performance Check at 1750 MHz Body TSL

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1033**

Date: 12/9/2016

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.48 mho/m; $\varepsilon_r$ = 52.7; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.7℃

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.00, 5.00, 5.00); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (51x81x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.6 mW/g

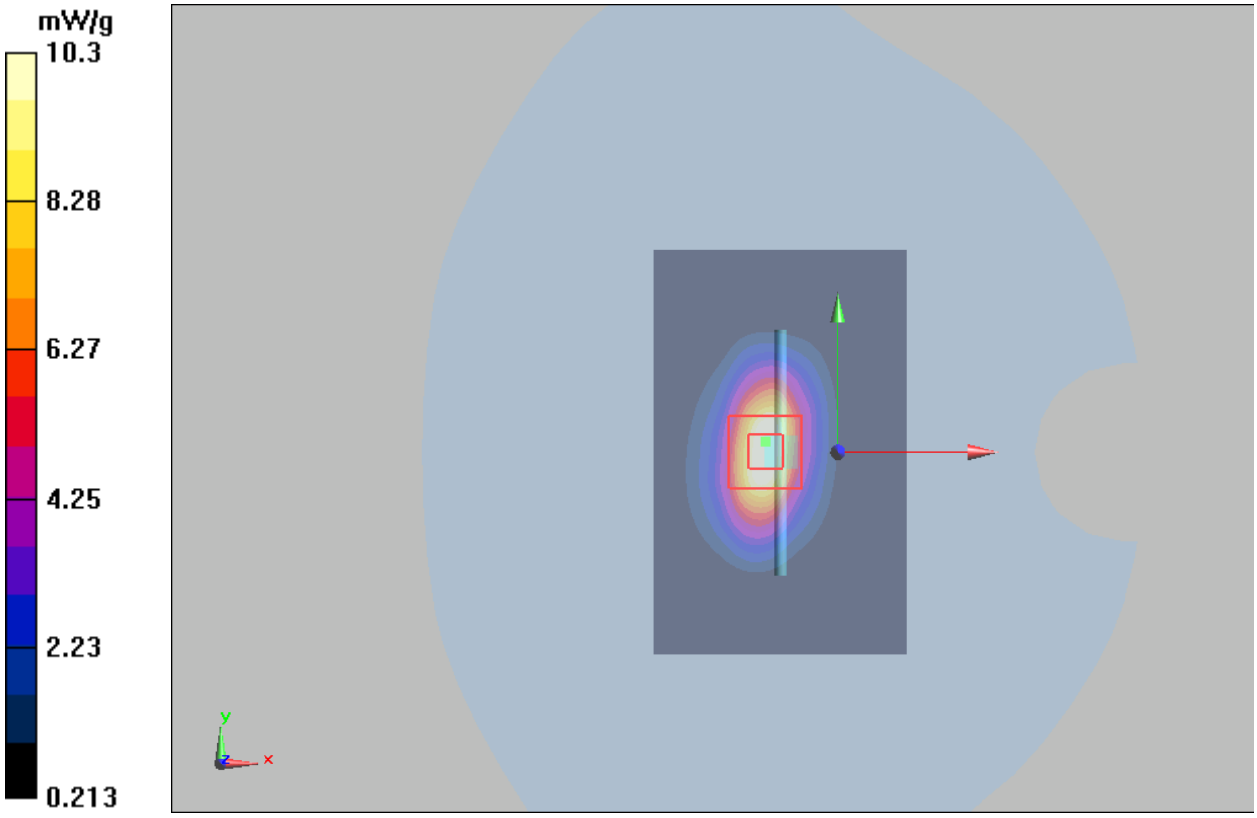
**d=10mm, Pin=250mW/Area Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 77.7 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 16.8 W/kg

**SAR(1 g) = 9.24 mW/g; SAR(10 g) = 4.9 mW/g**

Maximum value of SAR (measured) = 10.3 mW/g



## Plot 15 System Performance Check at 1750 MHz Body TSL

**DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2 - SN: 1033**

Date: 12/10/2016

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; $\sigma$ = 1.51 mho/m; $\varepsilon_r$ = 52.5; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.7℃

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.00, 5.00, 5.00); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (51x81x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.65 mW/g

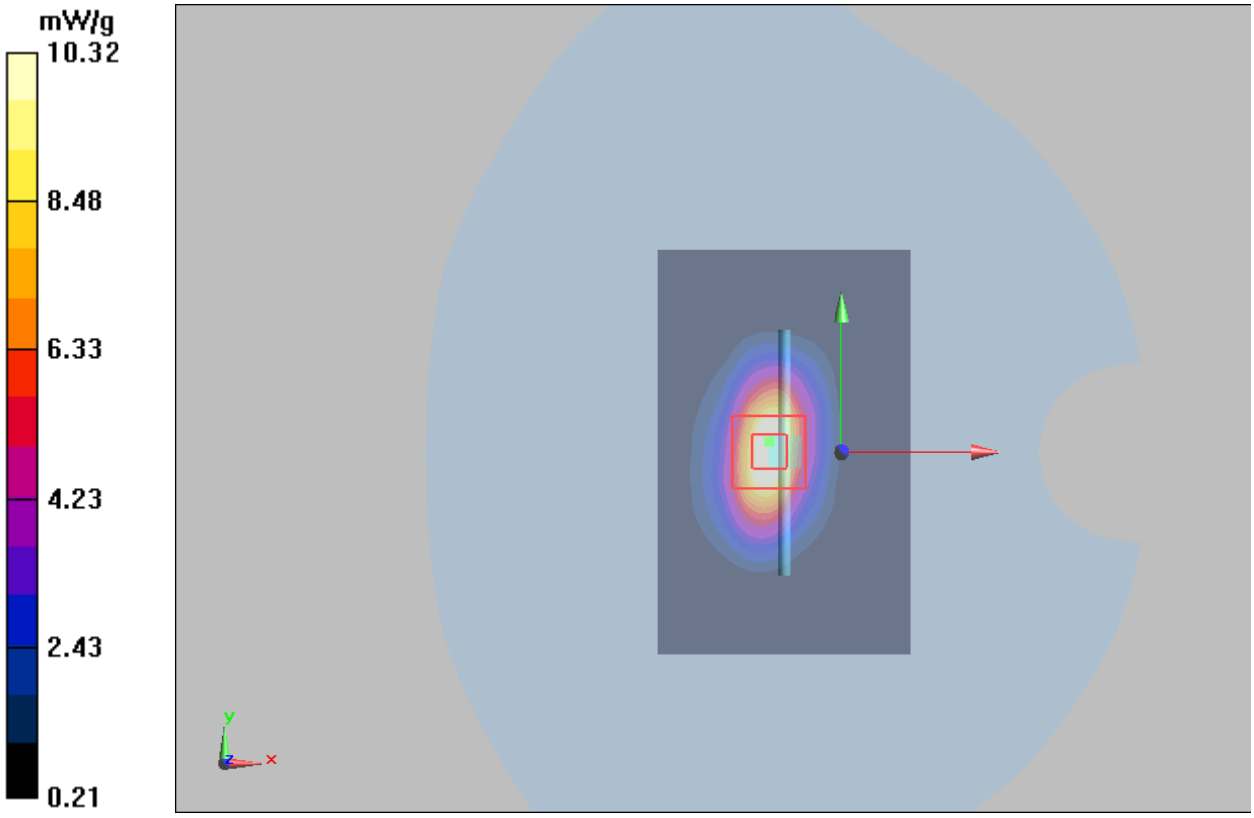
**d=10mm, Pin=250mW/Area Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 77.6 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 16.83 W/kg

**SAR(1 g) = 9.40 mW/g; SAR(10 g) = 5.22 mW/g**

Maximum value of SAR (measured) = 10.32 mW/g



## Plot 16 System Performance Check at 1900 MHz Head TSL

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d060**

Date: 11/27/2016

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 40.1; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.09, 5.09, 5.09); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 11.3 mW/g

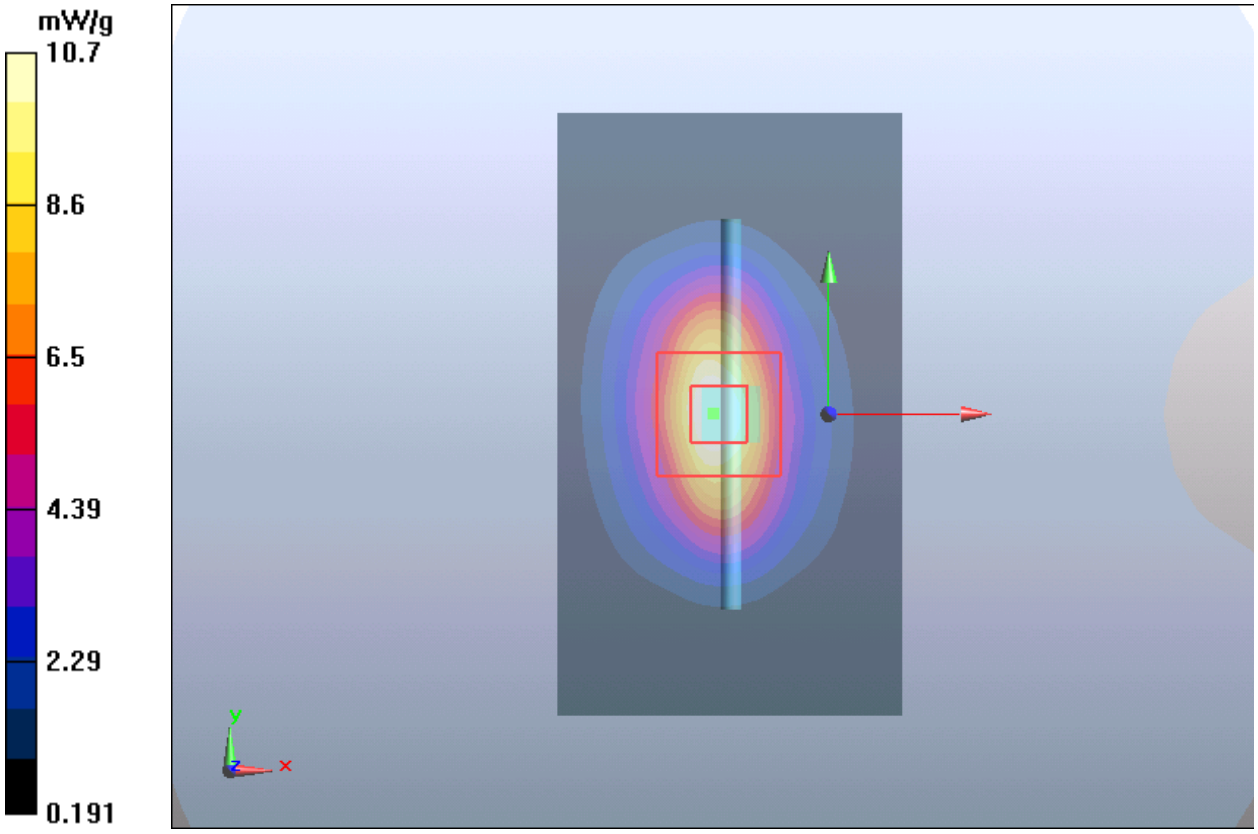
**d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.5 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 17.8 W/kg

**SAR(1 g) = 9.48 mW/g; SAR(10 g) = 4.9 mW/g**

Maximum value of SAR (measured) = 10.7 mW/g



## Plot 17 System Performance Check at 1900 MHz Head TSL

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d060**

Date: 11/28/2016

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.43 mho/m; $\varepsilon_r$ = 40.2; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.09, 5.09, 5.09); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 11.3 mW/g

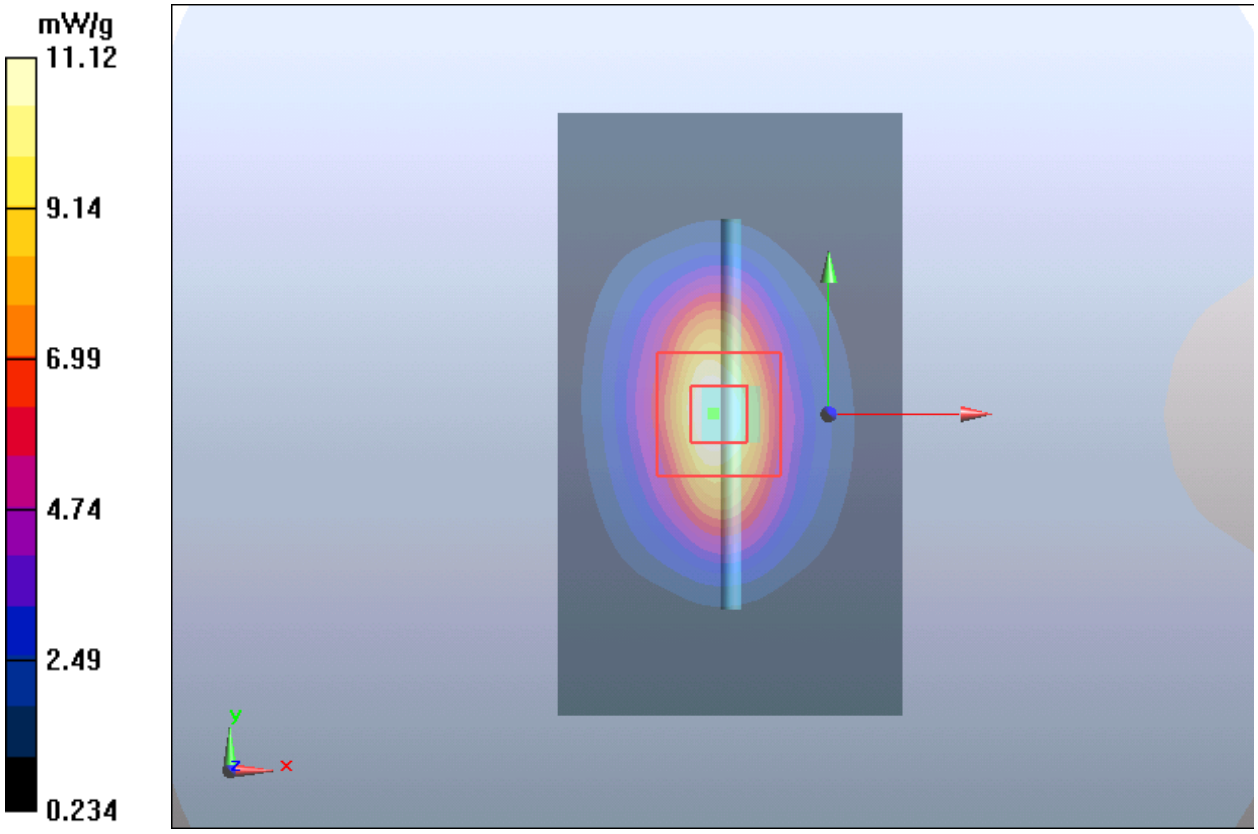
**d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.5 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 17.8 W/kg

**SAR(1 g) = 9.45 mW/g; SAR(10 g) = 4.93 mW/g**

Maximum value of SAR (measured) = 11.12 mW/g



## Plot 18 System Performance Check at 1900 MHz Head TSL

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d060**

Date: 12/12/2016

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.41 mho/m; $\varepsilon_r$ = 40.1; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.09, 5.09, 5.09); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.9 mW/g

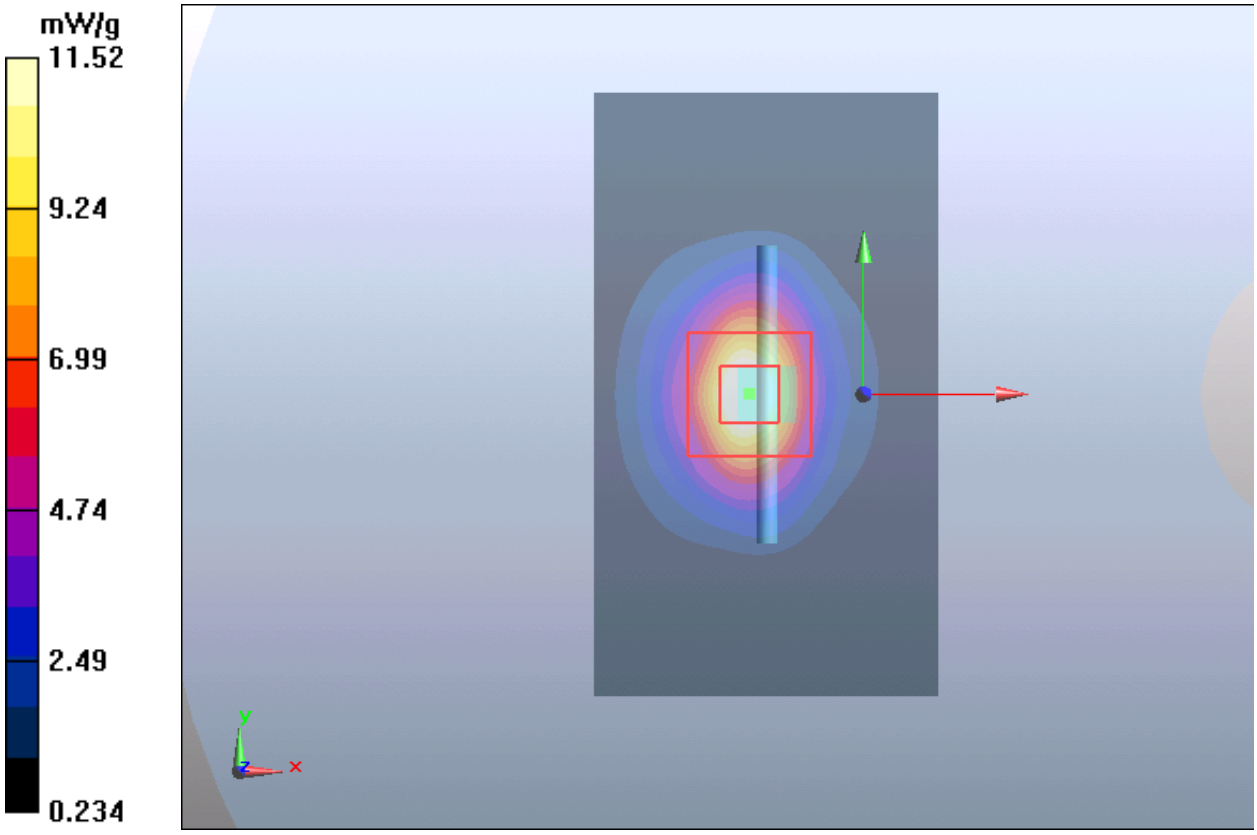
**d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 87.8 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 20.1 W/kg

**SAR(1 g) = 9.55 mW/g; SAR(10 g) = 5.39 mW/g**

Maximum value of SAR (measured) = 11.52 mW/g



## Plot 19 System Performance Check at 1900 MHz Body TSL

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d060**

Date: 12/7/2016

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.51 mho/m; $\varepsilon_r$ = 52.6; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(4.78, 4.78, 4.78); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.2 mW/g

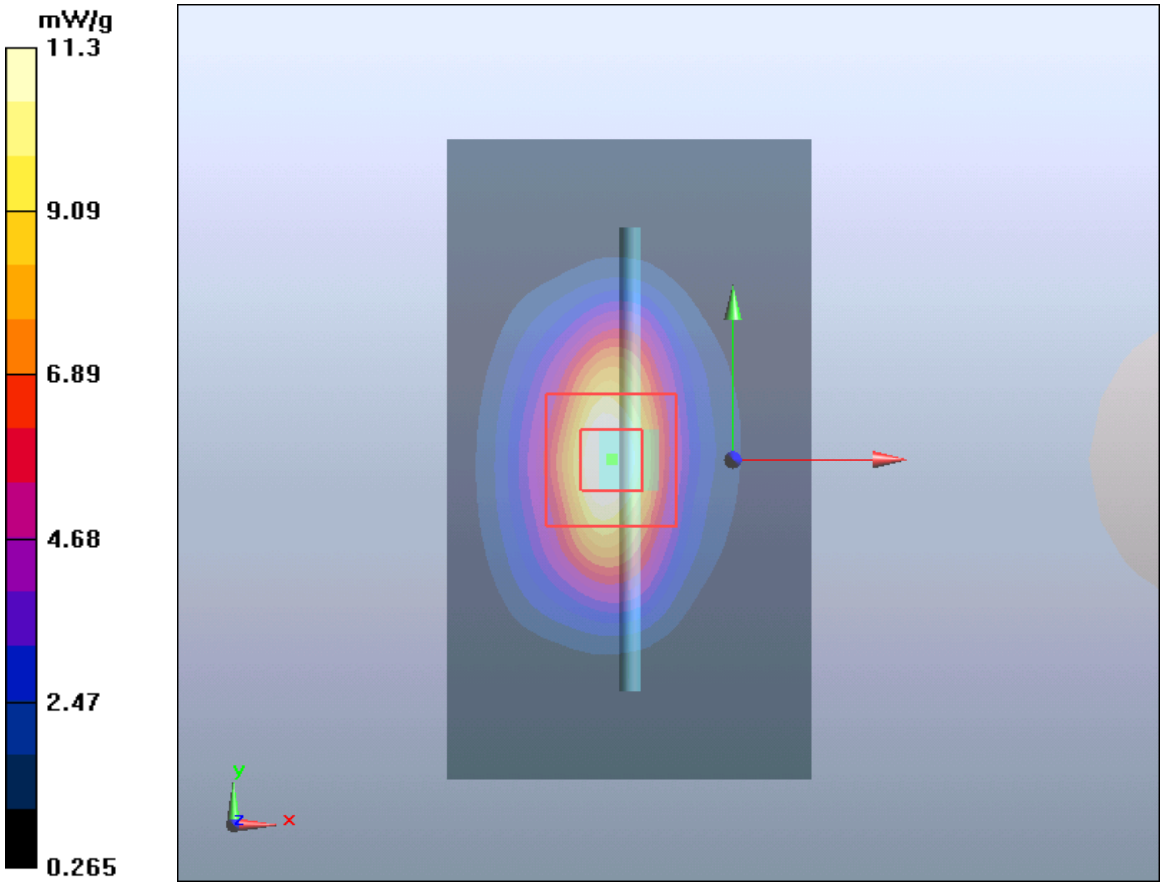
**d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 82.3 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 17.8 W/kg

**SAR(1 g) = 9.93 mW/g; SAR(10 g) = 5.25 mW/g**

Maximum value of SAR (measured) = 11.3 mW/g



## Plot 20 System Performance Check at 1900 MHz Body TSL

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d060**

Date: 12/8/2016

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; $\sigma$ = 1.51 mho/m; $\varepsilon_r$ = 52.8; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(4.78, 4.78, 4.78); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.2 mW/g

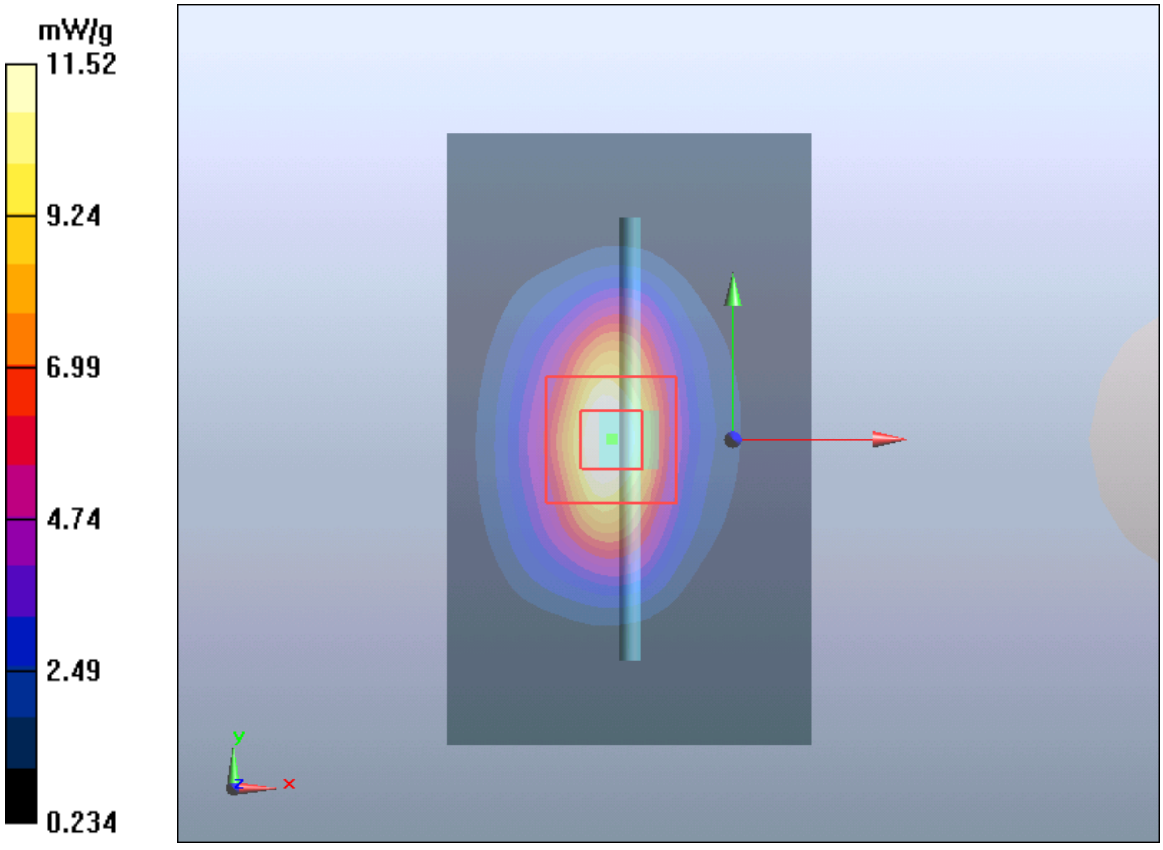
**d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 82.3 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 17.8 W/kg

**SAR(1 g) = 9.91 mW/g; SAR(10 g) = 5.23 mW/g**

Maximum value of SAR (measured) = 11.52 mW/g



## Plot 21 System Performance Check at 2450 MHz Head TSL

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786**

Date: 12/17/2016

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2450 MHz; $\sigma$ = 1.81 mho/m; $\varepsilon_r$ = 38.6; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (4.42, 4.42, 4.42); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 18.2 mW/g

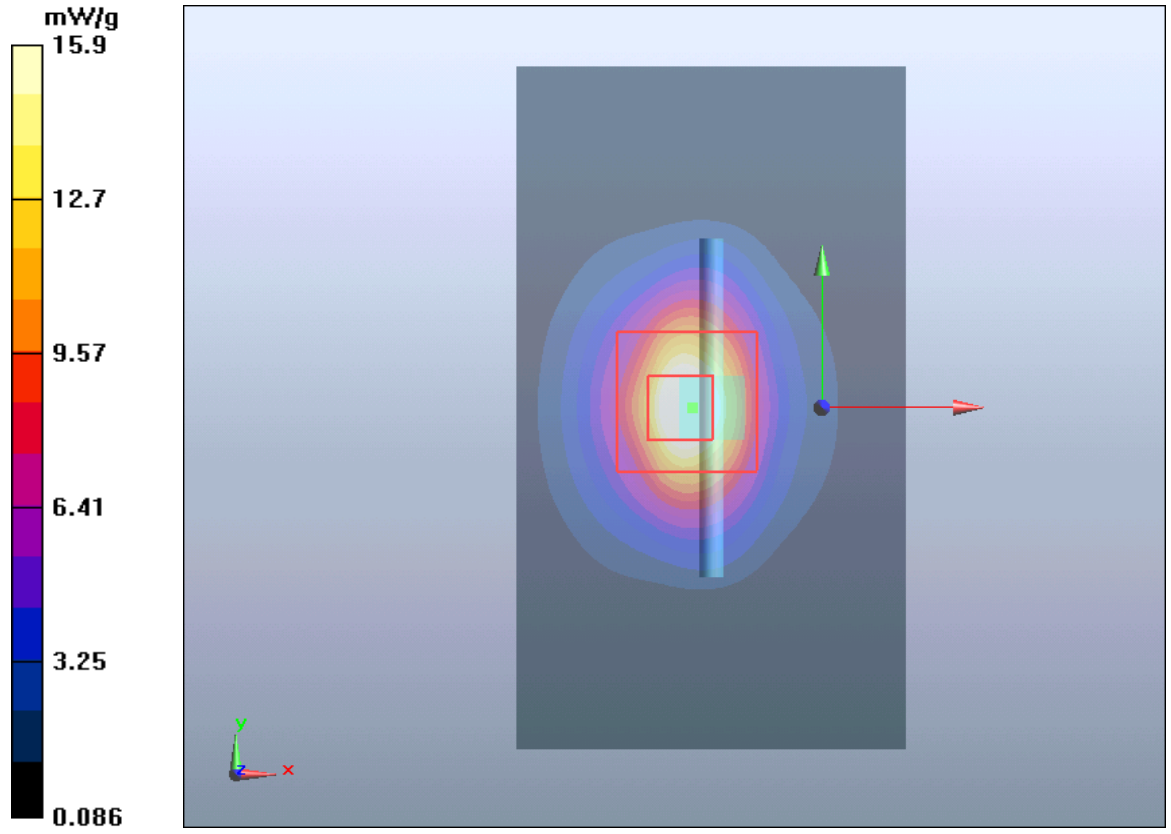
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.8 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 30 W/kg

**SAR(1 g) = 13.7 mW/g; SAR(10 g) = 6.22 mW/g**

Maximum value of SAR (measured) = 15.9 mW/g



## Plot 22 System Performance Check at 2450 MHz Body TSL

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786**

Date: 12/16/2016

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2450 MHz; $\sigma$ = 1.98 mho/m; $\varepsilon_r$ = 52.5; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (4.42, 4.42, 4.42); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 16 mW/g

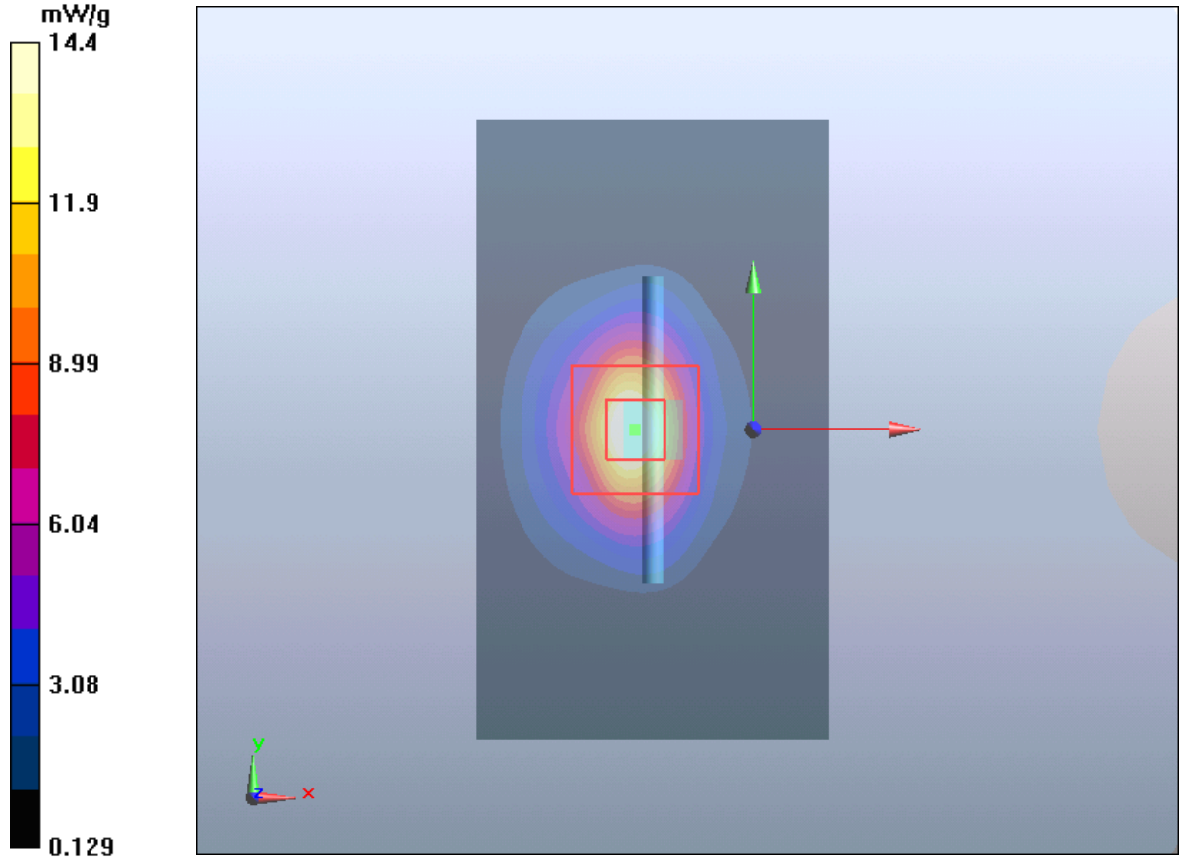
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.2 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 25.4 W/kg

**SAR(1 g) = 12.5 mW/g; SAR(10 g) = 6.20 mW/g**

Maximum value of SAR (measured) = 14.4 mW/g



## Plot 23 System Performance Check at 2600 MHz Head TSL

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 12/4/2016

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; $\sigma$ = 2.01 mho/m; $\varepsilon_r$ = 38.2; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (4.25, 4.25, 4.25); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.439 mW/g

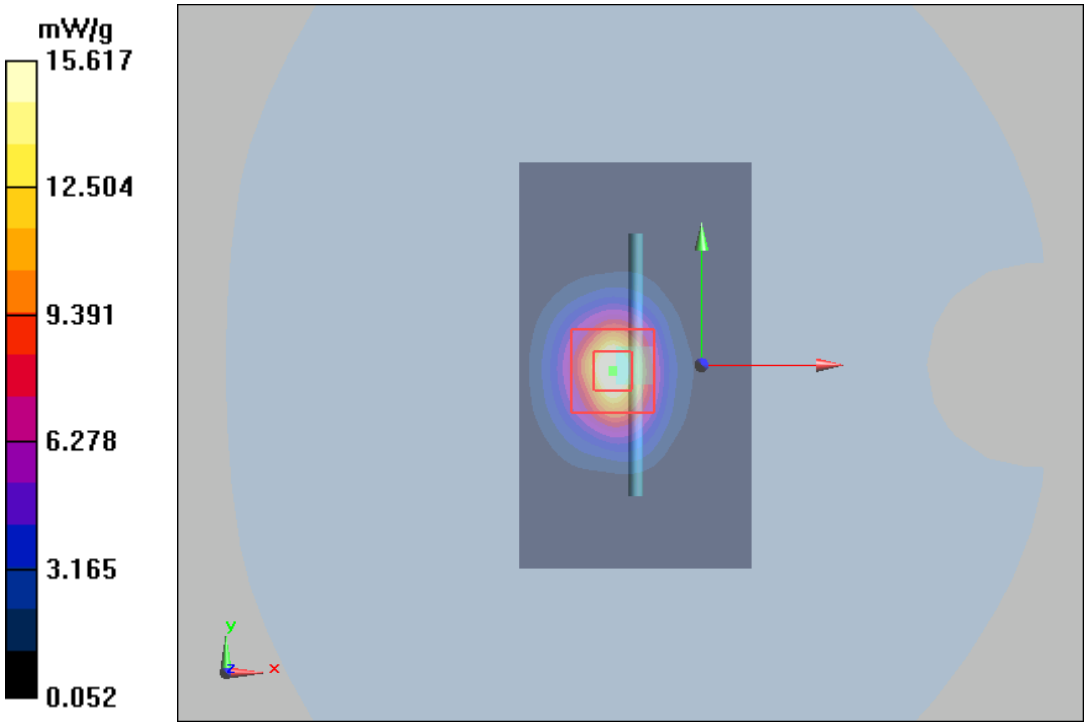
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.858 W/kg

**SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.07 mW/g**

Maximum value of SAR (measured) = 15.617 mW/g



## Plot 24 System Performance Check at 2600 MHz Head TSL

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 12/5/2016

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; $\sigma$ =1.94mho/m; $\varepsilon_r$ = 38.4; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (4.25, 4.25, 4.25); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.59 mW/g

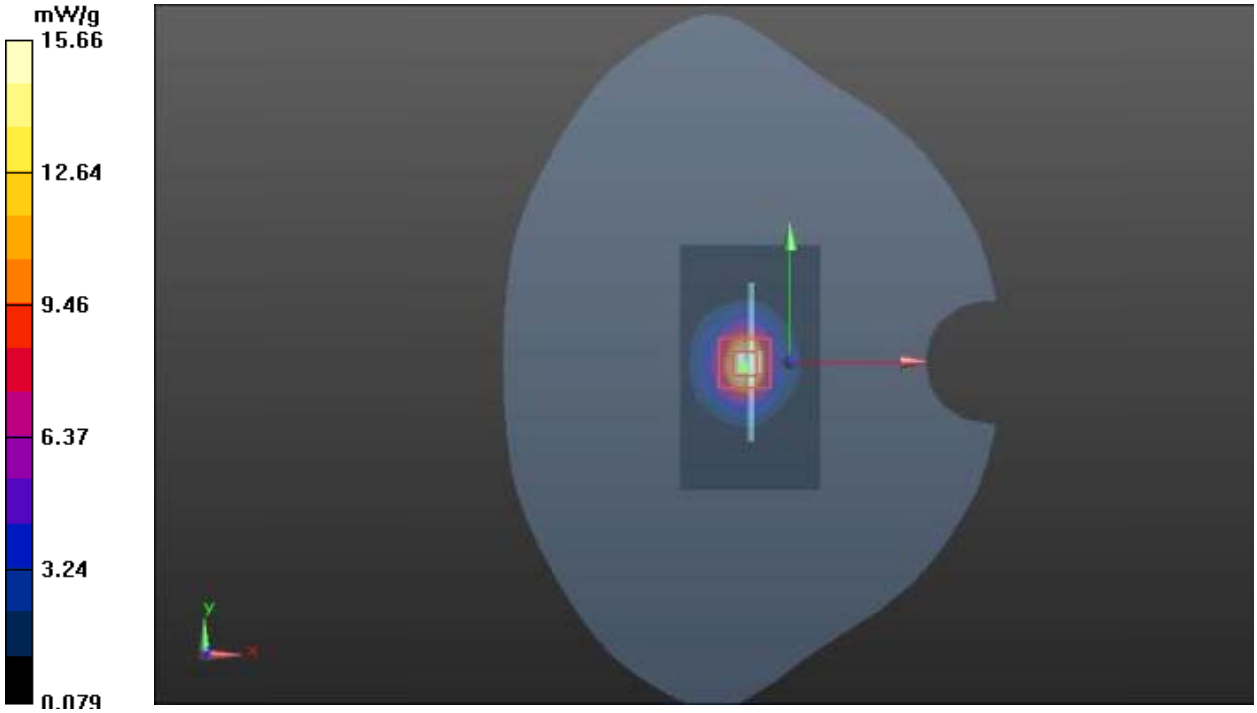
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.858 W/kg

**SAR(1 g) = 13.88 mW/g; SAR(10 g) = 6.09 mW/g**

Maximum value of SAR (measured) = 15.66 mW/g



## Plot 25 System Performance Check at 2600 MHz Head TSL

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 12/6/2016

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; $\sigma$ = 1.99 mho/m; $\varepsilon_r$ = 38.3; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (4.25, 4.25, 4.25); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.32 mW/g

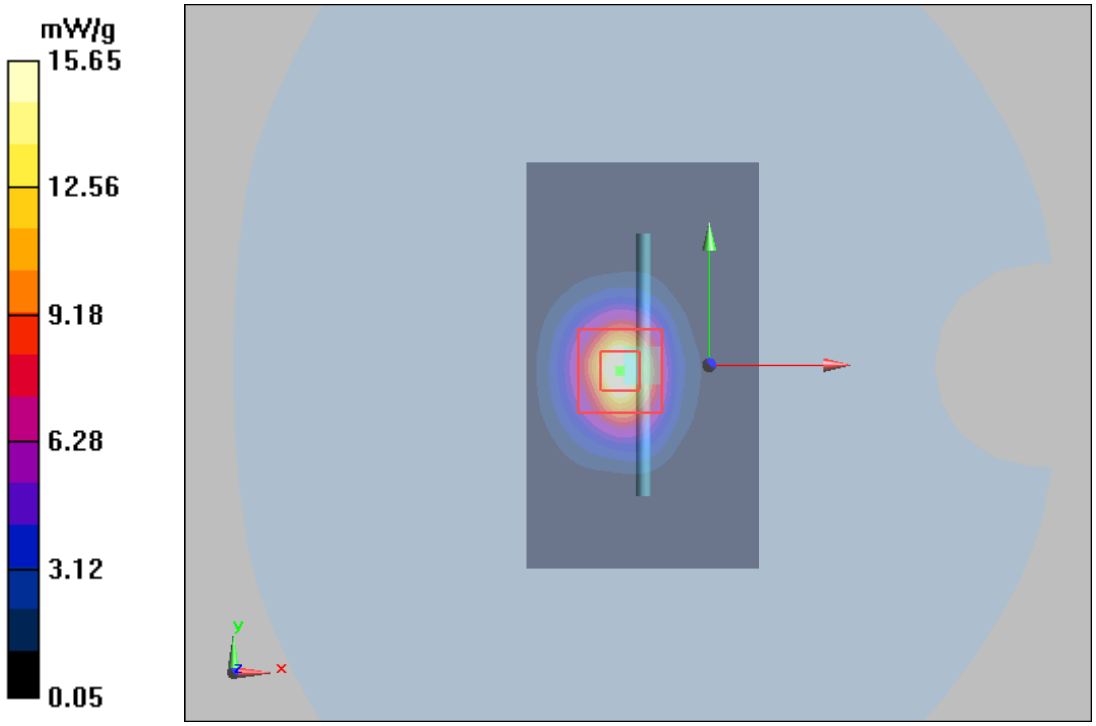
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.465 V/m; Power Drift = 0.146 dB

Peak SAR (extrapolated) = 31.85 W/kg

**SAR(1 g) = 13.94 mW/g; SAR(10 g) = 6.11 mW/g**

Maximum value of SAR (measured) = 15.66 mW/g



## Plot 26 System Performance Check at 2600 MHz Head TSL

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 12/20/2016

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; $\sigma$ = 2.01mho/m; $\varepsilon_r$ = 38.2; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF (4.25, 4.25, 4.25); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.439 mW/g

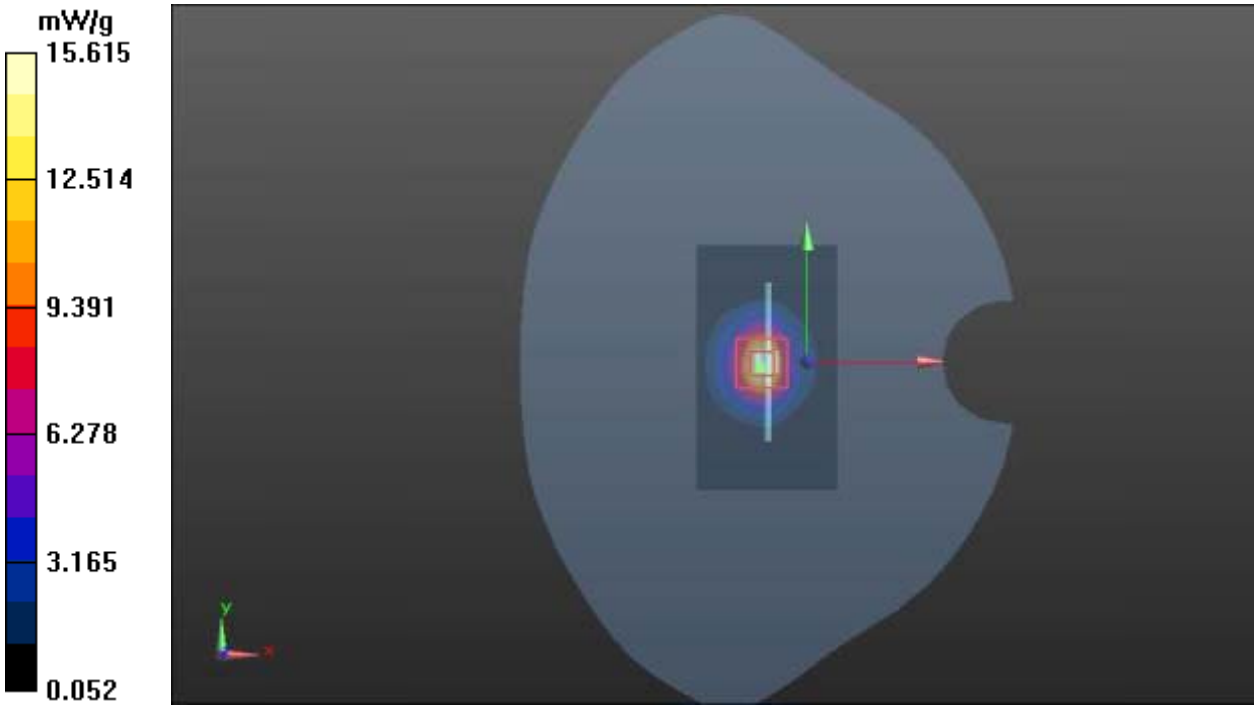
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.858 W/kg

**SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.08 mW/g**

Maximum value of SAR (measured) = 15.615 mW/g



## Plot 27 System Performance Check at 2600 MHz Body TSL

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 12/13/2016

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 2.23 mho/m; $\varepsilon_r$ = 51.5; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(4.21, 4.21, 4.21); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW /Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.7 mW/g

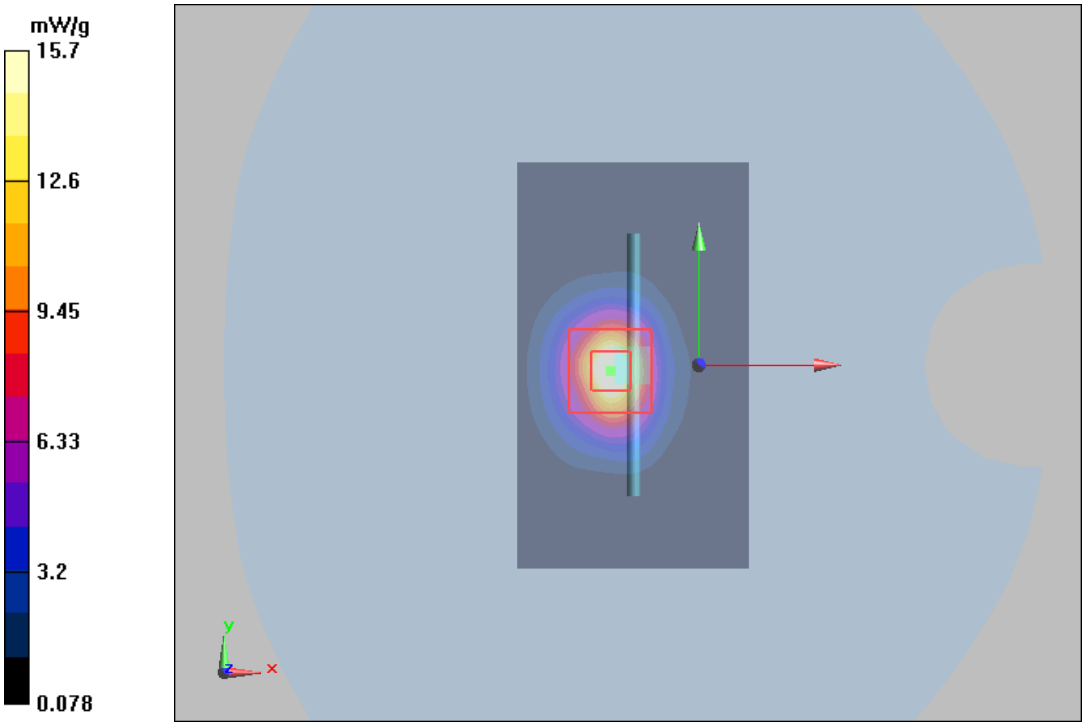
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74 V/m; Power Drift = -0.0027 dB

Peak SAR (extrapolated) = 28.5 W/kg

**SAR(1 g) = 13.5 mW/g; SAR(10 g) = 5.99 mW/g**

Maximum value of SAR (measured) = 15.7 mW/g



## Plot 28 System Performance Check at 2600 MHz Body TSL

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 12/14/2016

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 2.21 mho/m; $\varepsilon_r$ = 51.7; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(4.21, 4.21, 4.21); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW /Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.67 mW/g

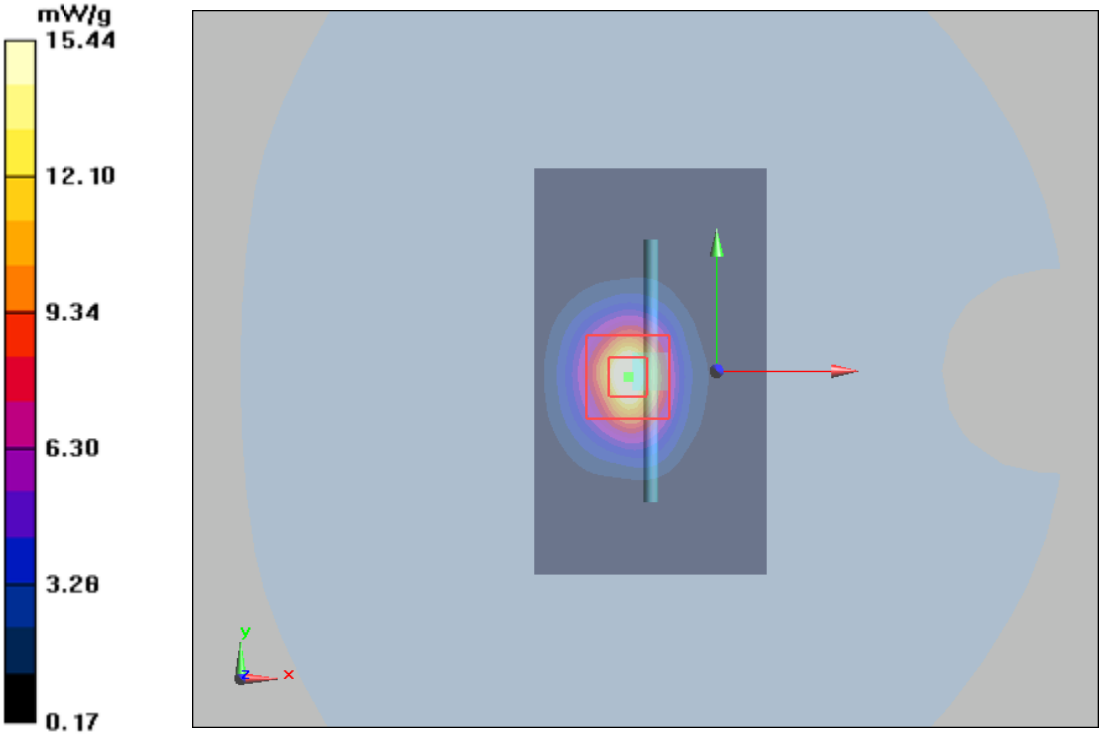
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 28.5 W/kg

**SAR(1 g) = 13.55 mW/g; SAR(10 g) = 5.89 mW/g**

Maximum value of SAR (measured) = 15.44 mW/g



## Plot 29 System Performance Check at 2600 MHz Body TSL

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 12/15/2016

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; $\sigma$ = 2.20 mho/m; $\varepsilon_r$ = 51.8; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(4.21, 4.21, 4.21); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW /Area Scan (41x71x1):** Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.58 mW/g

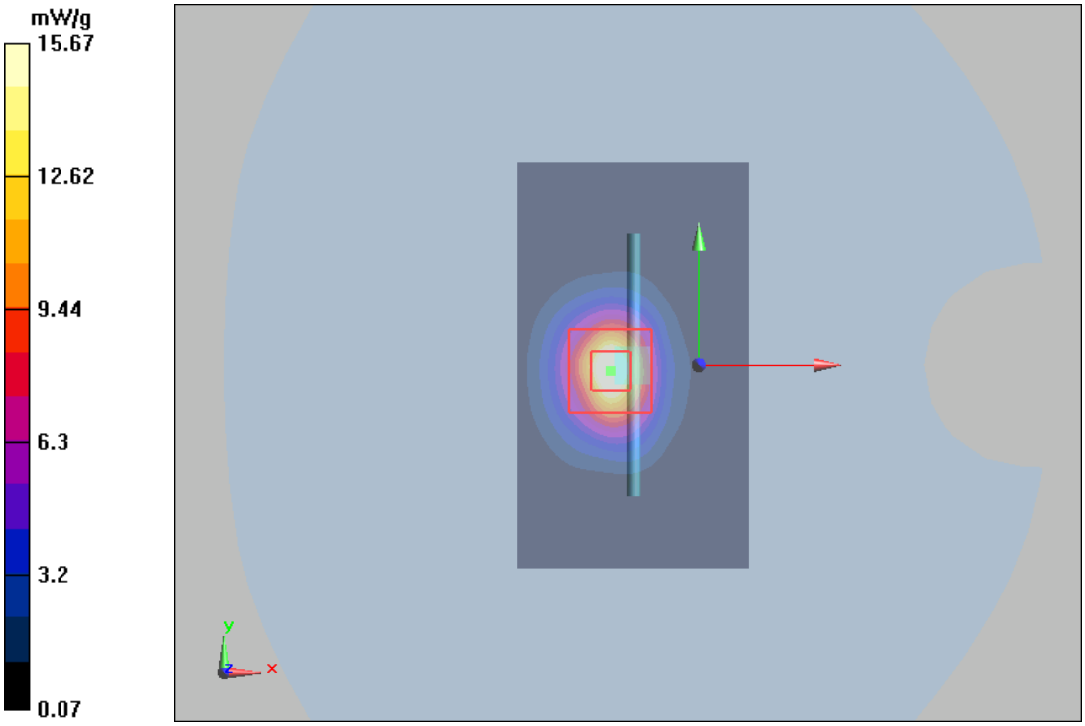
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74.40 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 28.5 W/kg

**SAR(1 g) = 13.89 mW/g; SAR(10 g) = 5.94 mW/g**

Maximum value of SAR (measured) = 15.67 mW/g



## Plot 30 System Performance Check at 5200 MHz Body TSL

**DUT: Dipole 5200 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 12/21/2016

Communication System: CW; Frequency: 5200 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5200 MHz; $\sigma$ = 5.32 mho/m; $\varepsilon_r$ = 48.1; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3898; ConvF (4.69, 4.69, 4.69); Calibrated: 7/11/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 7.69 mW/g

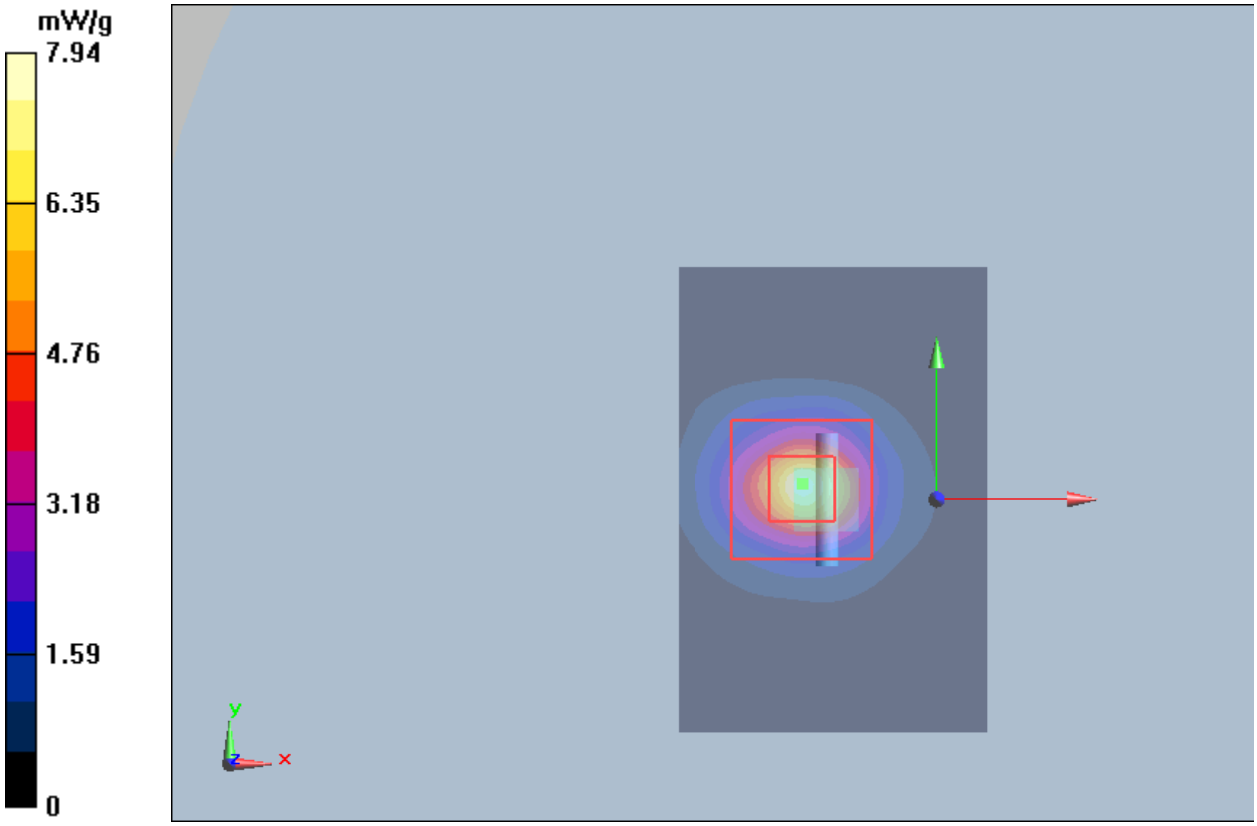
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 36.3 V/m; Power Drift = 0.0277 dB

Peak SAR (extrapolated) = 47.7 W/kg

**SAR(1 g) = 7.46 mW/g; SAR(10 g) = 2.26 mW/g**

Maximum value of SAR (measured) = 7.94 mW/g



## Plot 31 System Performance Check at 5300 MHz Head TSL

**DUT: Dipole 5300 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 12/23/2016

Communication System: CW; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5300 MHz; $\sigma$ = 4.95 mho/m; $\varepsilon_r$ = 35.2; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3898; ConvF (5.32, 5.32, 5.32); Calibrated: 7/11/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM 2; Type: SAM;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 10.7 mW/g

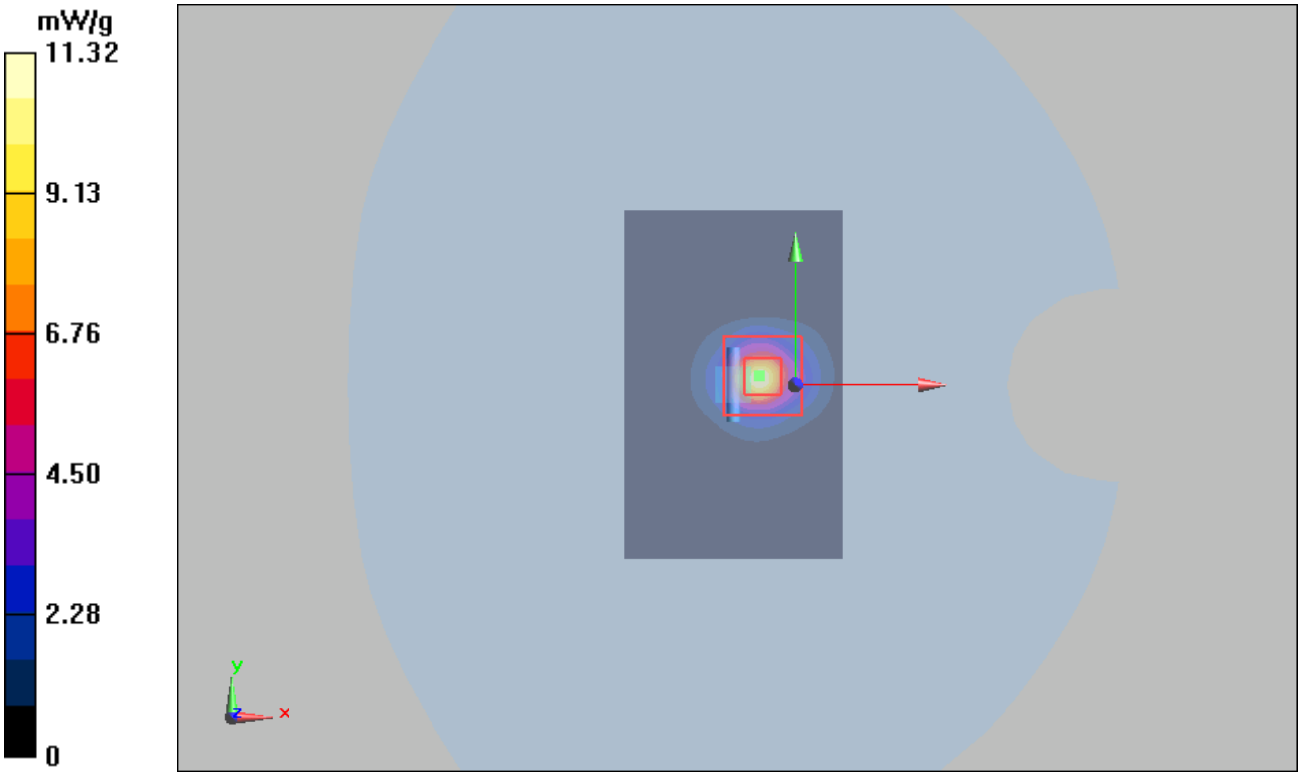
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 35.5 V/m; Power Drift = -0.151 dB

Peak SAR (extrapolated) = 58.8 W/kg

**SAR(1 g) = 8.13 mW/g; SAR(10 g) = 2.28 mW/g**

Maximum value of SAR (measured) = 11.32 mW/g



## Plot 32 System Performance Check at 5300 MHz Body TSL

**DUT: Dipole 5300 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 12/22/2016

Communication System: CW; Frequency: 5300 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5300 MHz; $\sigma$ = 5.30 mho/m; $\varepsilon_r$ = 48.4; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3898; ConvF (4.69, 4.69, 4.69); Calibrated: 7/11/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 7.11 mW/g

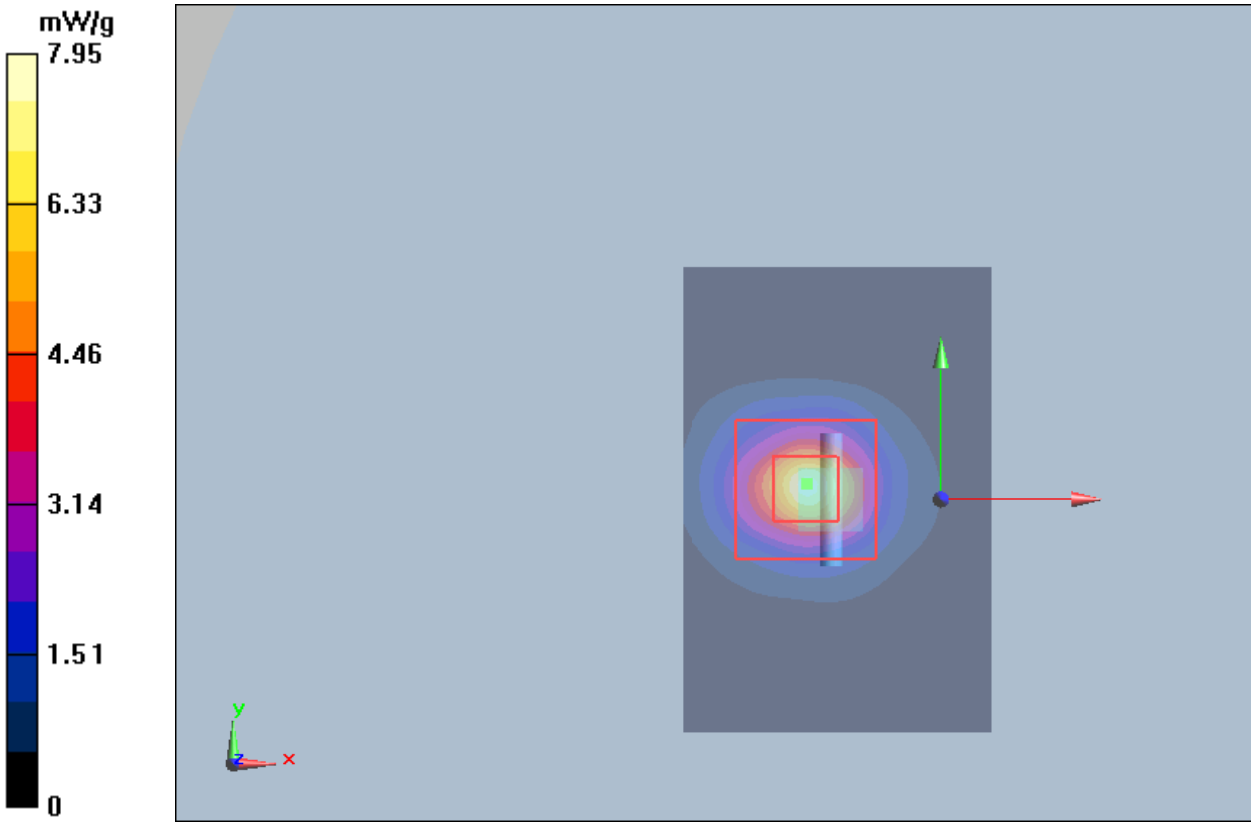
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 35.7 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 47.1 W/kg

**SAR(1 g) = 7.75 mW/g; SAR(10 g) = 2.24 mW/g**

Maximum value of SAR (measured) = 7.95 mW/g



## Plot 33 System Performance Check at 5600 MHz Head TSL

**DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 12/24/2016

Communication System: CW; Frequency: 5600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5600 MHz; $\sigma$ = 5.21 mho/m; $\varepsilon_r$ = 34.2; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3898; ConvF (4.61, 4.61, 4.61); Calibrated: 7/11/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM 2; Type: SAM;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 8.25 mW/g

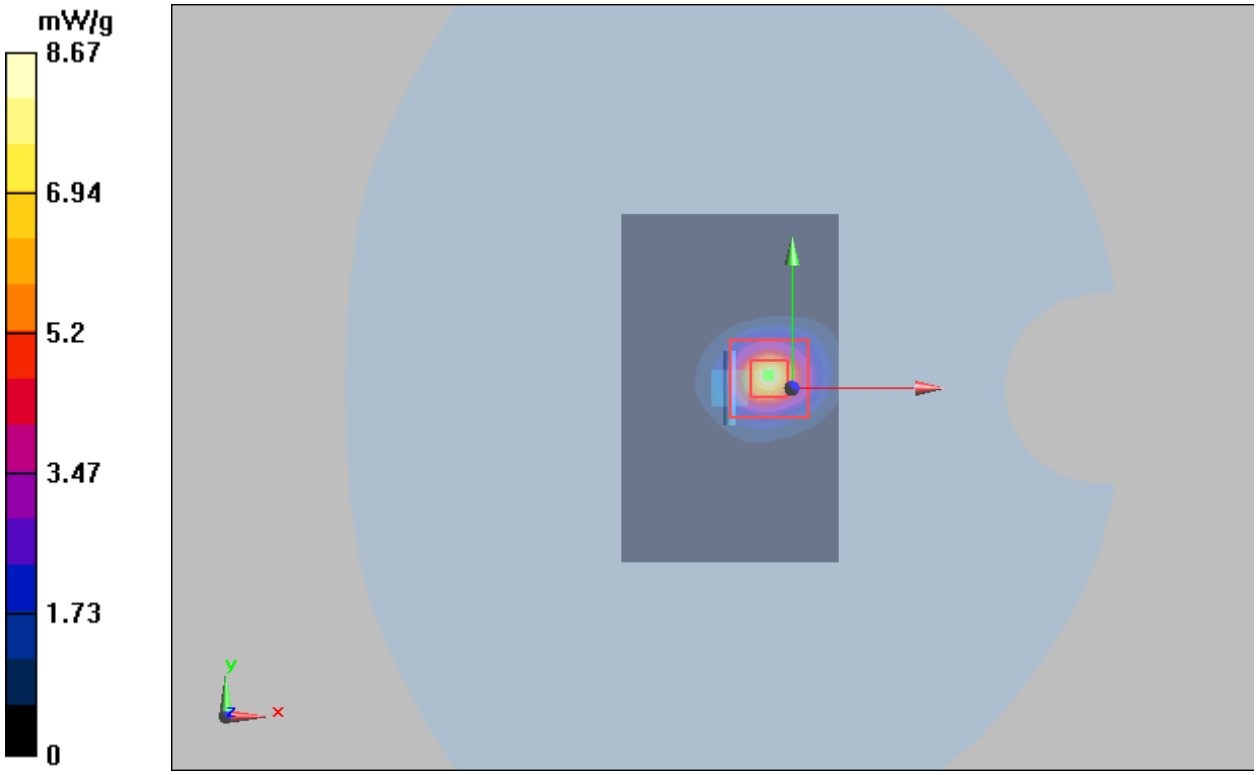
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 23.1 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 22.9 W/kg

**SAR(1 g) = 7.67 mW/g; SAR(10 g) = 2.27 mW/g**

Maximum value of SAR (measured) = 8.67 mW/g



## Plot 34 System Performance Check at 5600 MHz Body TSL

**DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 12/25/2016

Communication System: CW; Frequency: 5600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5600 MHz; $\sigma$ = 5.78 mho/m; $\varepsilon_r$ = 47.9; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3898; ConvF(3.87, 3.87, 3.87); Calibrated: 7/11/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 7.84 mW/g

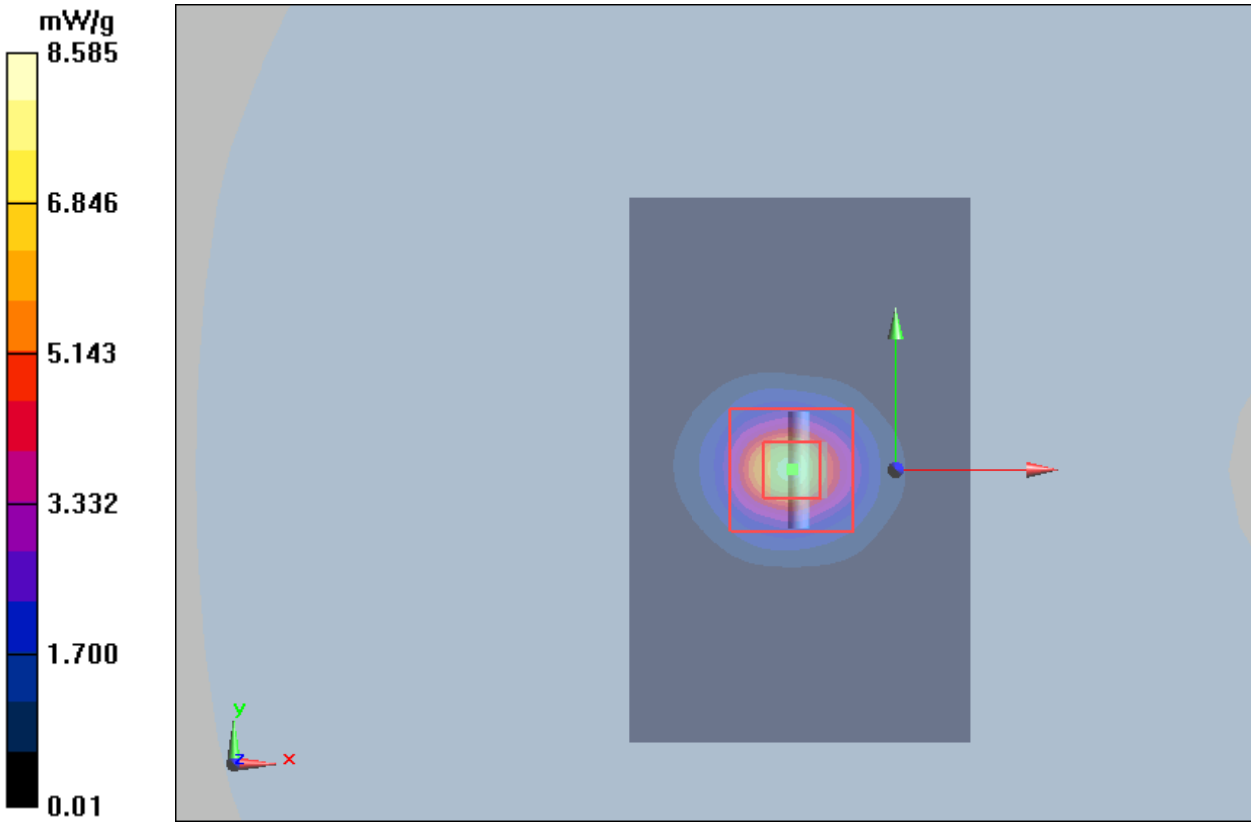
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 38 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 22.6 W/kg

**SAR(1 g) = 8.10 mW/g; SAR(10 g) = 2.21 mW/g**

Maximum value of SAR (measured) = 8.585 mW/g



## Plot 35 System Performance Check at 5800 MHz Head TSL

**DUT: Dipole 5800 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 12/19/2016

Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5800 MHz; $\sigma$ = 5.21 mho/m; $\varepsilon_r$ = 34.9; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3898; ConvF (4.82, 4.82, 4.82); Calibrated: 7/11/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM 2; Type: SAM;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 8.31 mW/g

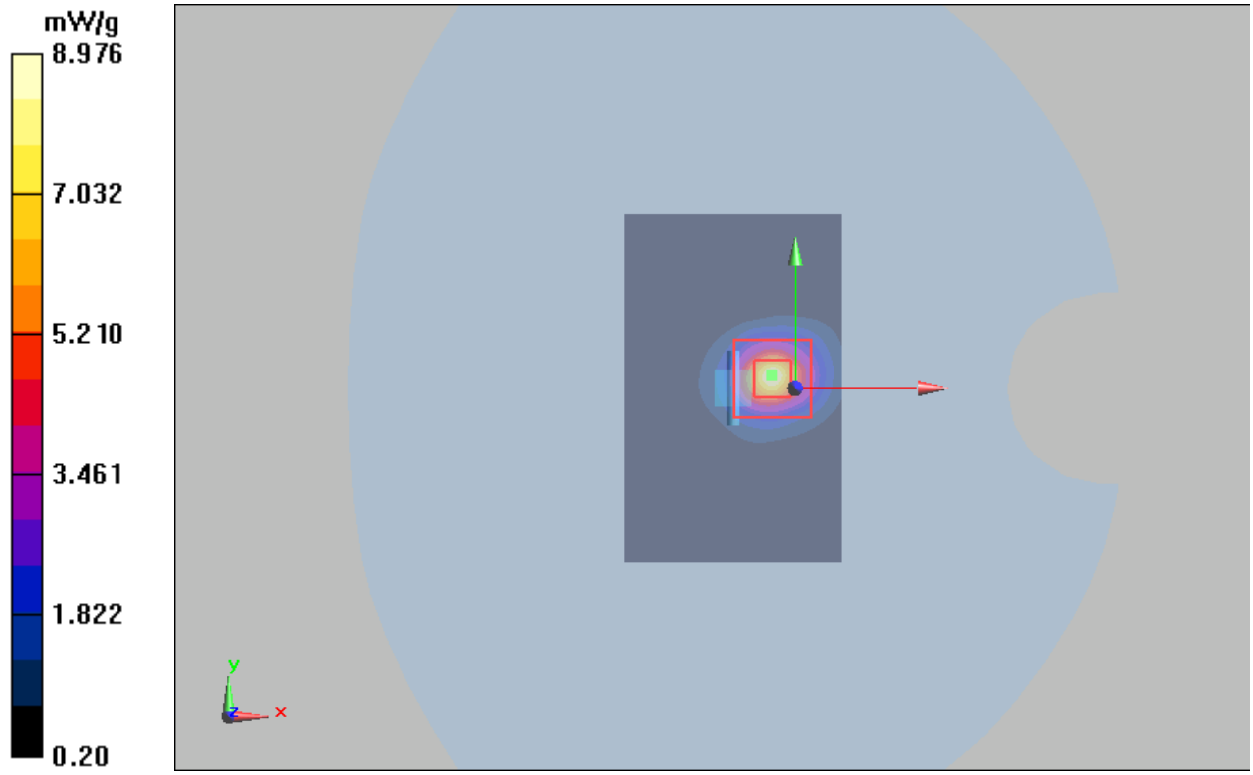
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 23.1 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 23.4 W/kg

**SAR(1 g) = 7.66 mW/g; SAR(10 g) = 2.27 mW/g**

Maximum value of SAR (measured) = 8.976 mW/g



## Plot 36 System Performance Check at 5800 MHz Body TSL

**DUT: Dipole 5800 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 12/18/2016

Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5800 MHz; $\sigma$ = 6.14 mho/m; $\varepsilon_r$ = 47.6; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3898; ConvF (4.04, 4.04, 4.04); Calibrated: 7/11/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA;

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 7.84 mW/g

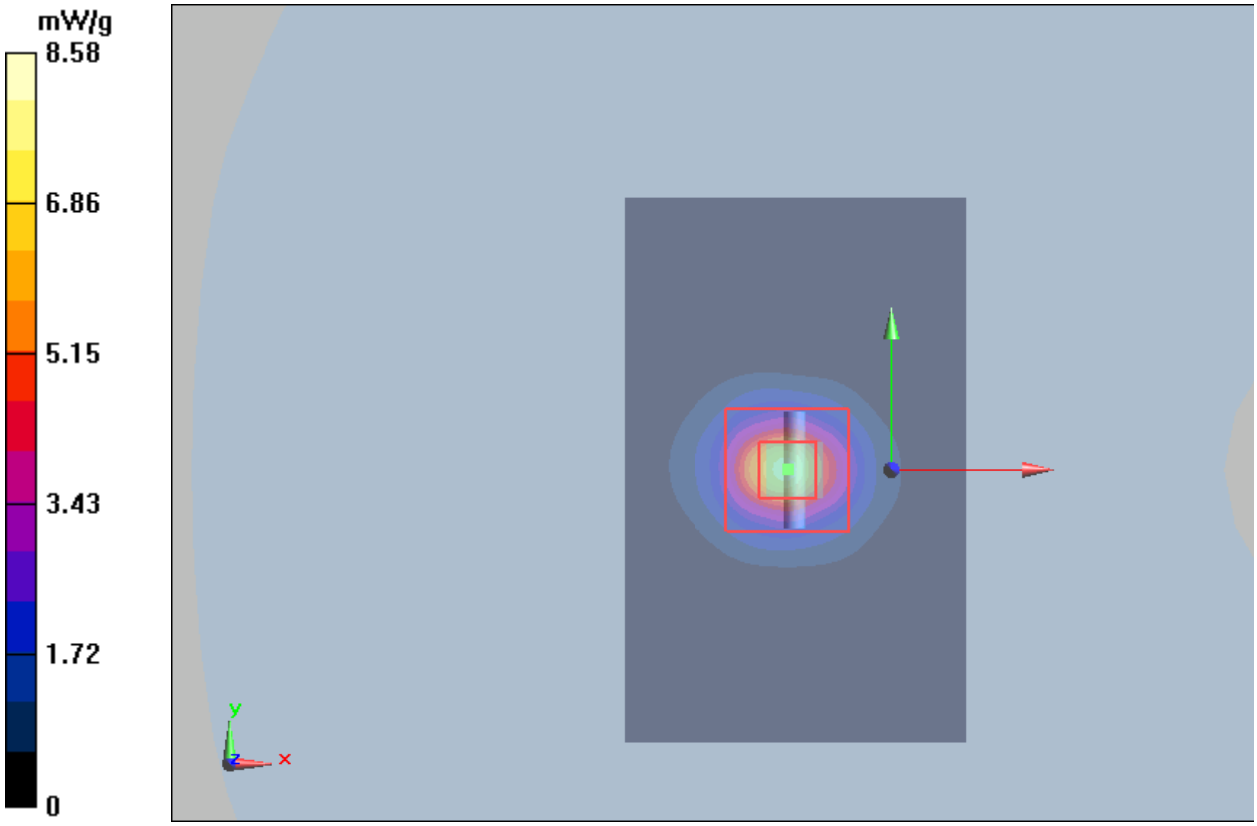
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 38 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 22.6 W/kg

**SAR(1 g) = 7.15 mW/g; SAR(10 g) = 1.99 mW/g**

Maximum value of SAR (measured) = 8.58 mW/g



# ANNEX C: Highest Graph Results

## Main-Antenna

### Plot 37 GSM 850 Left Cheek Middle

Date: 11/24/2016

Communication System: UID 0, GSM 850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: f = 837 MHz; $\sigma$ = 0.919 S/m; $\varepsilon_r$ = 41.514; $\rho$ = 1000 kg/m$^3$

Ambient Temperature: 22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(6.22, 6.22, 6.22); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Left Cheek Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.306 W/kg

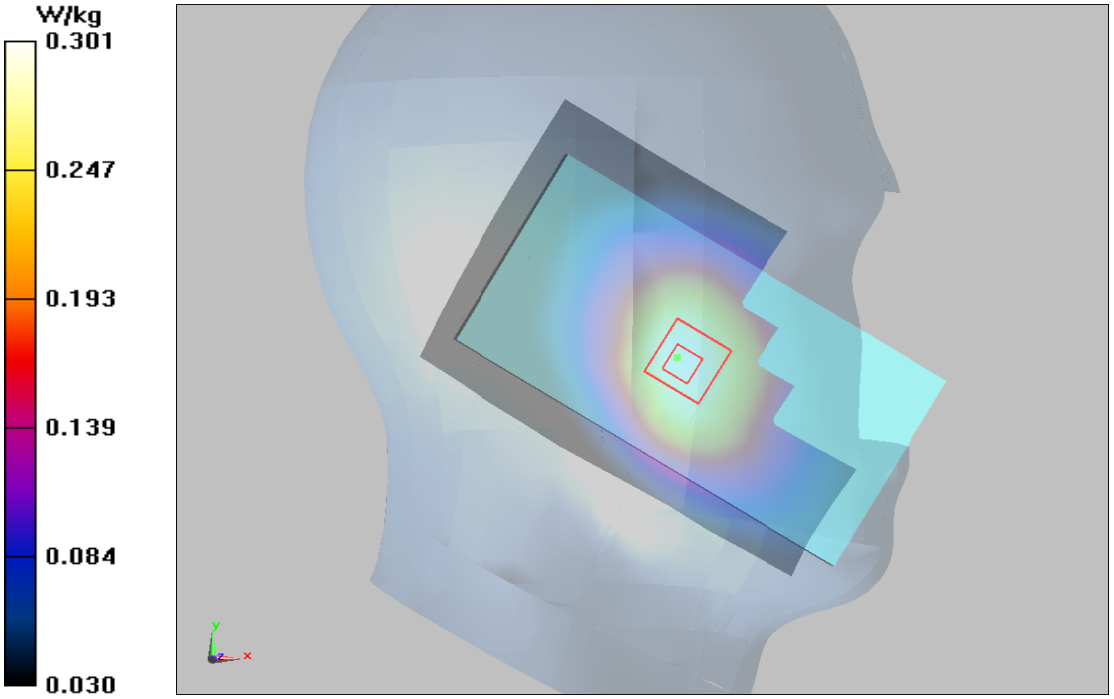
**Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.371 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.359 W/kg

**SAR(1 g) = 0.288 W/kg; SAR(10 g) = 0.219 W/kg**

Maximum value of SAR (measured) = 0.301 W/kg



## Plot 38 GSM 850 Back Side Middle (Distance 15mm)

Date: 11/22/2016

Communication System: UID 0, GSM 850 (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042

Medium parameters used: f = 837 MHz; $\sigma$ = 1.028 S/m; $\varepsilon_r$ = 55.335; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.87, 5.87, 5.87); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.342 W/kg

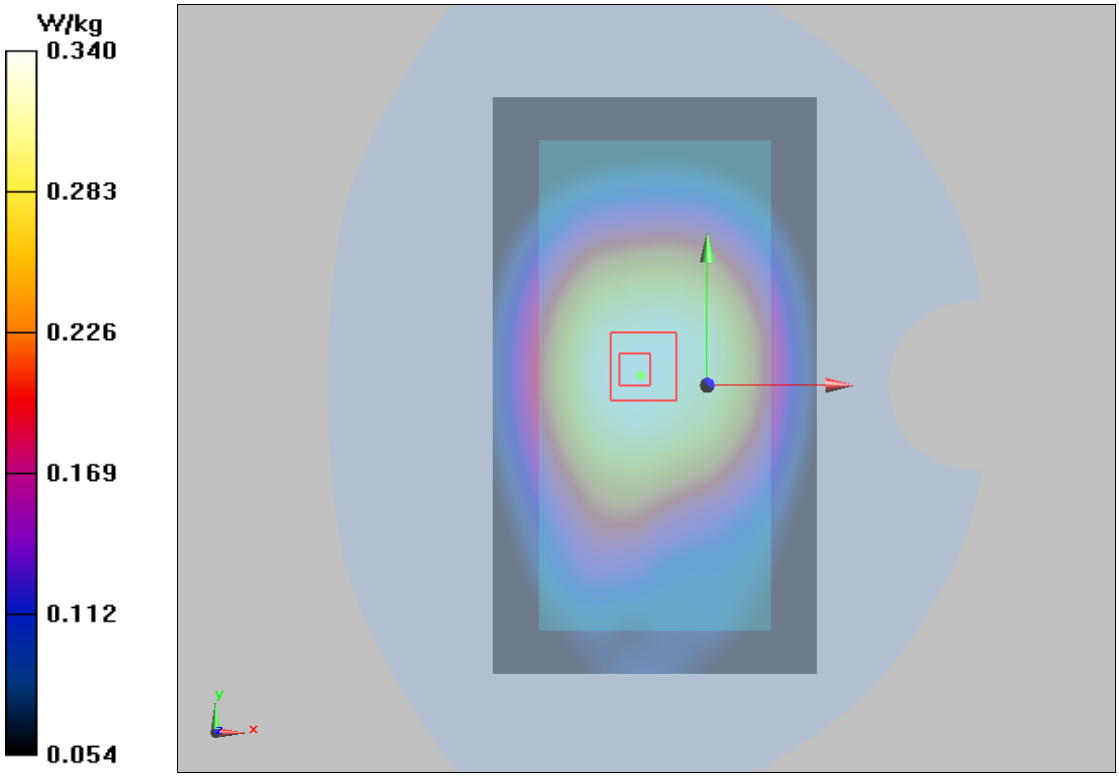
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.71 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.405 W/kg

**SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.250 W/kg**

Maximum value of SAR (measured) = 0.340 W/kg



## Plot 39 GSM 850 GPRS (2Txslots) Back Side Middle (Distance 10mm, Battery2)

Date: 11/22/2016

Communication System: UID 0, GPRS 2TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:4.14954

Medium parameters used: f = 837 MHz; $\sigma$ = 1.028 S/m; $\varepsilon_r$ = 55.335; $\rho$ = 1000 kg/m$^3$

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: ES3DV3 - SN3189; ConvF(5.87, 5.87, 5.87); Calibrated: 7/27/2016;

Electronics: DAE4 Sn1317; Calibrated: 8/2/2016

Phantom: SAM 2; Type: SAM; Serial: Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.474 W/kg

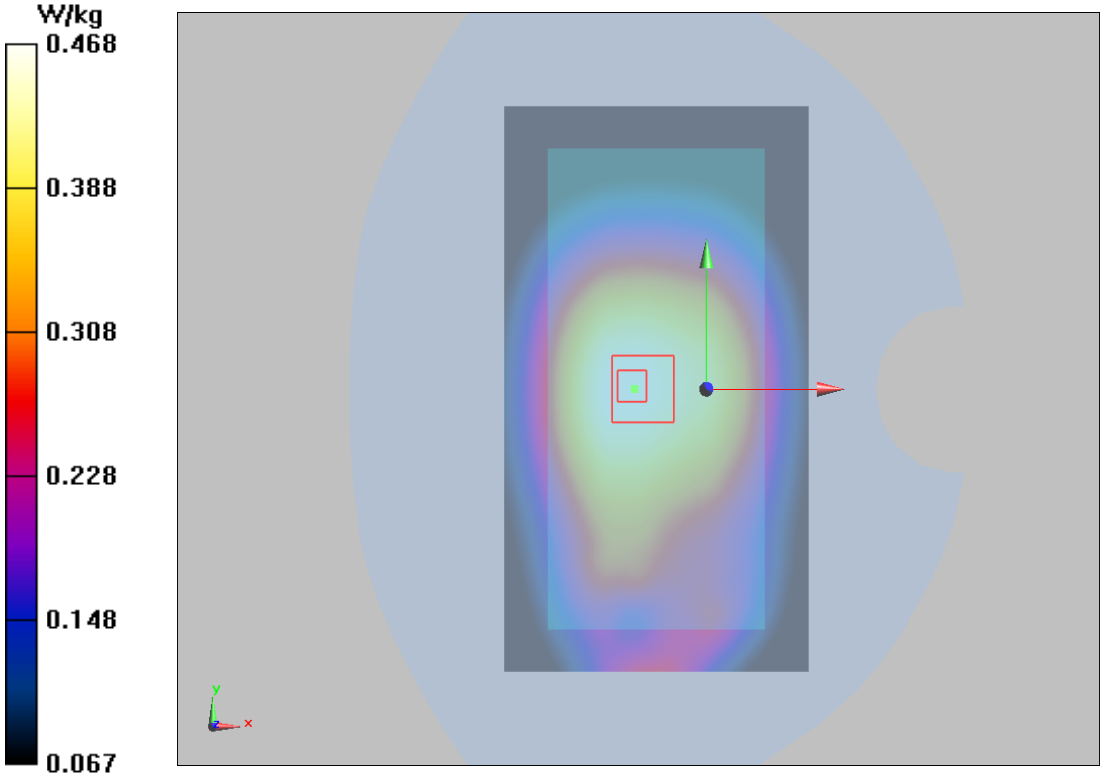
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.70 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.542 W/kg

**SAR(1 g) = 0.445 W/kg; SAR(10 g) = 0.343 W/kg**

Maximum value of SAR (measured) = 0.468 W/kg

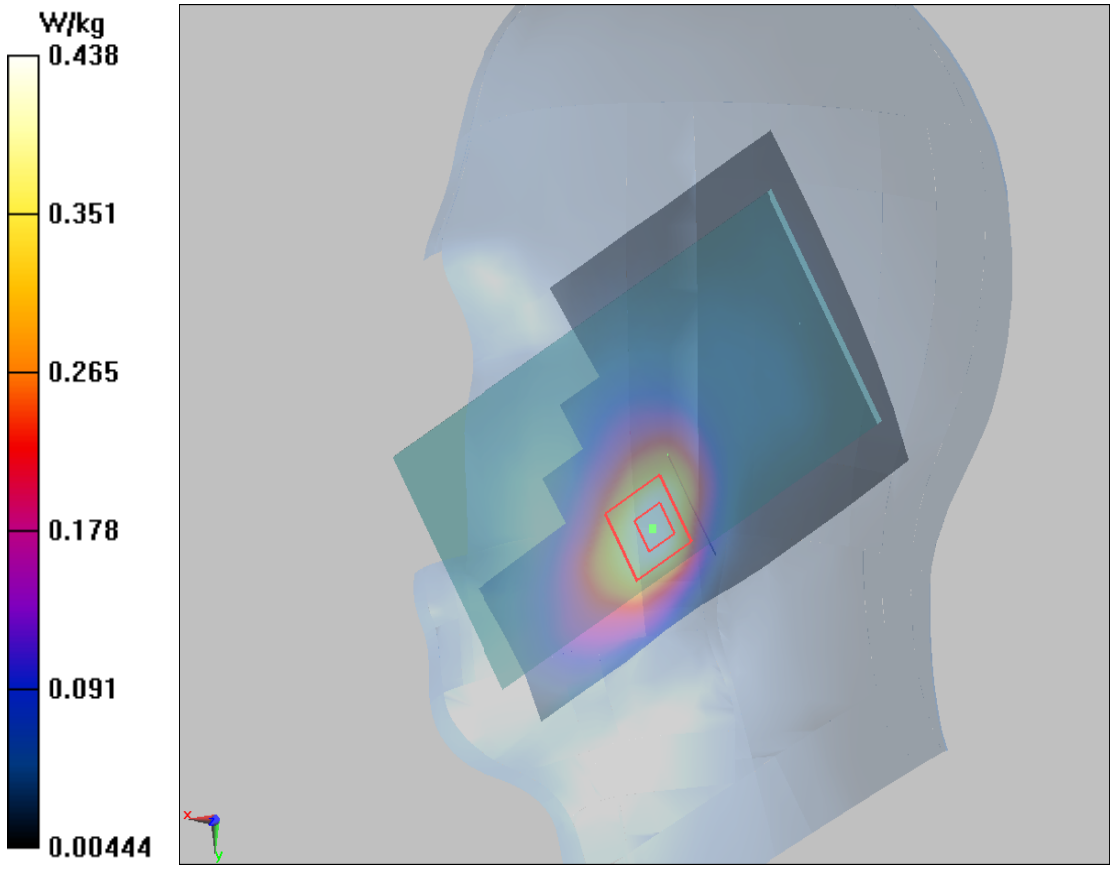


## Plot 40 GSM 1900 Right Cheek Middle (State1, Battery2)

Date: 12/12/2016
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.363 S/m; $\varepsilon_r$ = 39.073; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(5.09, 5.09, 5.09); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.466 W/kg

**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.499 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.590 W/kg
**SAR(1 g) = 0.407 W/kg; SAR(10 g) = 0.254 W/kg**
Maximum value of SAR (measured) = 0.438 W/kg

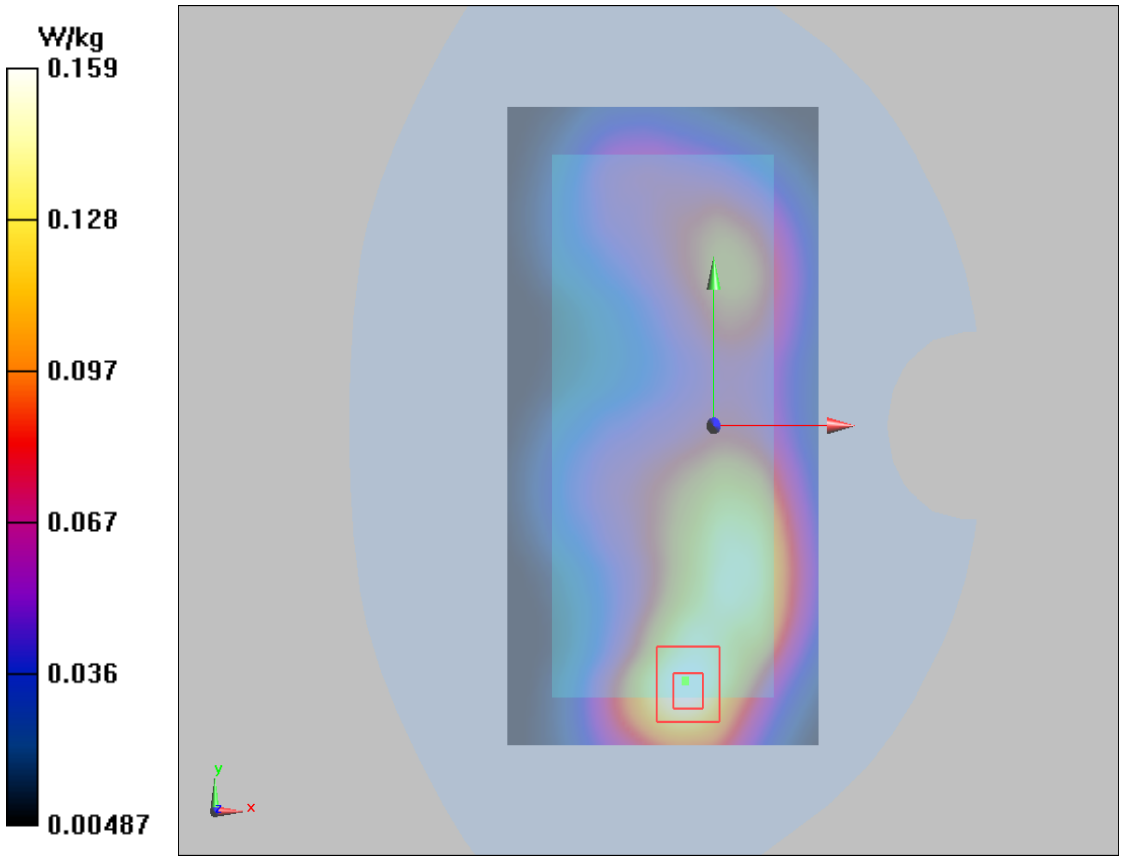


## Plot 41 GSM 1900 Front Side Middle (Distance 15mm, State2)

Date: 2016/12/8
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.477 S/m; $\varepsilon_r$ = 51.607; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(4.78, 4.78, 4.78); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Front Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.167 W/kg

**Front Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.723 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.253 W/kg
**SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.092 W/kg**
Maximum value of SAR (measured) = 0.159 W/kg

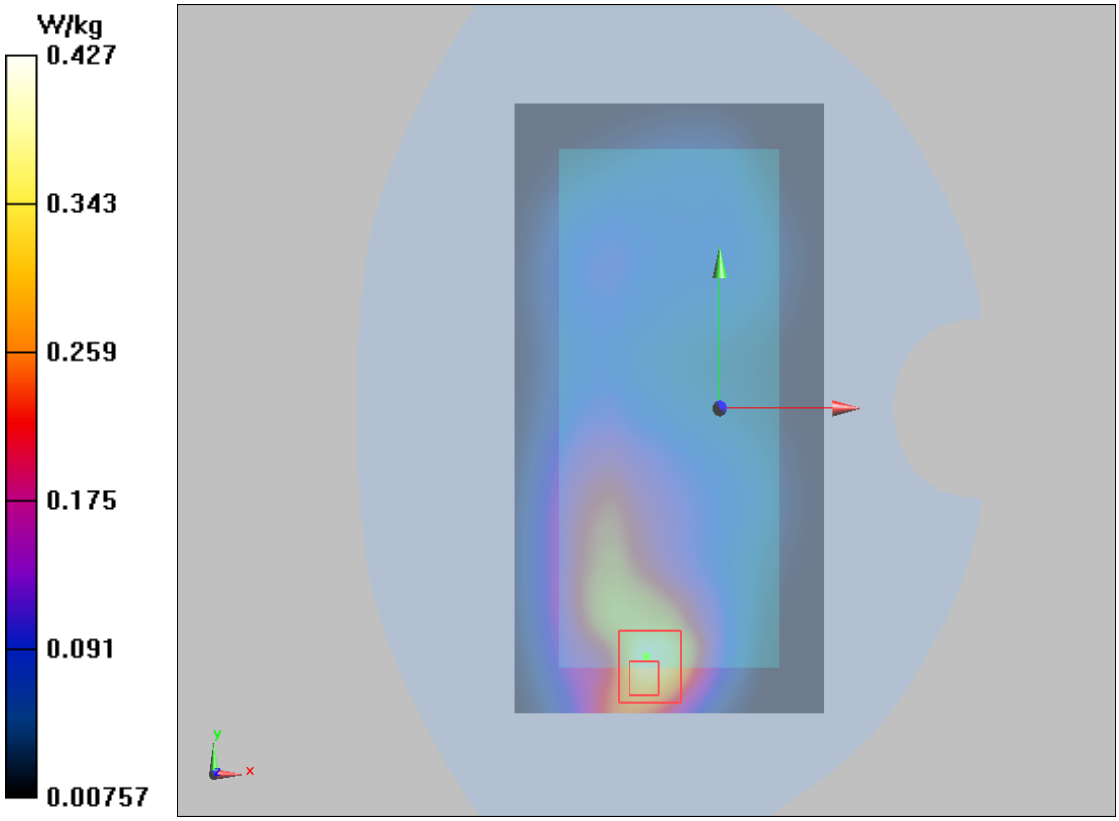


## Plot 42 GSM 1900 GPRS (2Txslots) Back Side Middle (Distance 10mm, State2)

Date: 2016/12/8
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.477 S/m; $\varepsilon_r$ = 51.607; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(4.78, 4.78, 4.78); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.394 W/kg

**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.063 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.675 W/kg
**SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.212 W/kg**
Maximum value of SAR (measured) = 0.427 W/kg

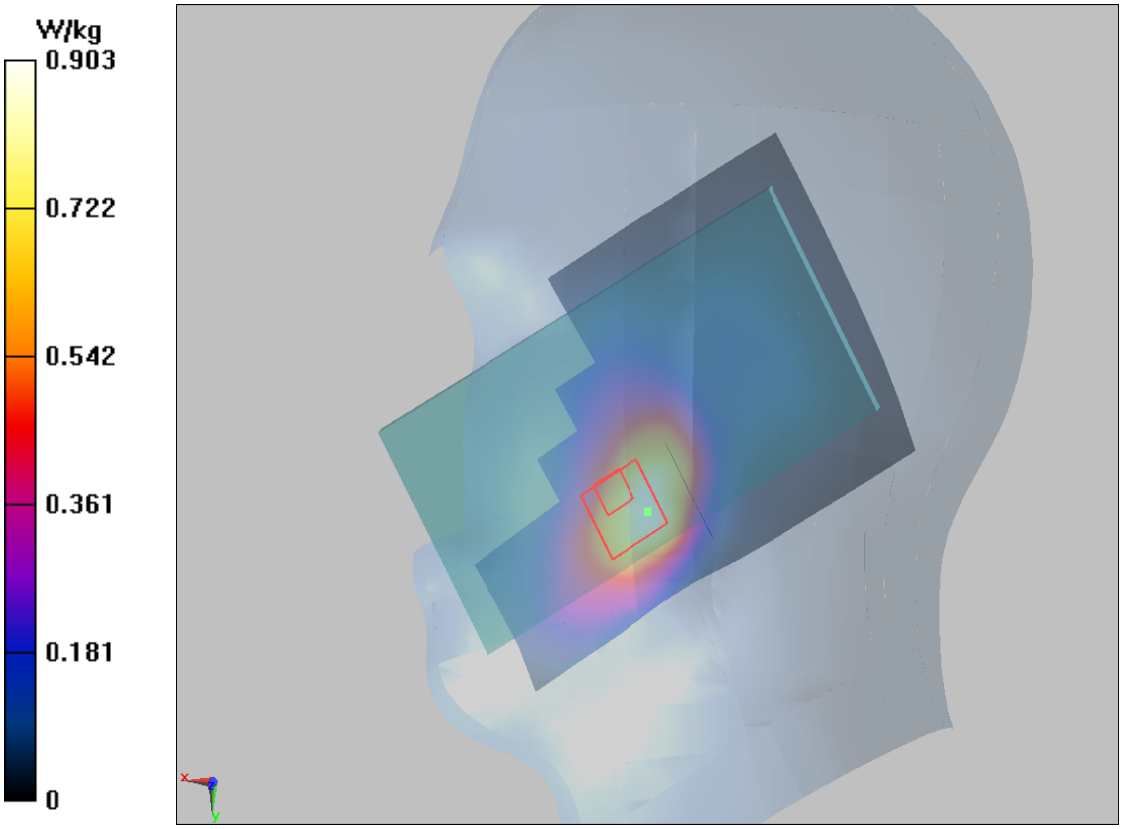


## Plot 43 UMTS Band II Right Cheek Low (State1)

Date: 12/12/2016
Communication System: UID 0, WCDMA (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1852.4 MHz; $\sigma$ = 1.339 S/m; $\varepsilon_r$ = 39.172; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(5.09, 5.09, 5.09); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Low/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.888 W/kg

**Right Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.312 V/m; Power Drift = -0.02dB
Peak SAR (extrapolated) = 1.70 W/kg
**SAR(1 g) = 0.891 W/kg; SAR(10 g) = 0.202 W/kg**
Maximum value of SAR (measured) = 0.903 W/kg

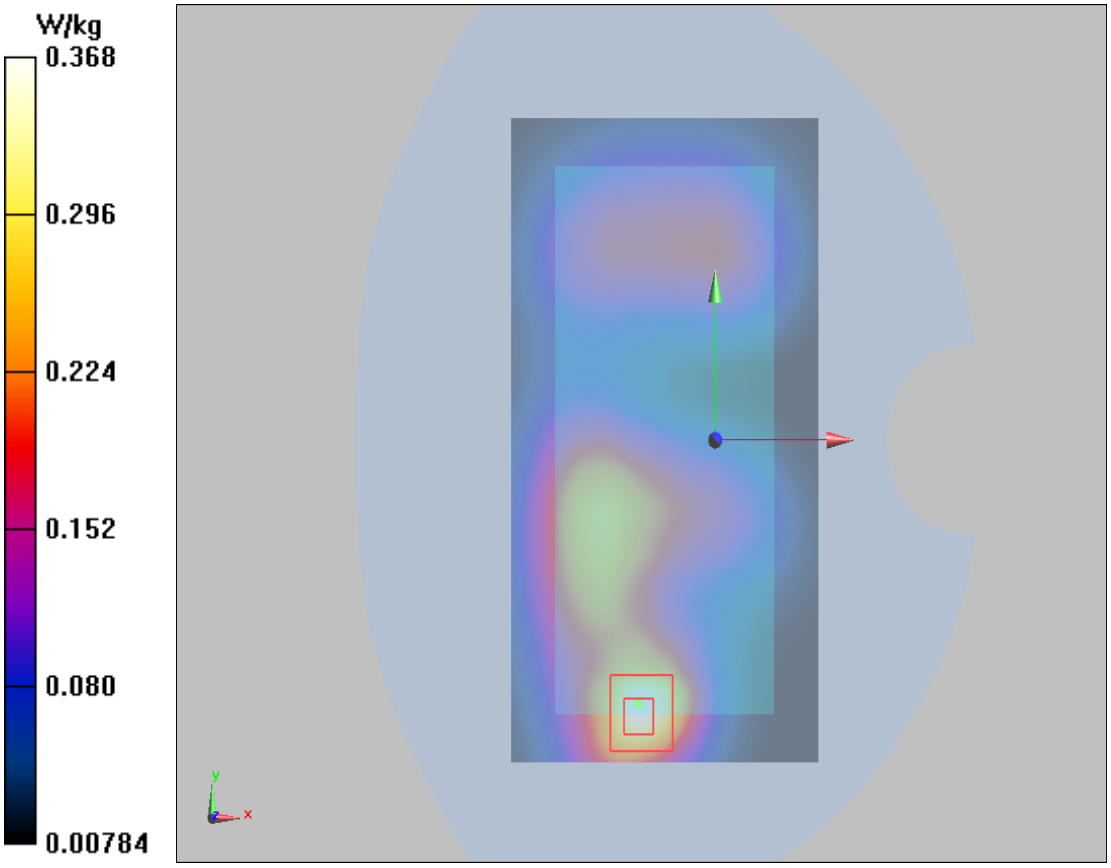


## Plot 44 UMTS Band II Back Side Middle (Distance 15mm, State2)

Date: 2016/12/8
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.477 S/m; $\varepsilon_r$ = 51.607; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(4.78, 4.78, 4.78); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.375 W/kg

**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.772 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.571 W/kg
**SAR(1 g) = 0.339 W/kg; SAR(10 g) = 0.192 W/kg**
Maximum value of SAR (measured) = 0.368 W/kg

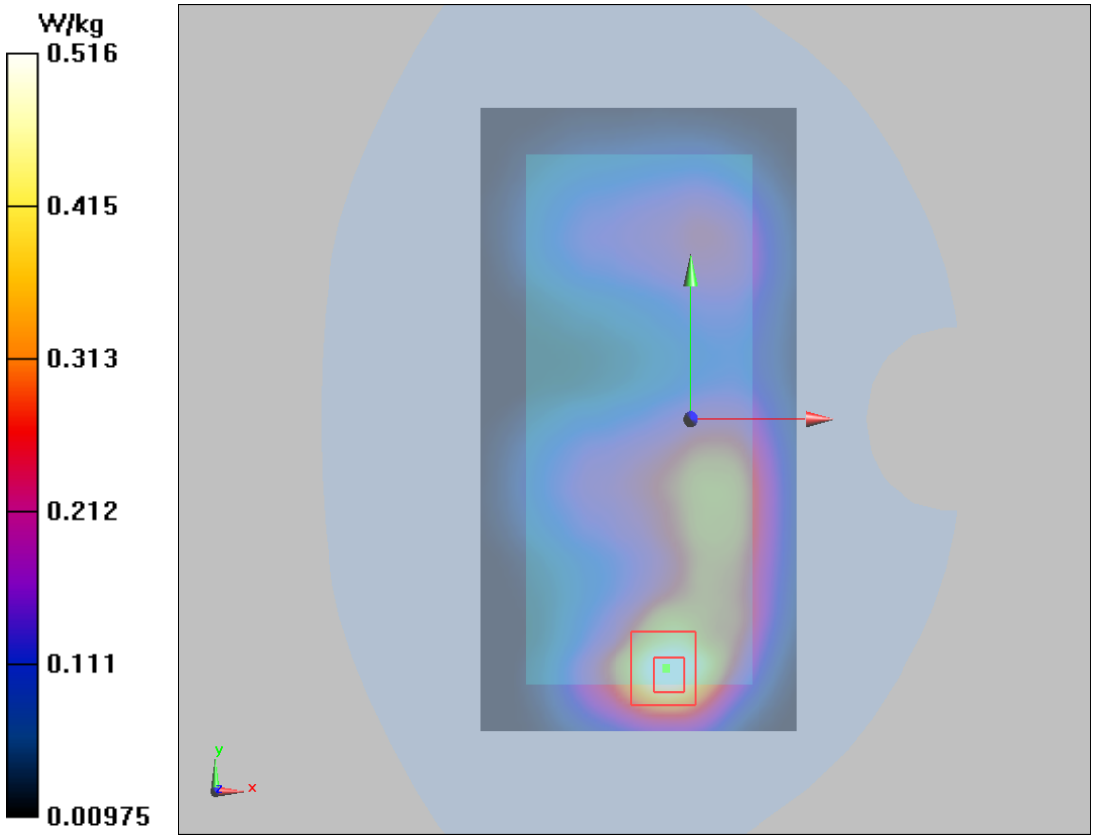


## Plot 45 UMTS Band II Front Side Middle (Distance 10mm, State2)

Date: 2016/12/8
Communication System: UID 0, WCDMA Band II (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; $\sigma$ = 1.477 S/m; $\varepsilon_r$ = 51.607; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(4.78, 4.78, 4.78); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 2; Type: SAM;
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Front Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.565 W/kg

**Front Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.556 V/m; Power Drift = -0.00 dB
Peak SAR (extrapolated) = 0.840 W/kg
**SAR(1 g) = 0.480 W/kg; SAR(10 g) = 0.266 W/kg**
Maximum value of SAR (measured) = 0.516 W/kg

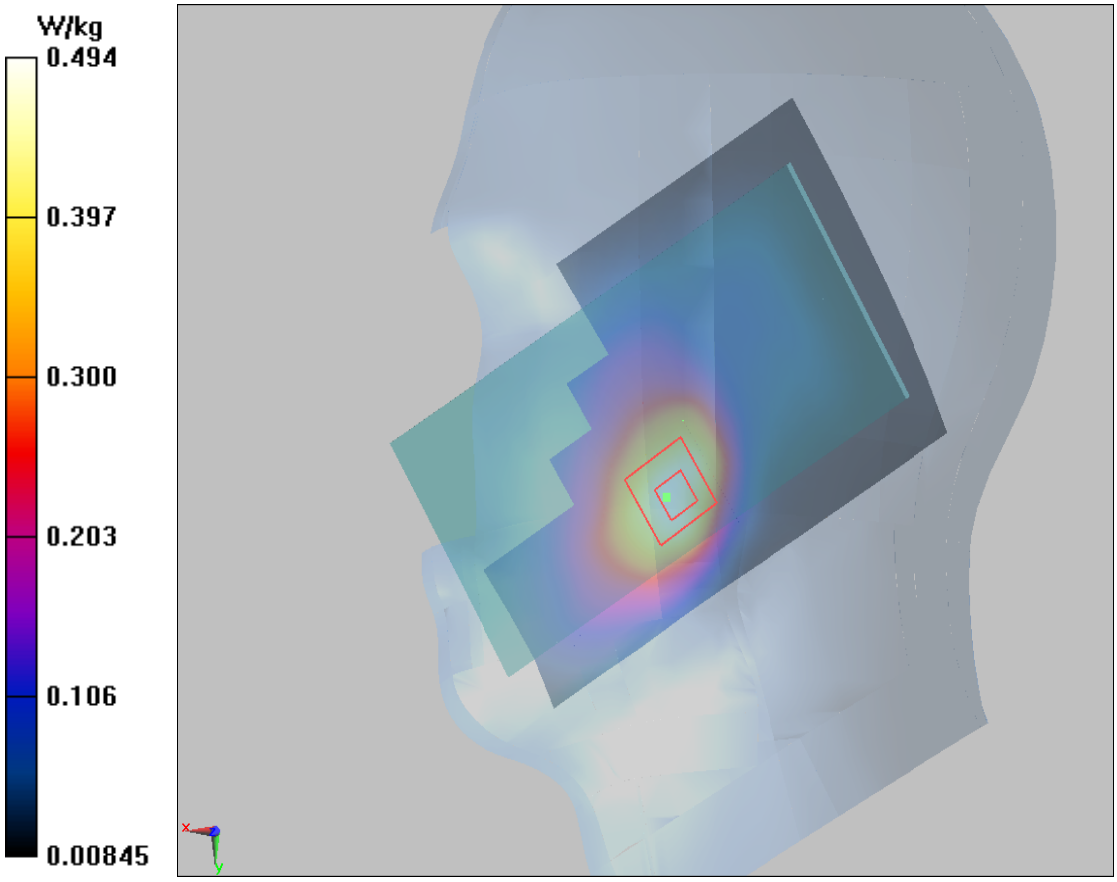


## Plot 46 UMTS Band IV Right Cheek Middle (State1)

Date: 12/11/2016
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1733 MHz; $\sigma$ = 1.358 S/m; $\varepsilon_r$ = 38.629; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(5.32, 5.32, 5.32); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.496 W/kg

**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.469 V/m; Power Drift = 0.027 dB
Peak SAR (extrapolated) = 0.685 W/kg
**SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.291 W/kg**
Maximum value of SAR (measured) = 0.494 W/kg



## Plot 47 UMTS Band IV Back Side Middle (Distance 15mm, State2)

Date: 12/10/2016
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1733 MHz; $\sigma$ = 1.464 S/m; $\varepsilon_r$ = 51.657; $\rho$ = 1000 kg/m$^3$
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: ES3DV3 - SN3189; ConvF(5.00, 5.00, 5.00); Calibrated: 7/27/2016;
Electronics: DAE4 Sn1317; Calibrated: 8/2/2016
Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.298 W/kg

**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.973 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.399 W/kg
**SAR(1 g) = 0.272 W/kg; SAR(10 g) = 0.182 W/kg**
Maximum value of SAR (measured) = 0.289 W/kg