SAR TEST REPORT

Applicant	Huawei Technologies Co., Ltd.
FCC ID	QISVKY-L09
Product	Smart Phone
Model	VKY-L09
Report No.	RHA1612-0111SAR01R1
Issue Date	January 24, 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.

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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.
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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

VKY-L09 (RHA1612-0111SAR01R1) is a variant model of VKY-L29 (RHA1611-0091SAR01R1). Test values duplicated from Original for variant. The variant changed SIM card and model name, so there is no additional SAR test. The detailed product change description please refers to the ANNEX N.

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	0.30	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	0.65	NA
LTE TDD 41	0.38	0.24	0.68	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	1.15	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 Shenzhen 518129 P.R.China.
Manufacturer	Huawei Technologies Co., Ltd.
Manufacturer address	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District Shenzhen 518129 P.R.China.

General Technologies

Application Purpose:	Class II Permissive Change
EUT Stage	Identical Prototype
Model:	VKY-L09
IMEI:	862940030039279
Hardware Version:	HL1AVICKYM
Software Version:	D189-L09C432B083
Antenna Type:	Internal Antenna
Device Class:	B
Wi-Fi Hotspot	Wi-Fi 2.4G Wi-Fi 5G U-NII-1&U-NII-3
Power Class:	GSM 850:4 GSM 1900:1 UMTS Band II/IV/V:3 LTE FDD 2/4/5/7/12/17/26:3 LTE TDD 38/41:3
Power Level	GSM 850:level 5 GSM 1900:level 0 UMTS Band II/IV/V:all up bits LTE FDD 2/4/5/7/12/17/26:max power LTE TDD 38/41:max power

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

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)	Rx (MHz)
GSM	850	Voice(GMSK) GPRS(GMSK) EGPRS(GMSK, 8PSK)	☐Multi-slot Class:8-1UP ☐Multi-slot Class:10-2UP ☒Multi-slot Class:12-4UP ☐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 HSUPA UE Category:6 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/ ac 20M/40M/80M	5150 ~ 5350 5470 ~ 5825	5150 ~ 5350 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	β_c	β_d	β_d (SF)	β_c/β_d	β_{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: Δ_{ACK}, Δ_{NACK} and Δ_{CQI}= 8$\Leftrightarrow$$A_{hs}$ = β_{hs}/β_c=30/15 $\Leftrightarrow$ β_{hs}=30/15*β_c

Note2: CM=1 for β_c/β_d =12/15, β_{hs}/β_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 β_c=11/15 and β_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	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	β_{ec}	β_{ed}	β_{ed} (SF)	β_{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	β_{ed1}:47/15 β_{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: Δ_{ACK}, ΔNACK and Δ_{CQI} = 8 $\Leftrightarrow$ A_{hs} = β_{hs}/β_c = 30/15 $\Leftrightarrow$ β_{hs}= 30/15 *β_c.

Note 2: CM = 1 for βc/βd =12/15, β_{hs}/β_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

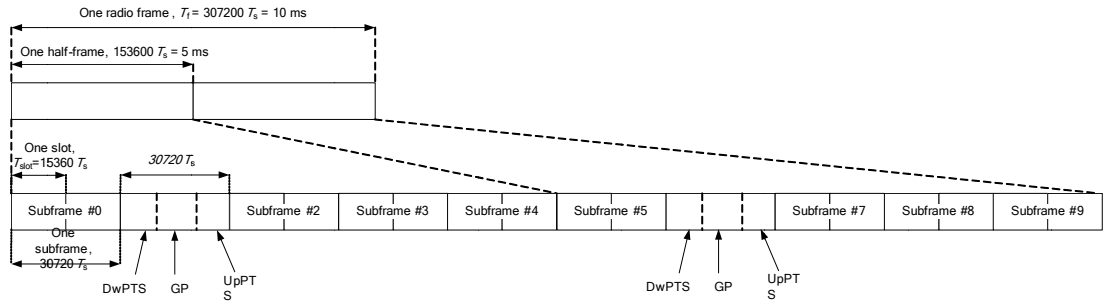


Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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 WiFi 5G 802.11a/n/ac
WLAN MIMO	WiFi 2.4G 802.11n, WiFi 5G 802.11n/11ac
WLAN CDD	WiFi 2.4G 802.11g , 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, B8/B12/B17/B28/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_3A-7A-8A	3			Yes	Yes	Yes		40	0
	7				Yes	Yes			
	8			Yes	Yes				
	3			Yes	Yes	Yes	Yes	50	1
	7				Yes	Yes	Yes		
	8			Yes	Yes				
CA_1A-3A-26A	1			Yes	Yes	Yes	Yes	50	0
	3			Yes	Yes	Yes	Yes		
	26			Yes	Yes				
CA_3A-7A-20A	3			Yes	Yes	Yes	Yes	60	0
	7				Yes	Yes	Yes		
	20			Yes	Yes	Yes	Yes		
CA_3A-7A-28A	3			Yes	Yes	Yes	Yes	60	0
	7			Yes	Yes	Yes	Yes		
	28			Yes	Yes	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.

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) All the listed bands above can be used as PCC or SCC except for CA_3A_7A_8A, B8 cannot be PCC.

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

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.

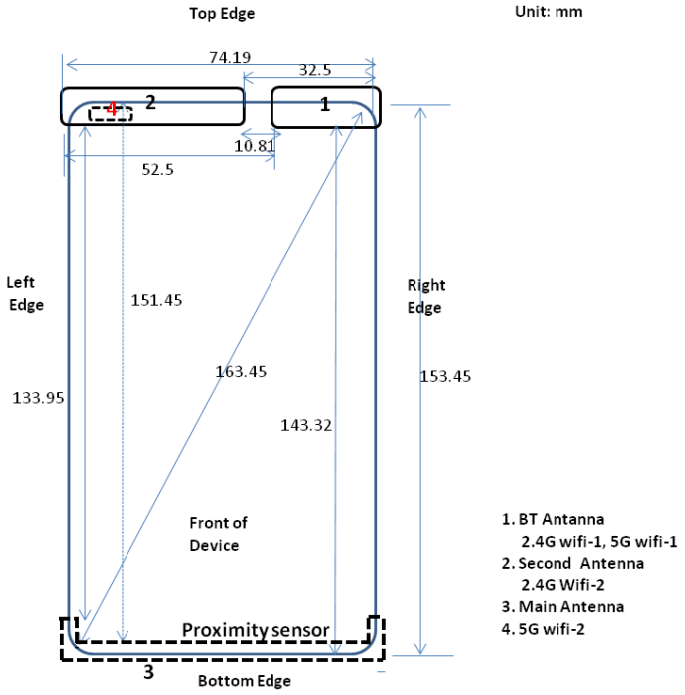
Main Antenna	GSM 850	GSM 1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B26	LTE B38	LTE B41
Hotspot on	0	0	-1.5	0	0	-0.5	0	0	0	0	0	0	0	0
2G&3G&4G + Wi-Fi station simultaneous Transmission	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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 B38	LTE B41
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.



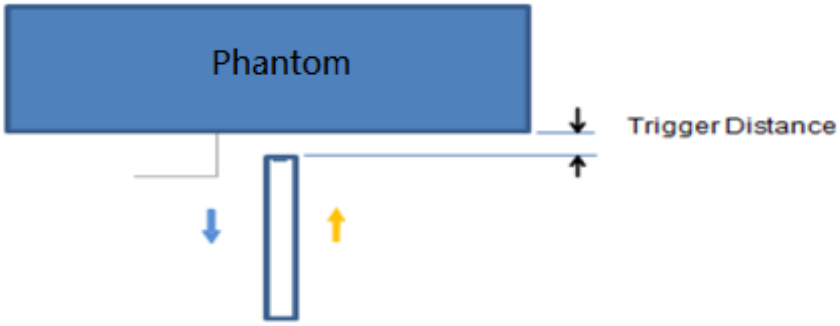
Tx Antenna	Antenna/Sensor-to- DUT sides separation distances					
	Front side	Back side	Left Edge	Right Edge	Top Edge	Bottom Edge
Main 2G&3G&4G Antenna	NA	NA	NA	NA	143.3mm	NA
Second 2G&3G&4G Antenna	NA	NA	NA	32.5mm	NA	143.3mm
2.4G/5G WiFi Antenna	NA	NA	52.5mm	NA	NA	143.3mm
sensor	NA	NA	NA	NA	143.3mm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

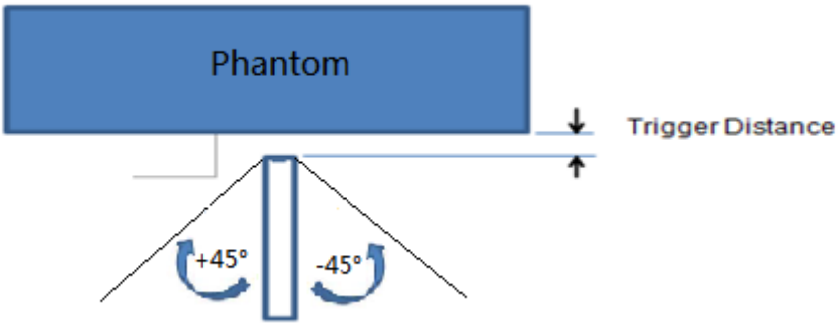


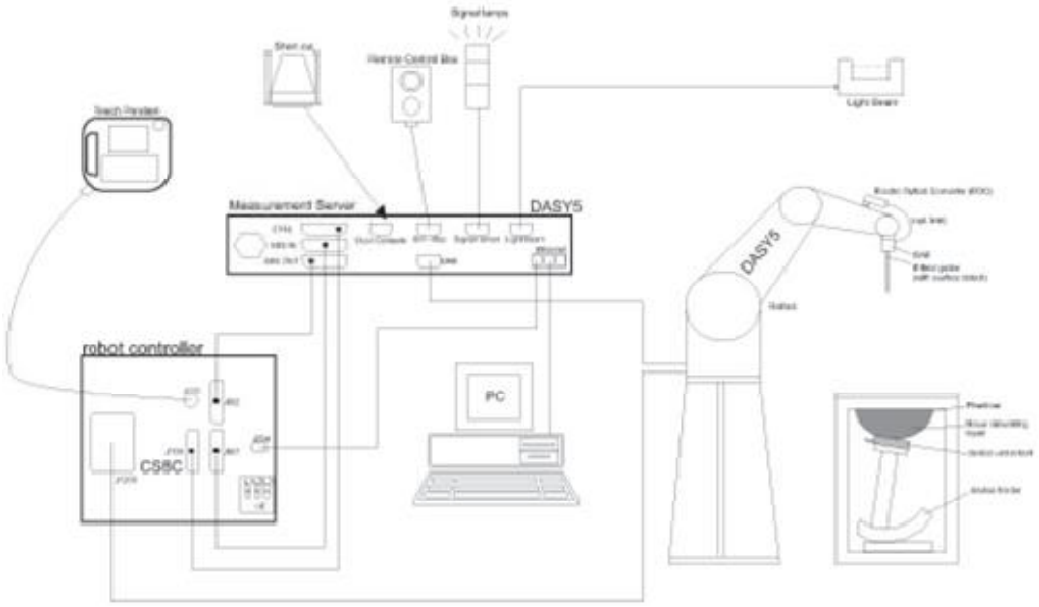
Table: KDB 616217 D04 § 6.4.1

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 Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 4 GHz Linearity: ± 0.2 dB (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 Dosimetry in strong gradient fields 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: Δt = 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 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 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 2 – 3GHz: ≤5mm*	3 – 4GHz: ≤5mm* 4 – 6GHz: ≤4mm*
Maximum zoom scan spatial resolution, normal to phantom surface	Uniform grid: $\triangle z_{zoom}(n)$		≤5mm	3 – 4GHz: ≤4mm 4 – 5GHz: ≤3mm 5 – 6GHz: ≤2mm
	Graded grid	$\triangle z_{zoom}(1)$: between 1st two points closest to phantom surface	≤4mm	3 – 4GHz: ≤3mm 4 – 5GHz: ≤2.5mm 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 4 – 5GHz: ≥25mm 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. * 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 (%)	ε_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	ε_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

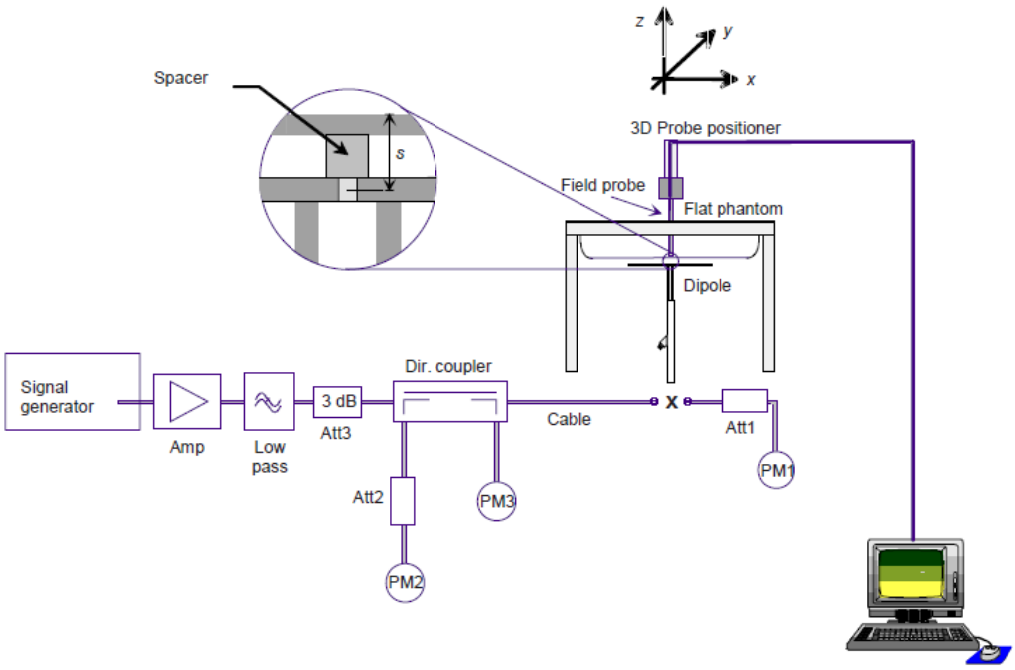
Frequency (MHz)		Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
				ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
750	Head	11/30/2016	21.5	41.1	0.90	41.9	0.89	-1.91	1.12
		12/1/2016	21.5	42.0	0.87	41.9	0.89	0.24	-2.25
		12/2/2016	21.5	41.8	0.89	41.9	0.89	-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
CA_3A-7A-8A	7	10	1	25	50	0	21100	3100	3	20	1575	8	10	3625	22.98	23.04	23.50
	7	15	1	38	75	0	21100	3100	3	20	1575	8	10	3625	23.03	23.04	23.50
	7	20	1	50	100	0	21100	3100	3	20	1575	8	10	3625	23.03	23.05	23.50
CA_3A-7A-20A	7	10	1	25	50	0	21100	3100	3	20	1575	20	20	6300	23.19	23.18	23.50
	7	15	1	38	75	0	21100	3100	3	20	1575	20	20	6300	23.07	23.08	23.50
	7	20	1	50	100	0	21100	3100	3	20	1575	20	20	6300	23.20	23.13	23.50
CA_3A-7A-28A	7	5	1	13	25	0	21100	3100	3	20	1575	28	20	9460	23.29	23.19	23.50
	7	10	1	25	50	0	21100	3100	3	20	1575	28	20	9460	23.07	23.04	23.50
	7	15	1	38	75	0	21100	3100	3	20	1575	28	20	9460	23.19	23.16	23.50
	7	20	1	50	100	0	21100	3100	3	20	1575	28	20	9460	23.35	23.15	23.50

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	22.00
		25	13	21.27	21.39	21.59	
		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	22.00
		1	25	21.75	21.73	21.73	
		1	49	21.59	21.41	20.93	
		25	0	20.37	20.35	20.47	21.50
		25	13	20.57	20.69	20.89	
		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	23.00
		12	6	21.88	22.53	22.45	
		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	24.00
		12	6	22.43	23.07	23.12	
		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	23.00
		1	13	22.19	22.38	22.55	
		1	24	21.30	21.82	21.80	
		12	0	21.92	22.39	22.41	23.00
		12	6	21.85	22.48	22.41	
		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	24.00
		1	25	22.93	23.08	23.25	
		1	49	22.05	22.51	22.58	
		25	0	22.62	23.20	23.04	24.00
		25	13	22.46	23.12	23.16	
		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	23.00
		1	25	22.22	22.42	22.58	
		1	49	21.33	21.84	21.83	
		25	0	21.95	22.44	22.45	23.00
		25	13	21.87	22.52	22.44	
		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 Limit (dBm)
				26775/822.5	26865/831.5	26965/841.5	
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	
		25	13	17.13	17.62	17.66	18.00
		25	25	17.15	17.49	17.52	
		50	0	17.03	17.45	17.56	18.00
	16QAM	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	
		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	17.50
		50	25	16.26	16.69	16.75	
		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
	16QAM	1	0	15.64	16.15	16.36	17.00
		1	38	16.19	16.54	16.63	
		1	74	16.16	16.26	16.14	
		36	0	14.95	15.25	15.49	16.00
		36	18	15.03	15.40	15.64	
		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
		1	0	16.92	16.97	16.77	
		1	13	16.78	17.24	17.05	18.00
		1	24	16.75	17.22	17.33	
	16QAM	12	0	15.79	16.23	16.00	
		12	6	15.82	16.13	16.29	17.00
		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		1	0	17.08	17.19	16.94	
		1	25	16.95	17.46	17.25	18.00
		1	49	16.95	17.41	17.56	
	QPSK	25	0	15.97	16.48	16.21	
		25	13	15.99	16.36	16.49	17.00
		25	25	15.82	16.41	16.05	
		50	0	15.86	16.28	16.33	17.00
		1	0	16.94	17.00	16.79	
		1	25	16.81	17.28	17.08	18.00
		1	49	16.78	17.24	17.36	
	16QAM	25	0	15.82	16.28	16.04	
		25	13	15.84	16.17	16.32	17.00
		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		1	0	17.07	17.15	16.92	
		1	38	16.93	17.45	17.22	18.00
		1	74	16.92	17.36	17.52	
	QPSK	36	0	15.95	16.44	16.18	
		36	18	15.96	16.31	16.45	17.00
		36	39	15.79	16.38	16.01	
		75	0	15.84	16.24	16.28	17.00
		1	0	16.89	16.98	16.77	
		1	38	16.79	17.25	17.06	18.00
		1	74	16.75	17.20	17.33	
	16QAM	36	0	15.79	16.26	16.01	
		36	18	15.81	16.12	16.28	17.00
		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
CA_3A-7A-8A	7	10	1	25	50	0	21100	3100	3	20	1575	8	10	3625	17.80	17.90	18.80
	7	15	1	38	75	0	21100	3100	3	20	1575	8	10	3625	17.68	17.75	18.80
	7	20	1	50	100	0	21100	3100	3	20	1575	8	10	3625	17.72	17.83	18.80
CA_3A-7A-20A	7	10	1	25	50	0	21100	3100	3	20	1575	20	20	6300	18.07	18.01	18.80
	7	15	1	38	75	0	21100	3100	3	20	1575	20	20	6300	18.06	18.12	18.80
	7	20	1	50	100	0	21100	3100	3	20	1575	20	20	6300	17.99	18.06	18.80
CA_3A-7A-28A	7	5	1	13	25	0	21100	3100	3	20	1575	28	20	9460	17.92	17.98	18.80
	7	10	1	25	50	0	21100	3100	3	20	1575	28	20	9460	18.02	17.99	18.80
	7	15	1	38	75	0	21100	3100	3	20	1575	28	20	9460	18.01	18.15	18.80
	7	20	1	50	100	0	21100	3100	3	20	1575	28	20	9460	17.90	17.98	18.80

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) / Data Rate (bps) / 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) / Data Rate (bps) / 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

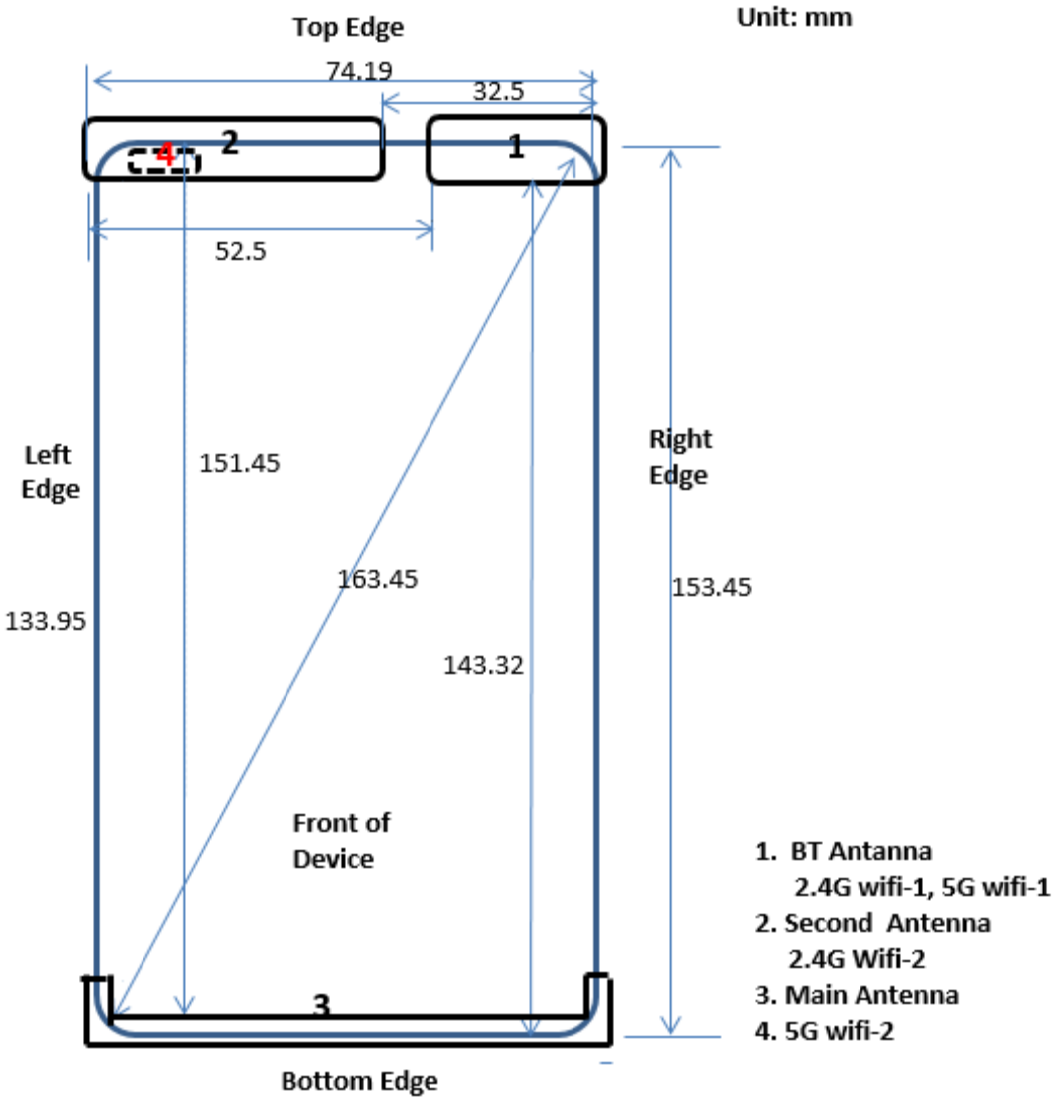
Note. 1. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, each band is tested independently for SAR.

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 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 165.5mm. 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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	61
		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	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	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	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	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	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	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	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	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	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	75
		State2	1RB	50	38150/2610	23.50	22.81	0.037	0.522	1.17	0.612	/
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	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	76
		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	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	78
		State2	1RB	99	41140/2645	23.80	22.93	0.016	0.498	1.22	0.608	/
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	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	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	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	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	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	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	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	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	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	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	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	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	94
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	115
		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	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	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	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	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	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	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	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	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	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	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	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	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	CDD	1:1	0.117	14.50	13.80	-0.026	0.128	1.17	0.150	/
Front Side	standard	48/5240	CDD	1:1	0.105	14.50	13.80	0.028	0.090	1.17	0.106	/
Left Edge	standard	48/5240	CDD	1:1	0.024	14.50	13.80	-0.015	0.017	1.17	0.020	/
Right Edge	standard	48/5240	CDD	1:1	0.176	14.50	13.80	0.194	0.152	1.17	0.179	150
Top Edge	standard	48/5240	CDD	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	CDD	1:1	0.134	14.50	13.80	0.136	0.136	1.17	0.160	/
Right Edge	Battery 3	48/5240	CDD	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.												

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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	0.304	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	0.648	0.035	0.461	N/A	0.476
LTE TDD 41	0.169	0.160	0.381	0.095	0.184	0.236	0.535	**0.684**	0.095	0.507	N/A	0.514
MAX. SAR1g	0.540	0.489	1.322	0.387	0.528	0.403	1.028	0.684	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**	1.154	**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. 2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}					

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

MAX. ΣSAR_{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	0.684	0.068	0.347	0.106	1.031
	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. ΣSAR_{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. ΣSAR_{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	0.684	0.347	0.097	1.128
	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. ΣSAR_{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.

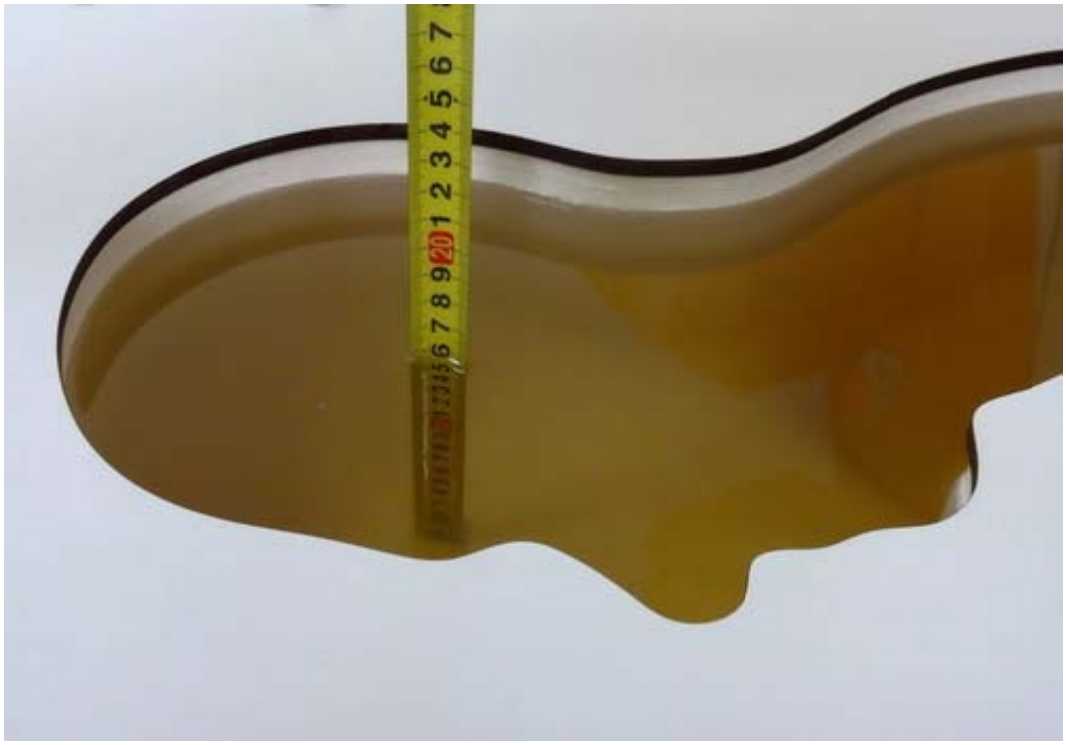
2. MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}

MAX. ΣSAR_{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

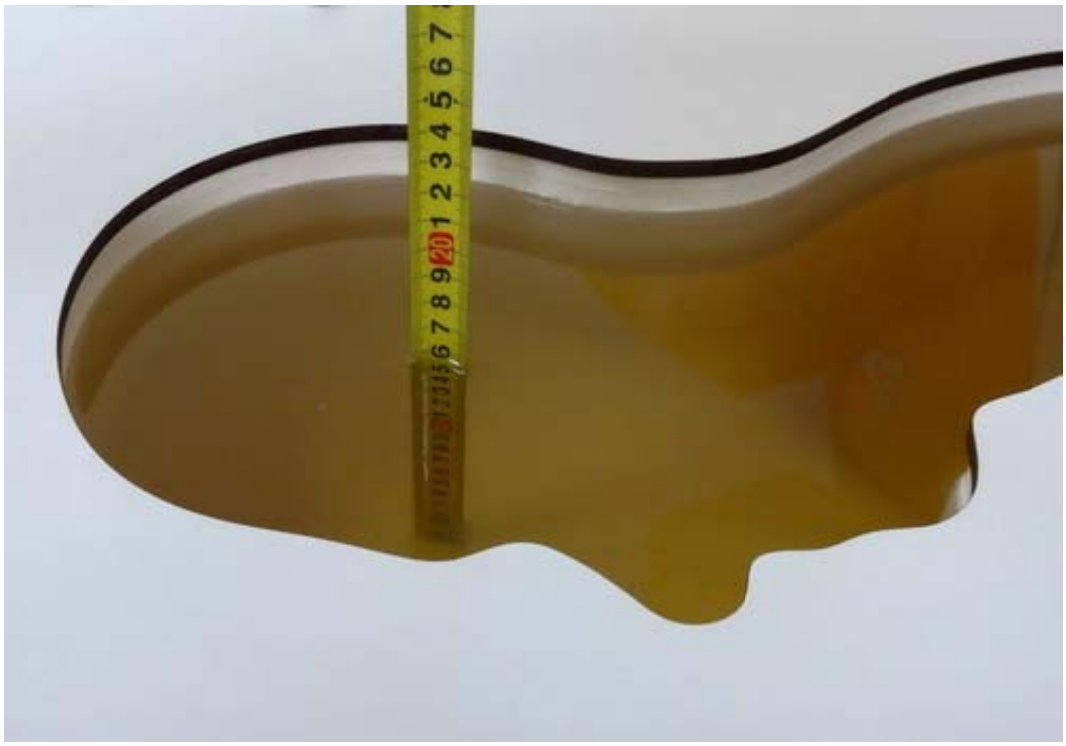
Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528- 2013 is not required in SAR reports submitted for equipment approval. This also applies to the 10-g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

ANNEX A: Test Layout



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

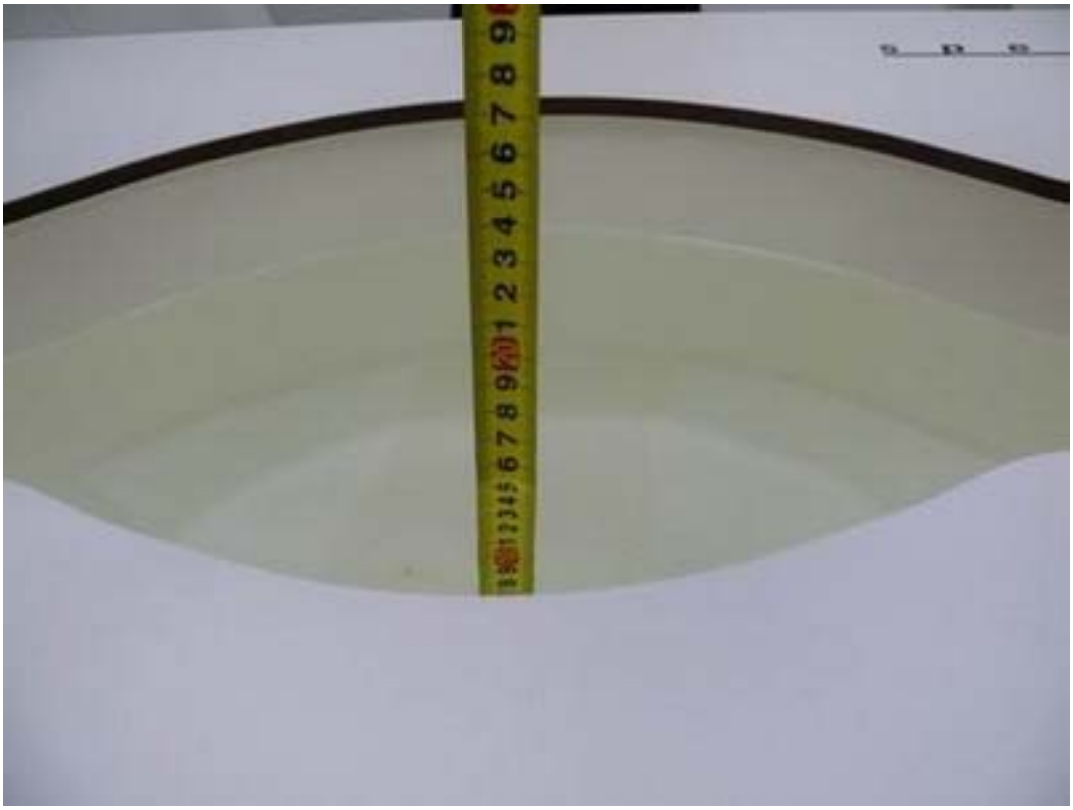
Picture 4: Liquid depth in the flat Phantom (750MHz, 15.4cm depth)



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

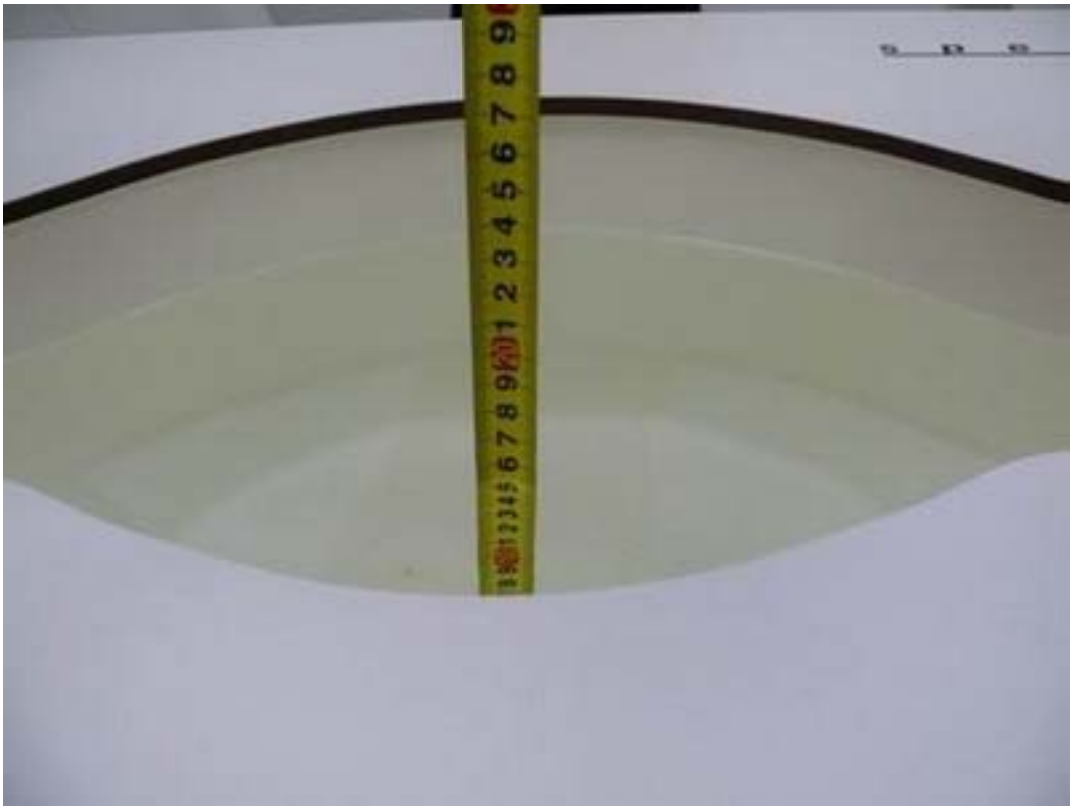
Picture 6: Liquid depth in the flat Phantom (835MHz, 15.4cm depth)

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



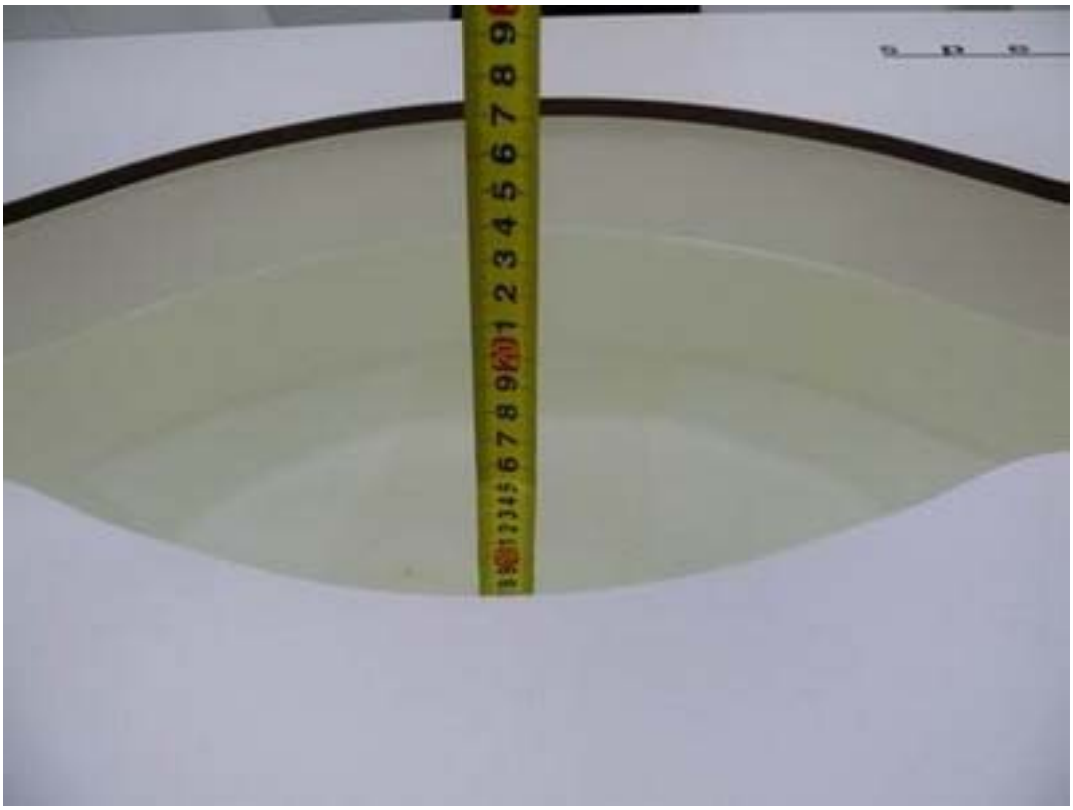
Picture 8: Liquid depth in the flat Phantom (1750 MHz, 15.2cm depth)

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



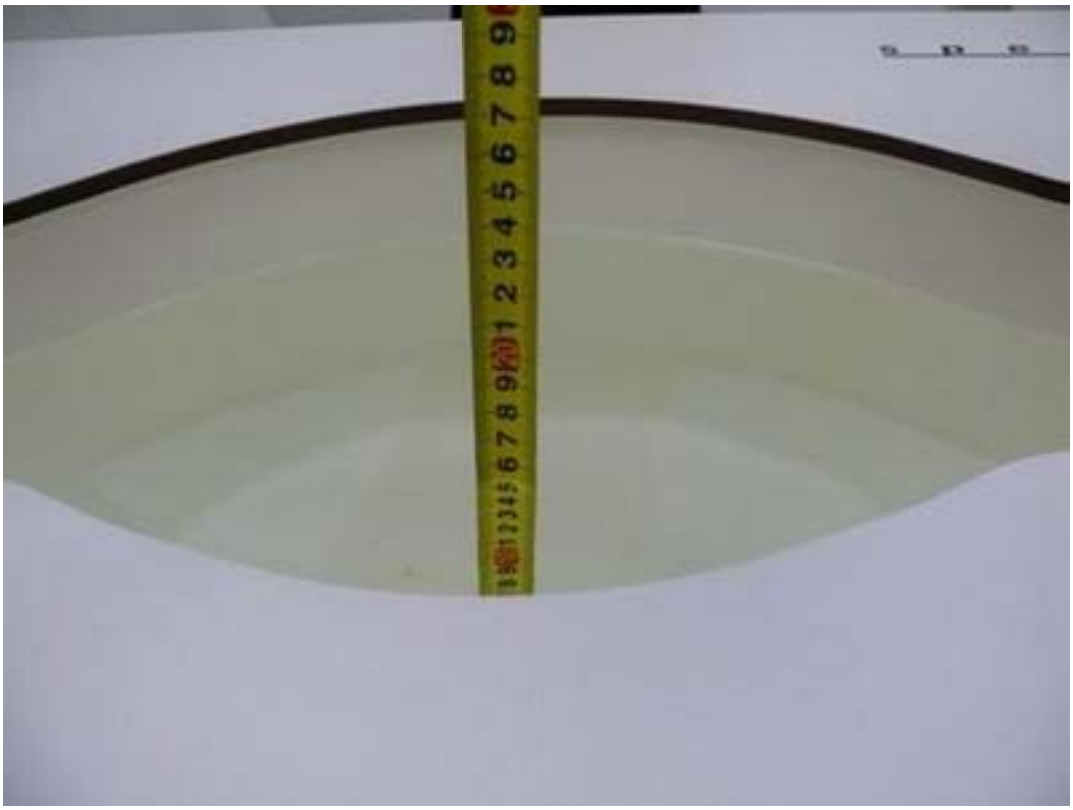
Picture 10: Liquid depth in the flat Phantom (1900 MHz, 15.2cm depth)

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

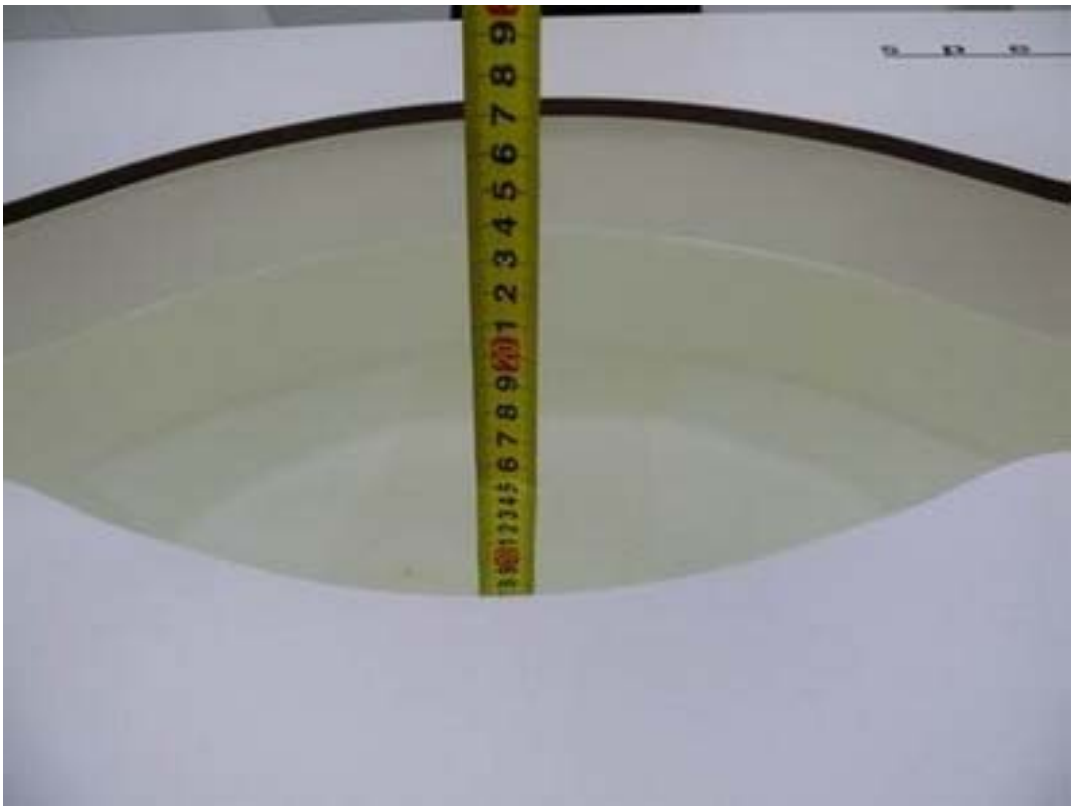


Picture 12: Liquid depth in the flat Phantom (2450 MHz, 15.3cm depth)

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

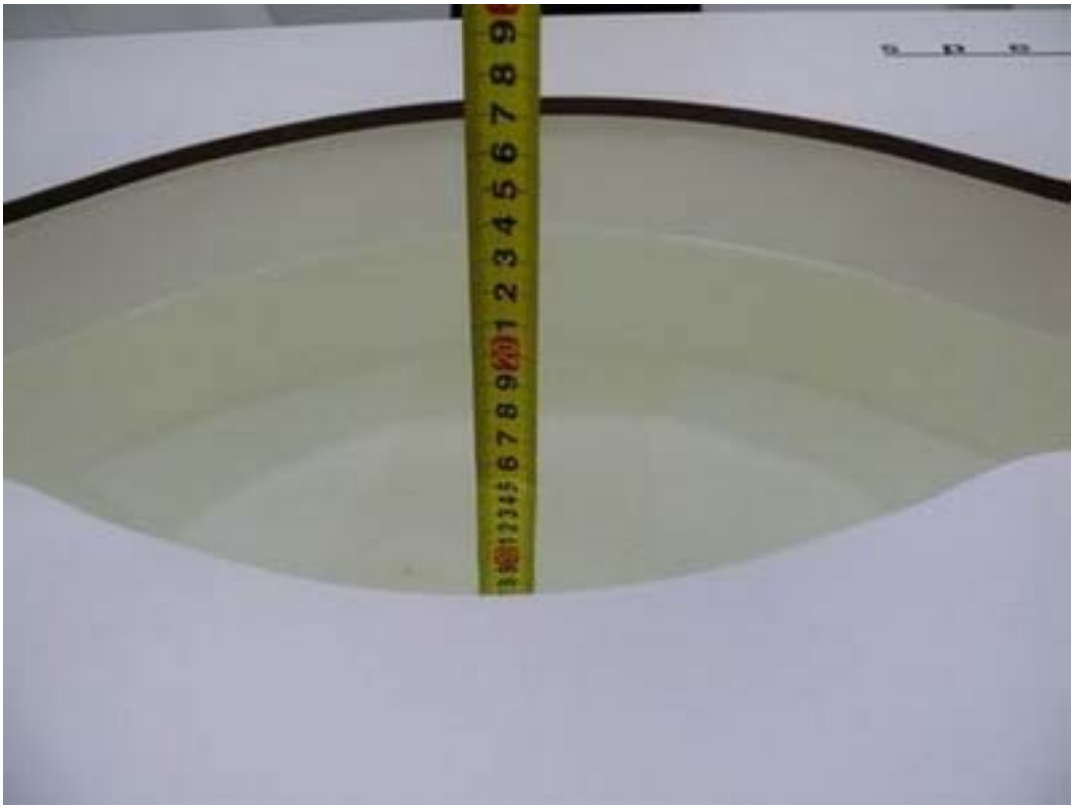


Picture 14: Liquid depth in the flat Phantom (2600 MHz, 15.3cm depth)



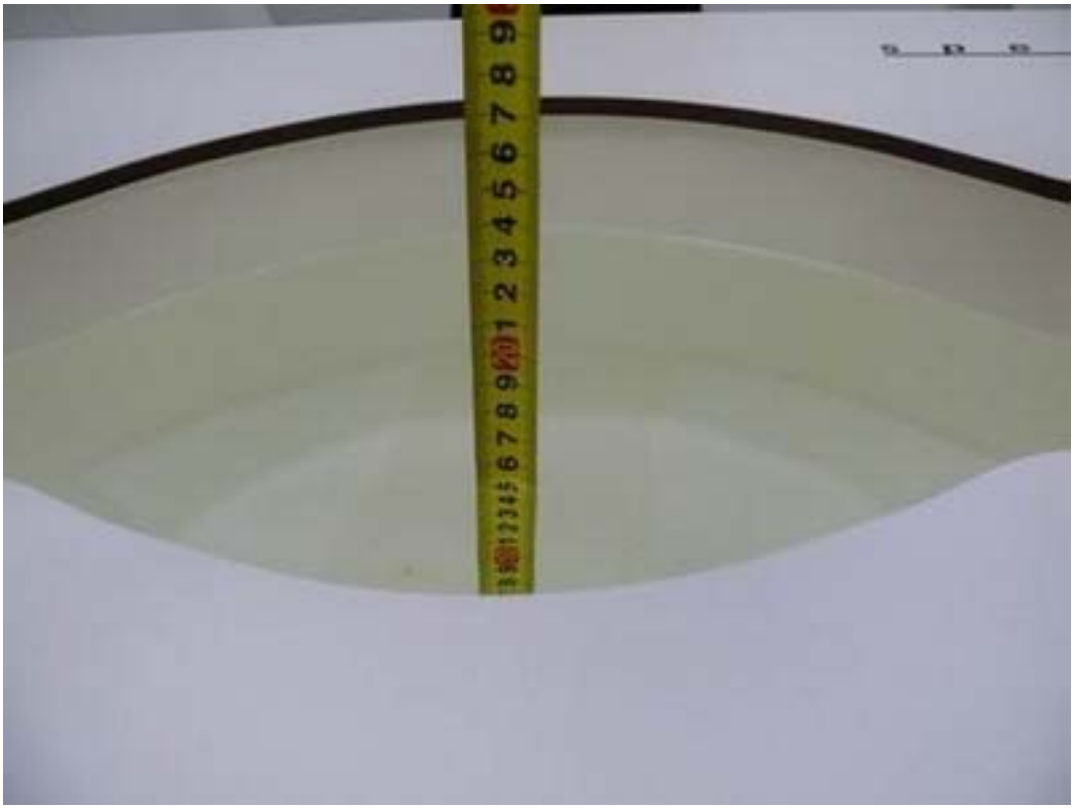
Picture 15: Liquid depth in the flat Phantom (5200 MHz, 15.3cm depth)

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



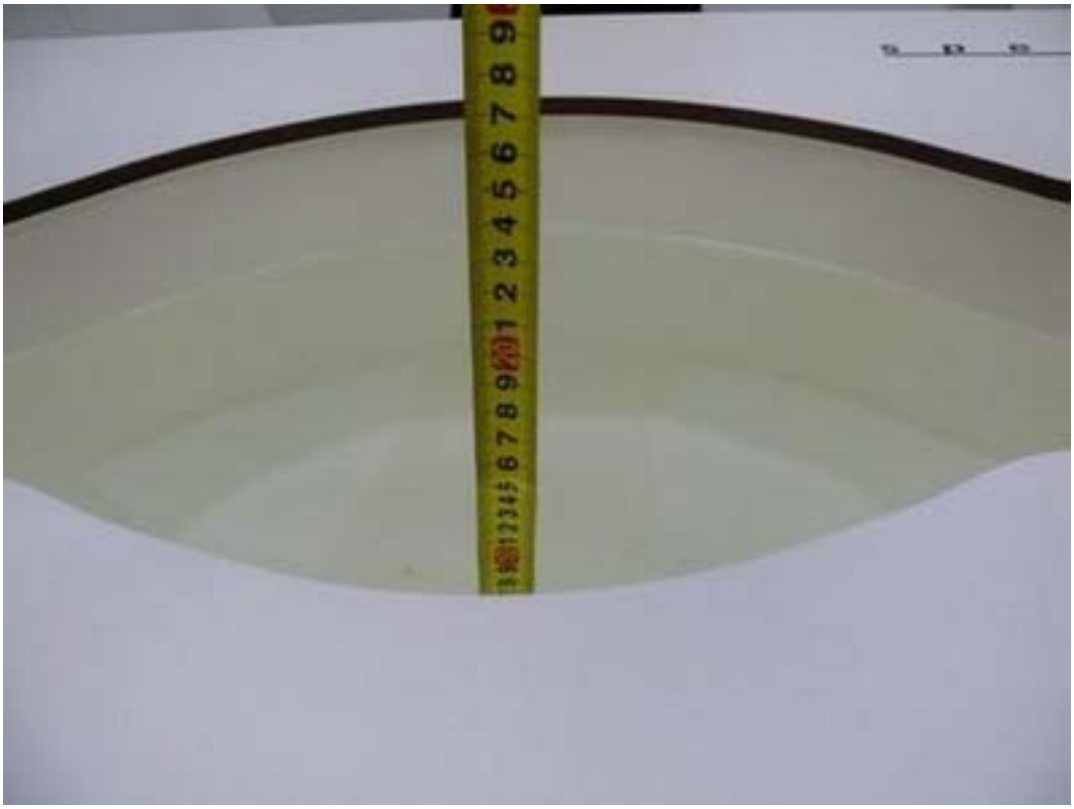
Picture 17: Liquid depth in the flat Phantom (5300 MHz, 15.3cm depth)

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; σ = 0.90 S/m; ε_r = 41.1; ρ = 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

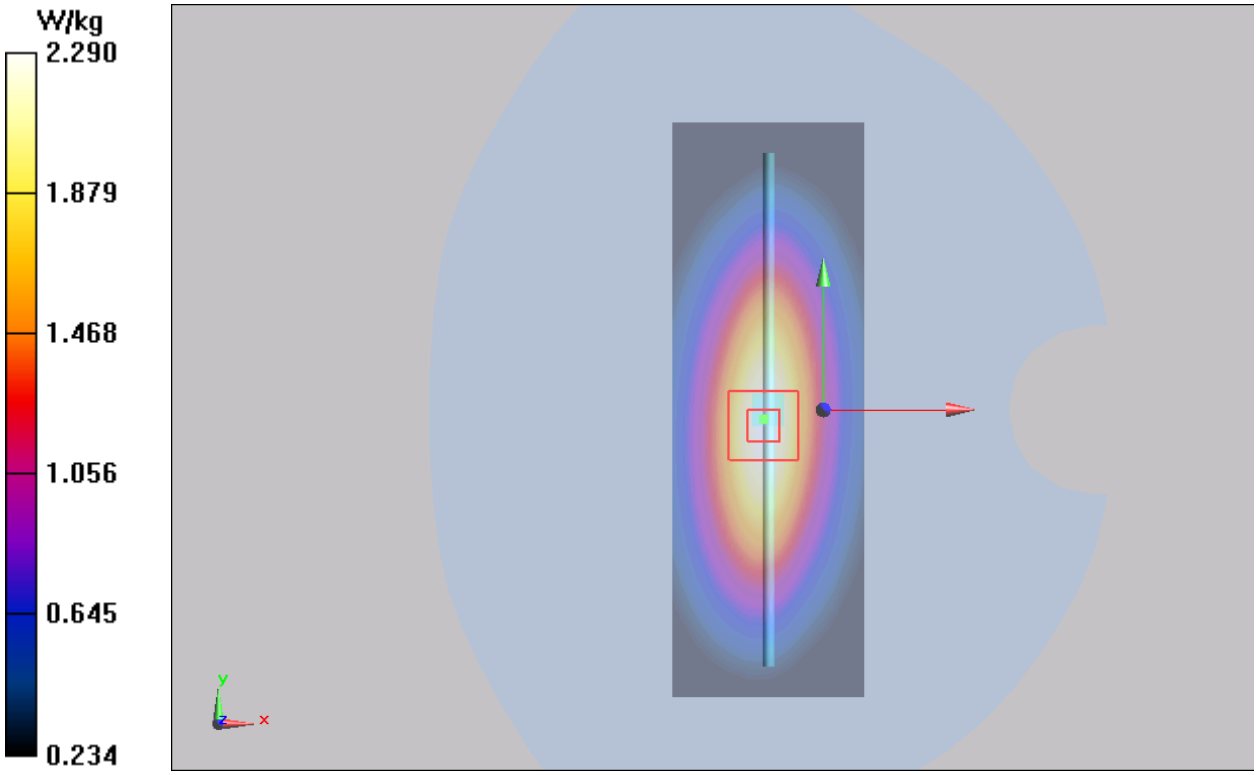
d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.87 S/m; ε_r = 42.0; ρ = 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

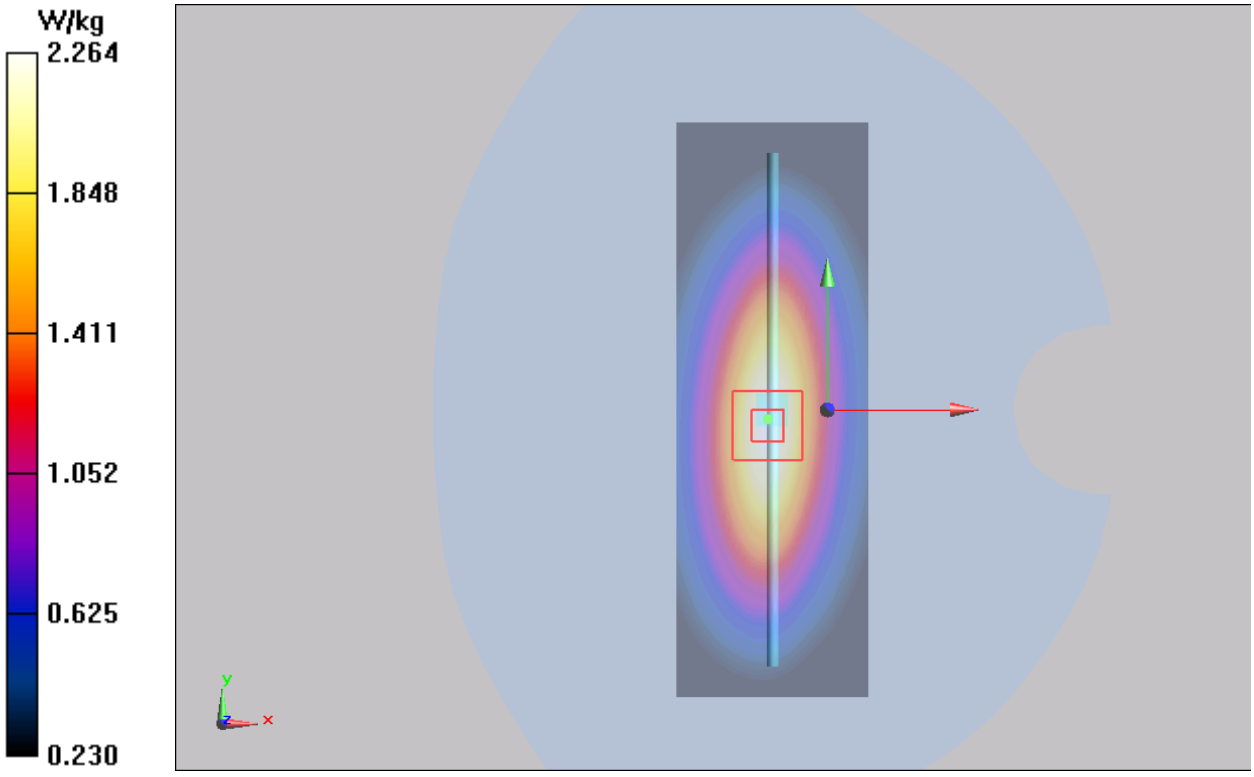
d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.89 S/m; ε_r = 41.8; ρ = 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

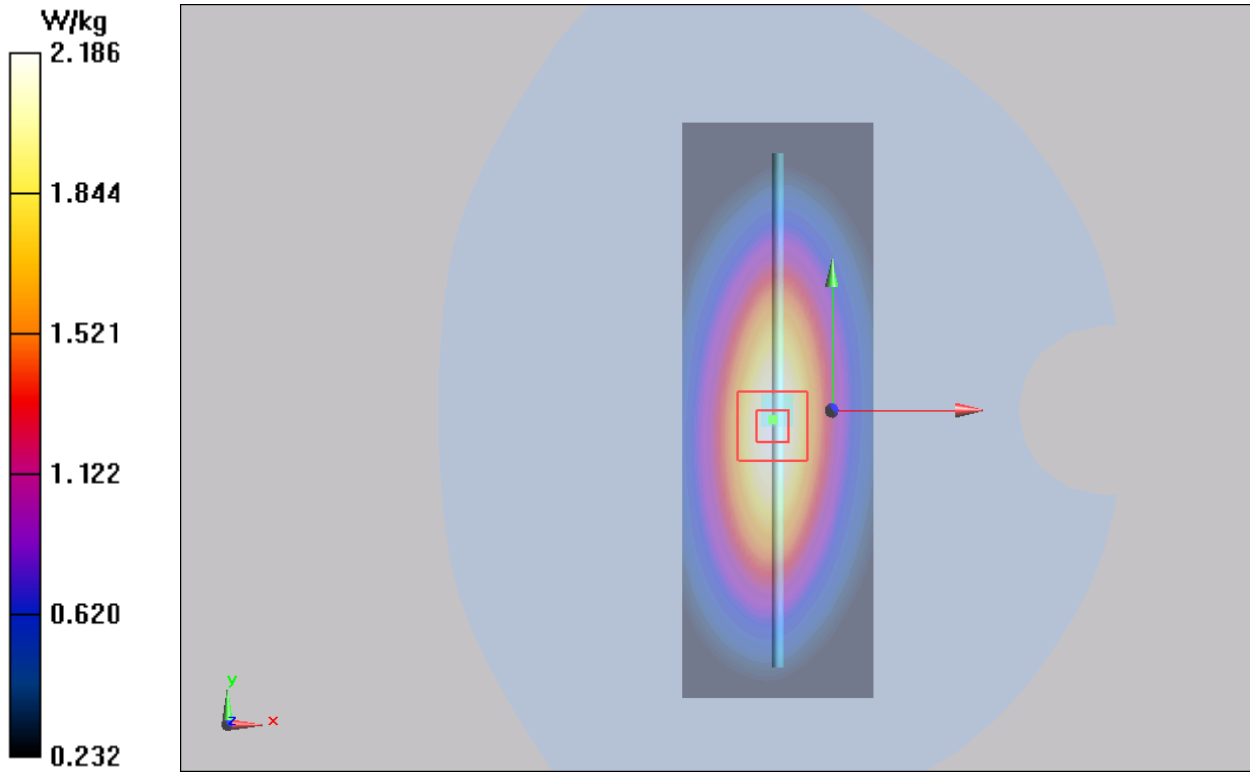
d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.87 S/m; ε_r = 42.0; ρ = 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

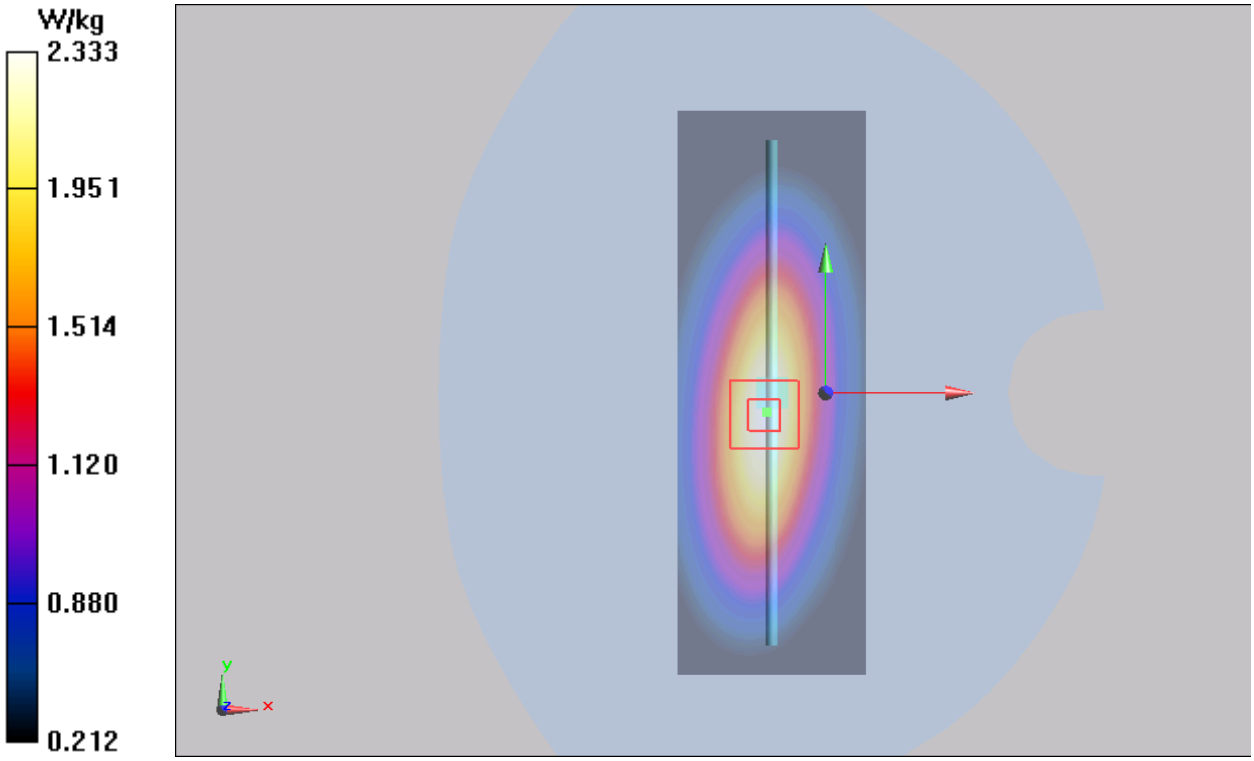
d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.95 S/m; ε_r = 57.0; ρ = 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

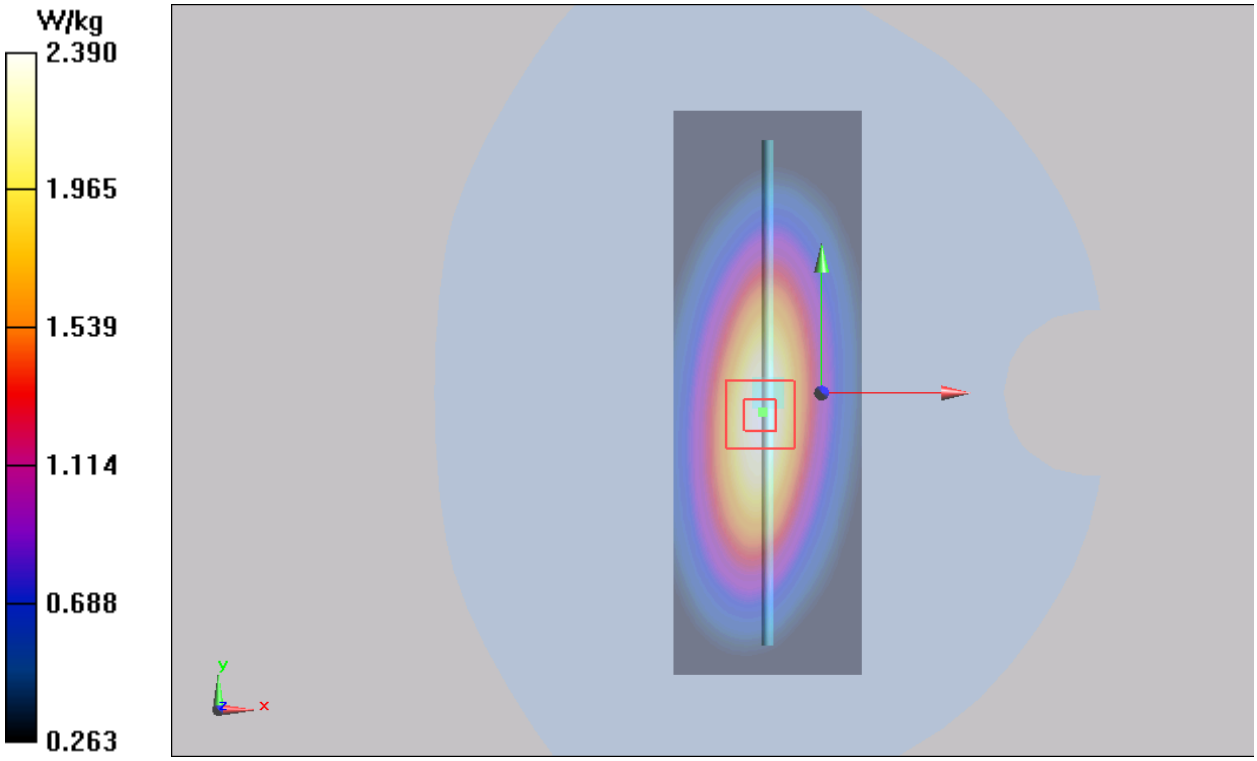
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.96 S/m; ε_r = 54.5; ρ = 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

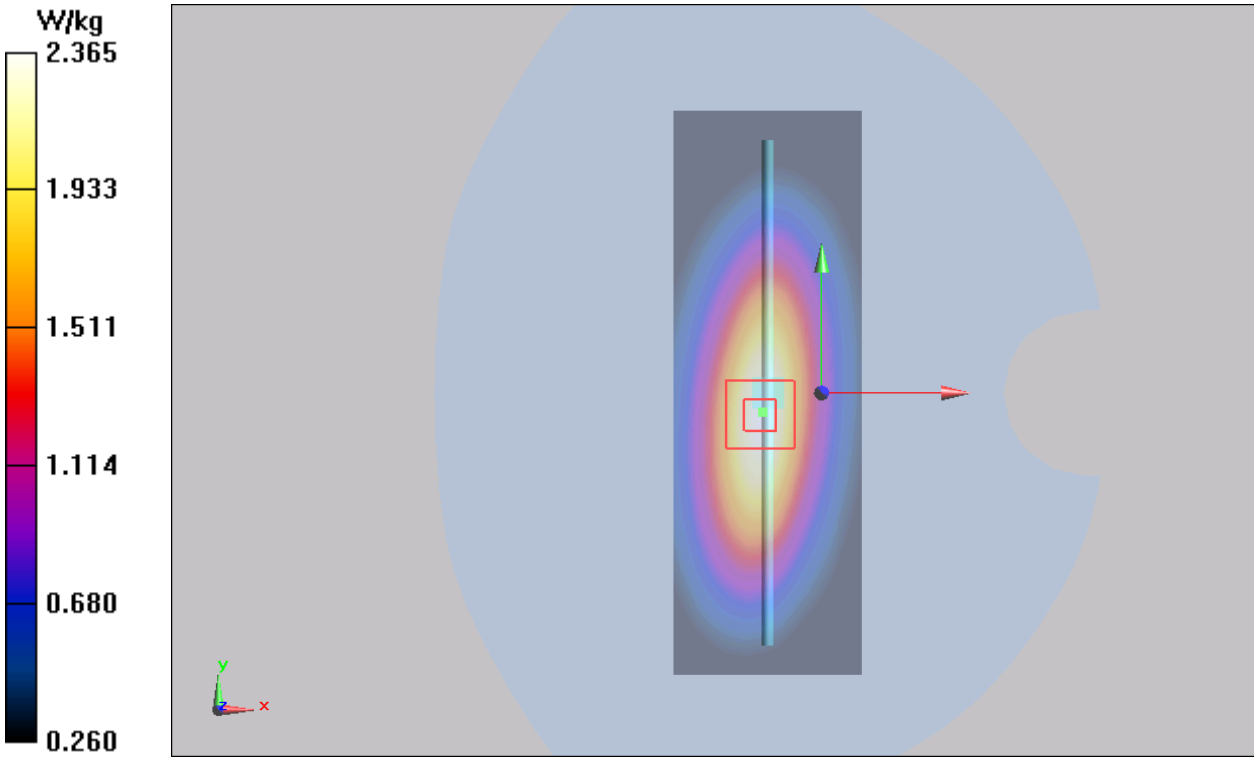
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.90 mho/m; ε_r = 41.3; ρ = 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

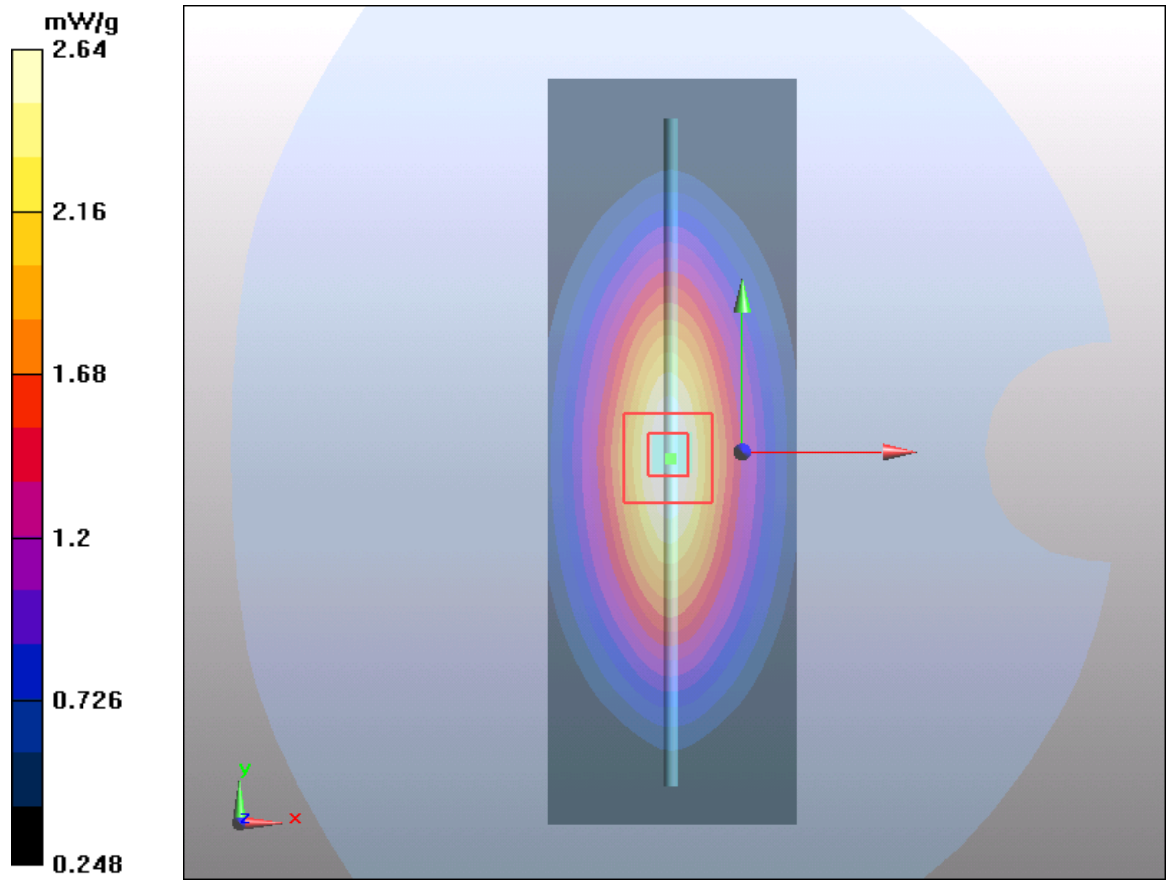
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.88 mho/m; ε_r = 41.3; ρ = 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

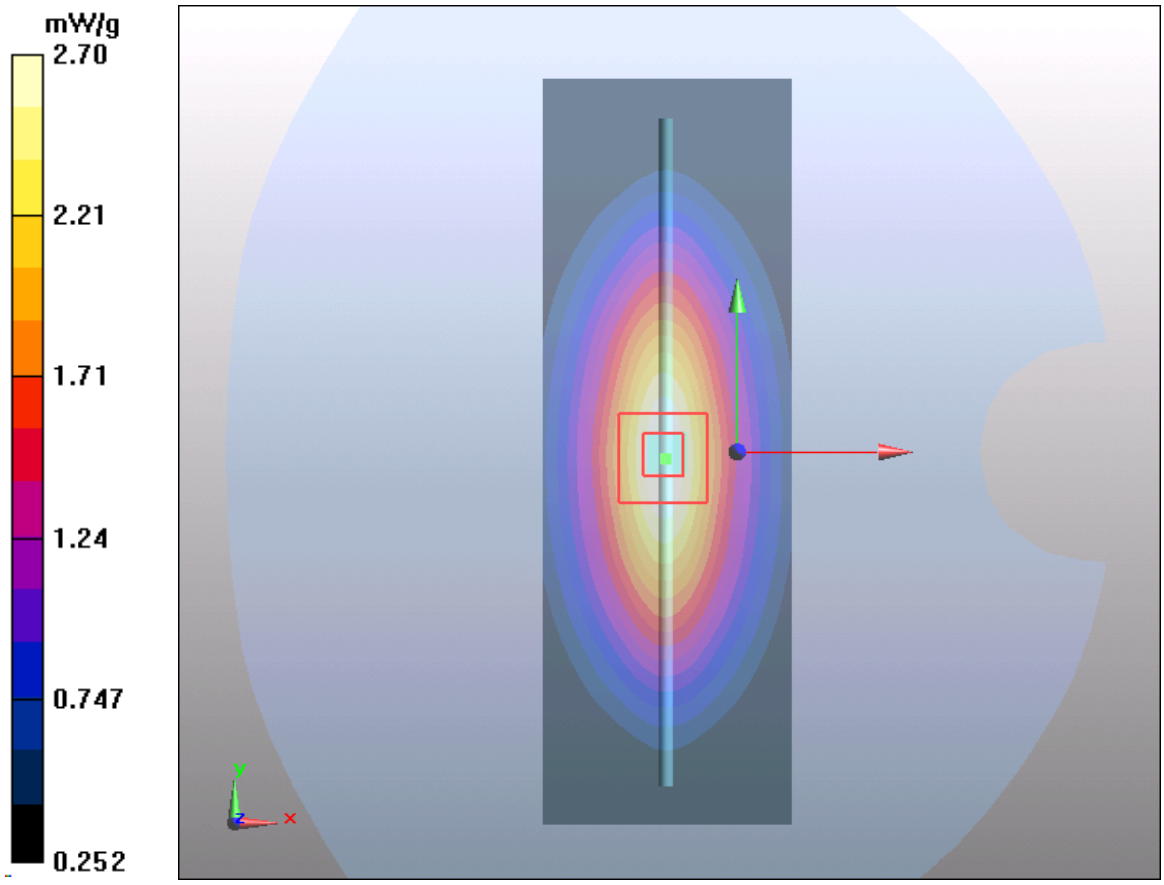
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.00 mho/m; ε_r = 54.4; ρ = 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

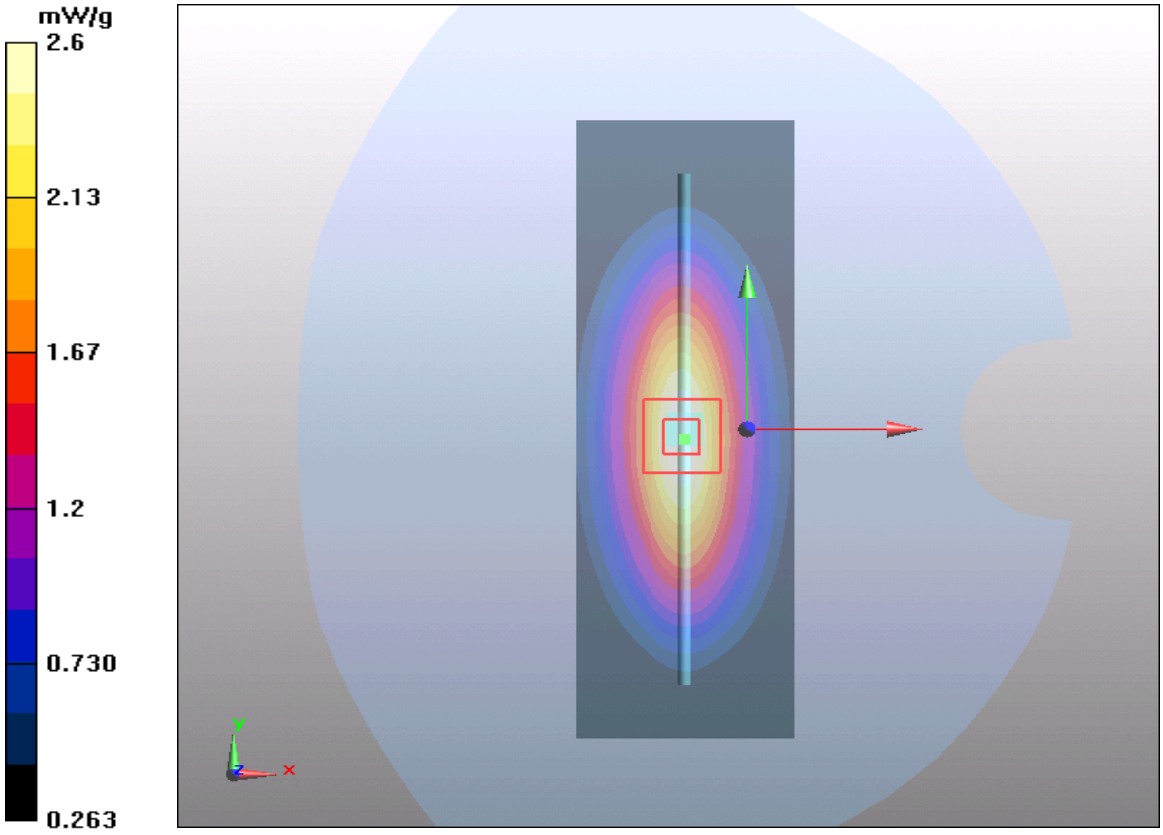
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.98 mho/m; ε_r = 54.6; ρ = 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

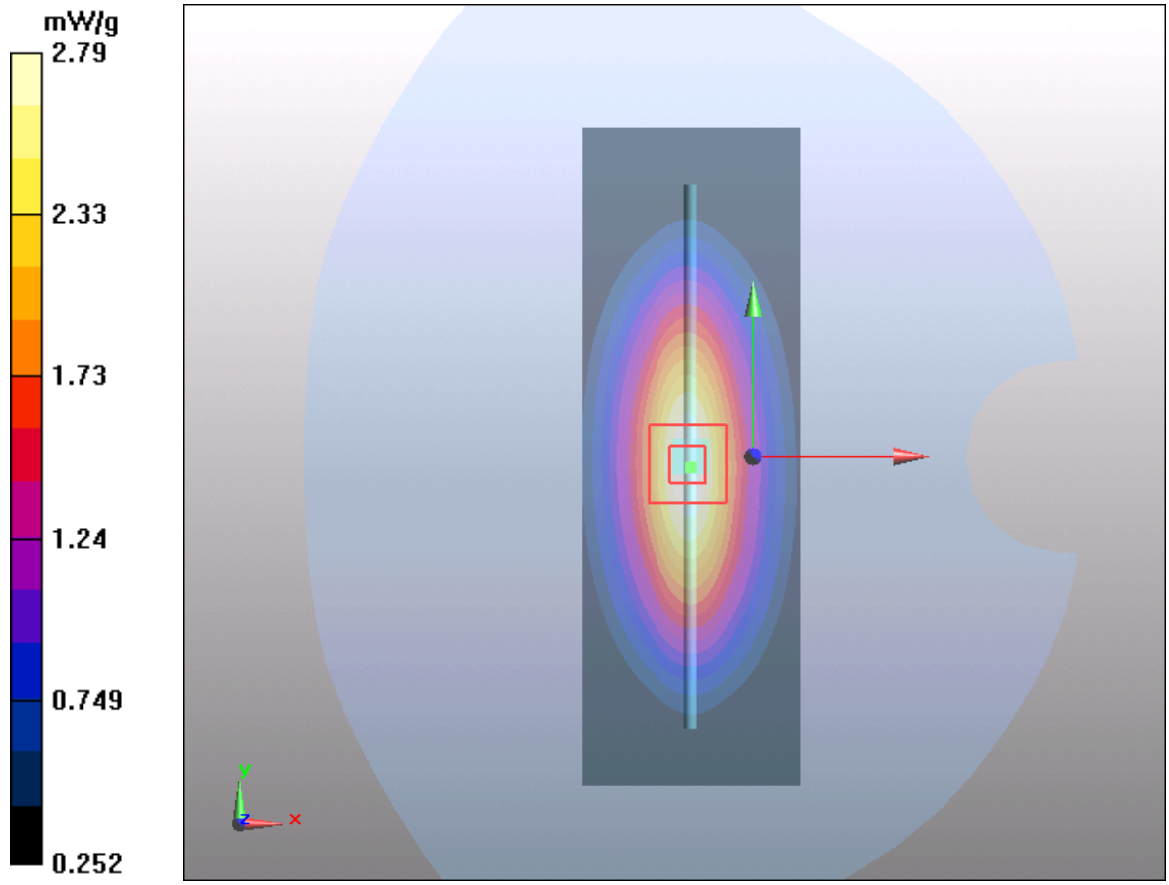
d=15mm, Pin=250mW/Zoom Scan(5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 0.98 mho/m; ε_r = 54.5; ρ = 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

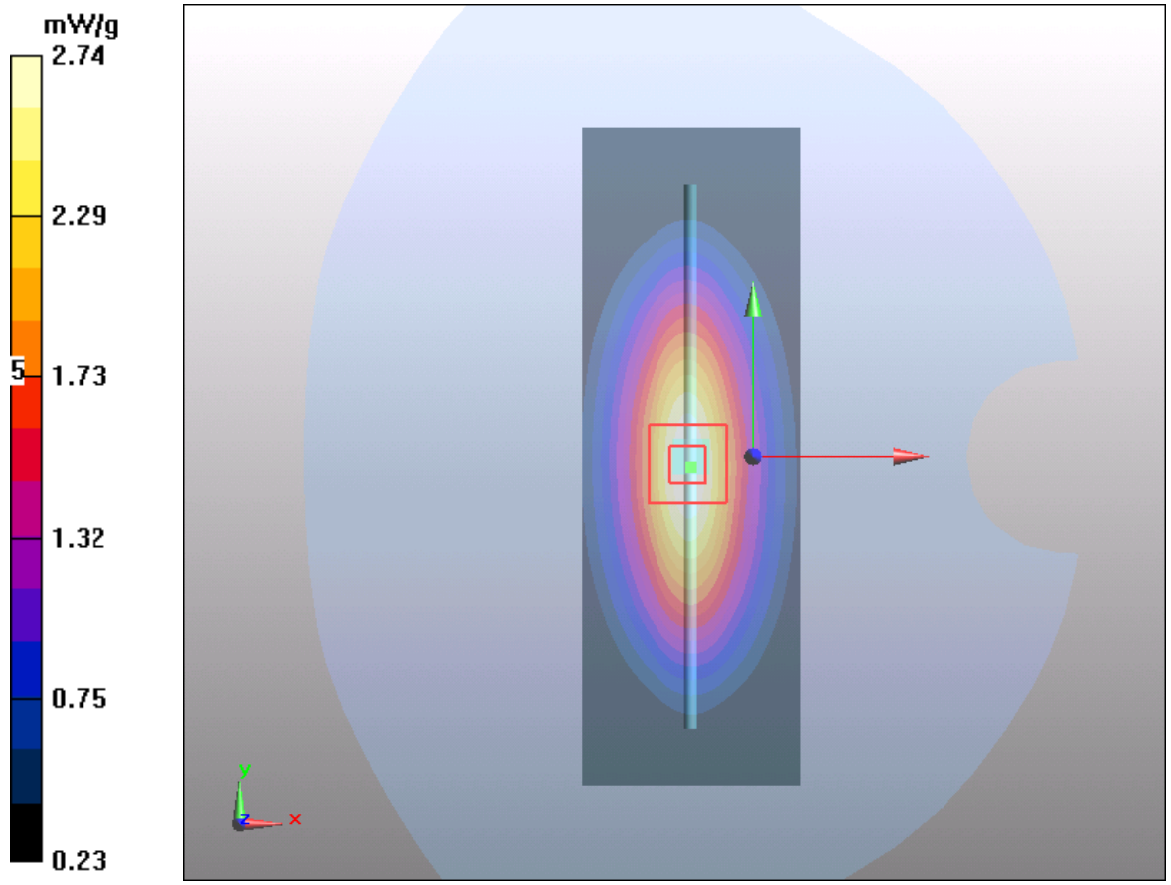
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.37 mho/m; ε_r = 39.5; ρ = 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

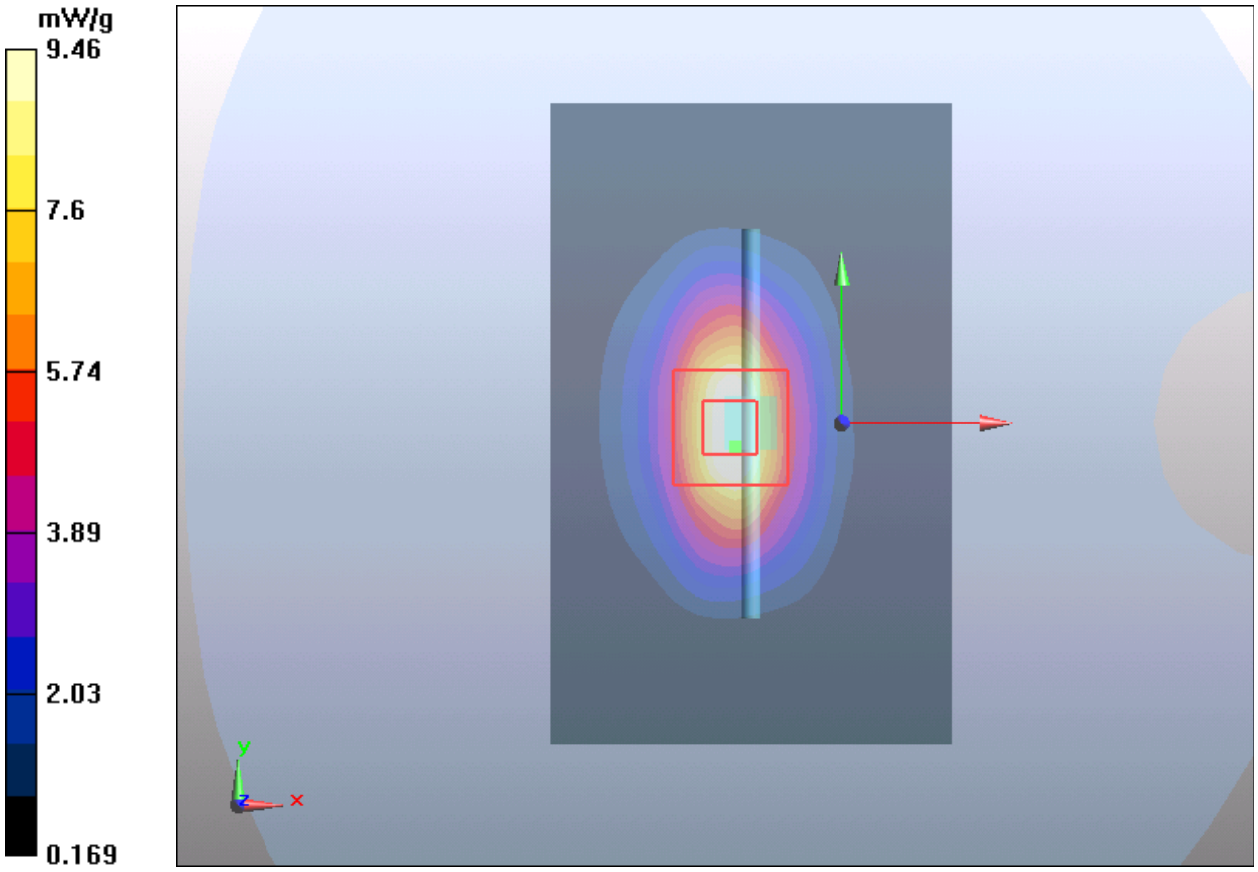
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.34 mho/m; ε_r = 40.1; ρ = 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

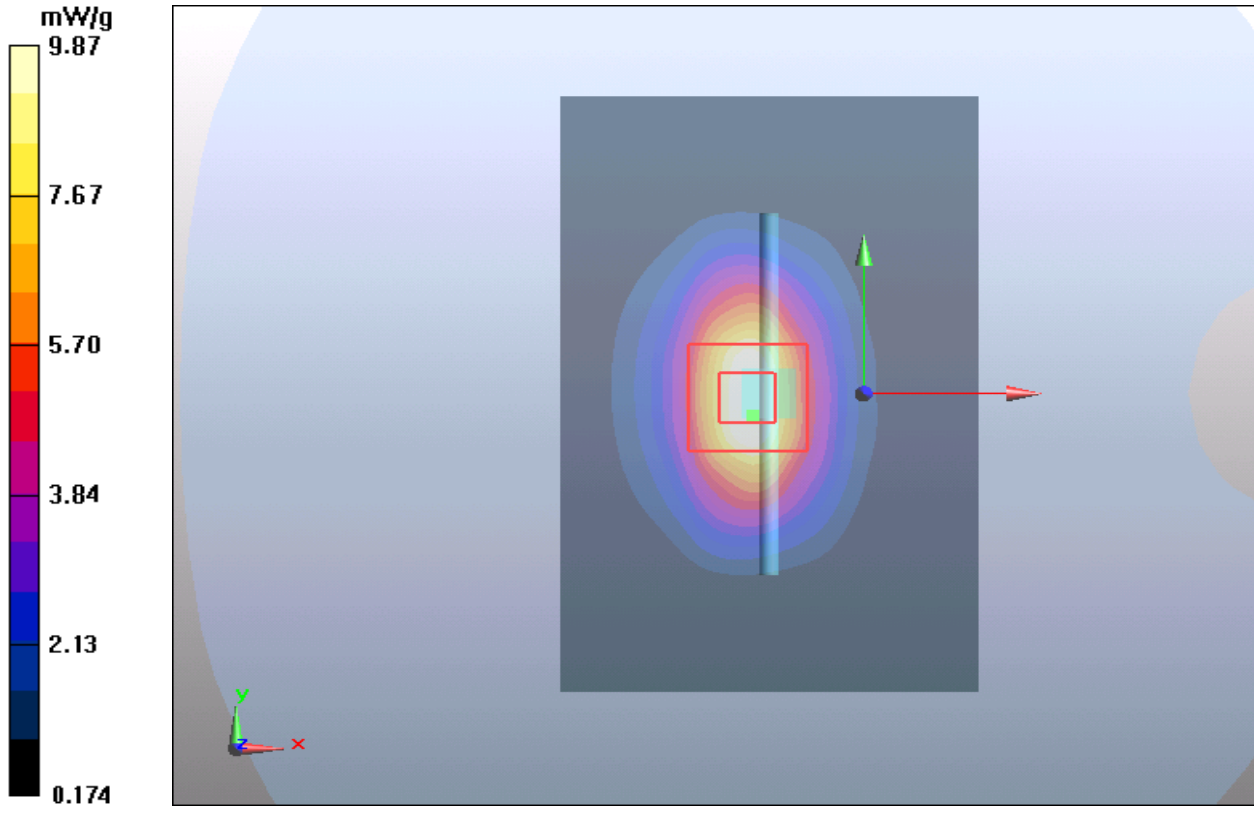
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.48 mho/m; ε_r = 52.7; ρ = 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

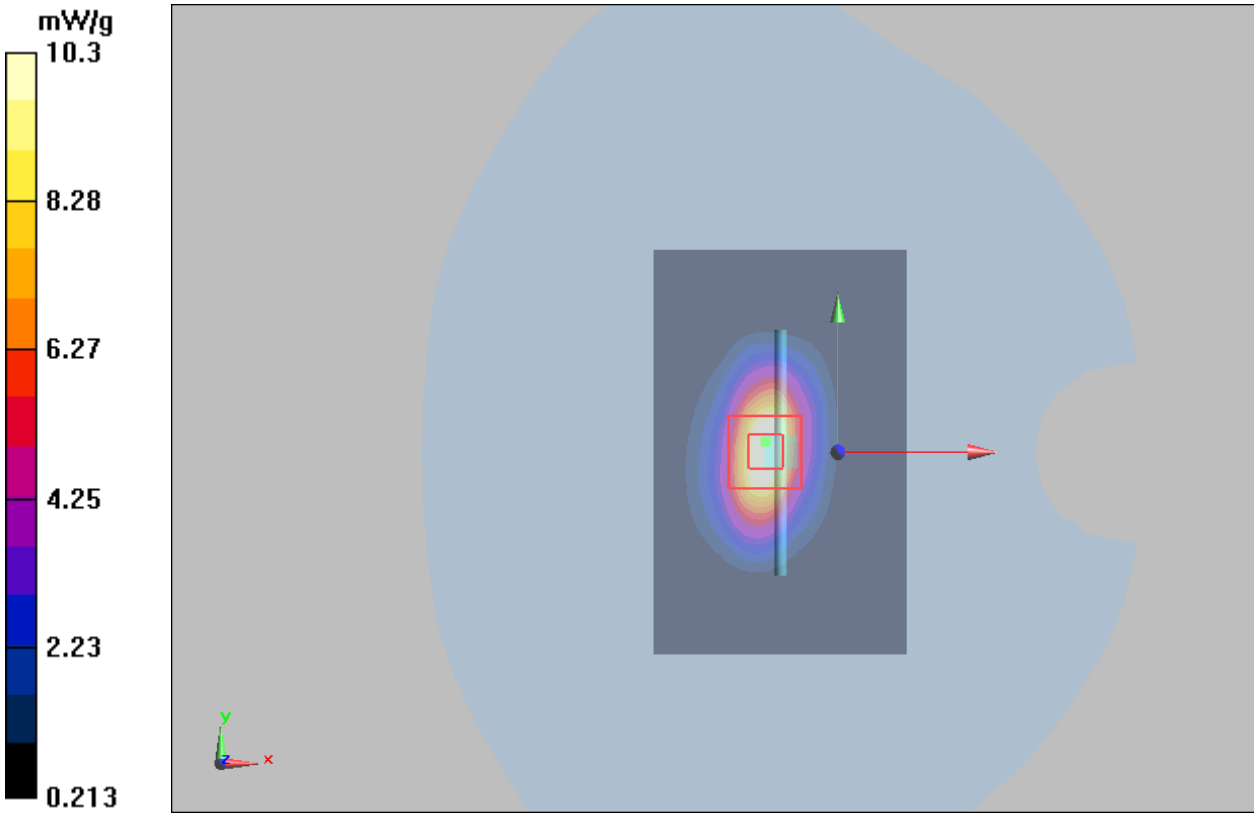
d=10mm, Pin=250mW/Area Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.51 mho/m; ε_r = 52.5; ρ = 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

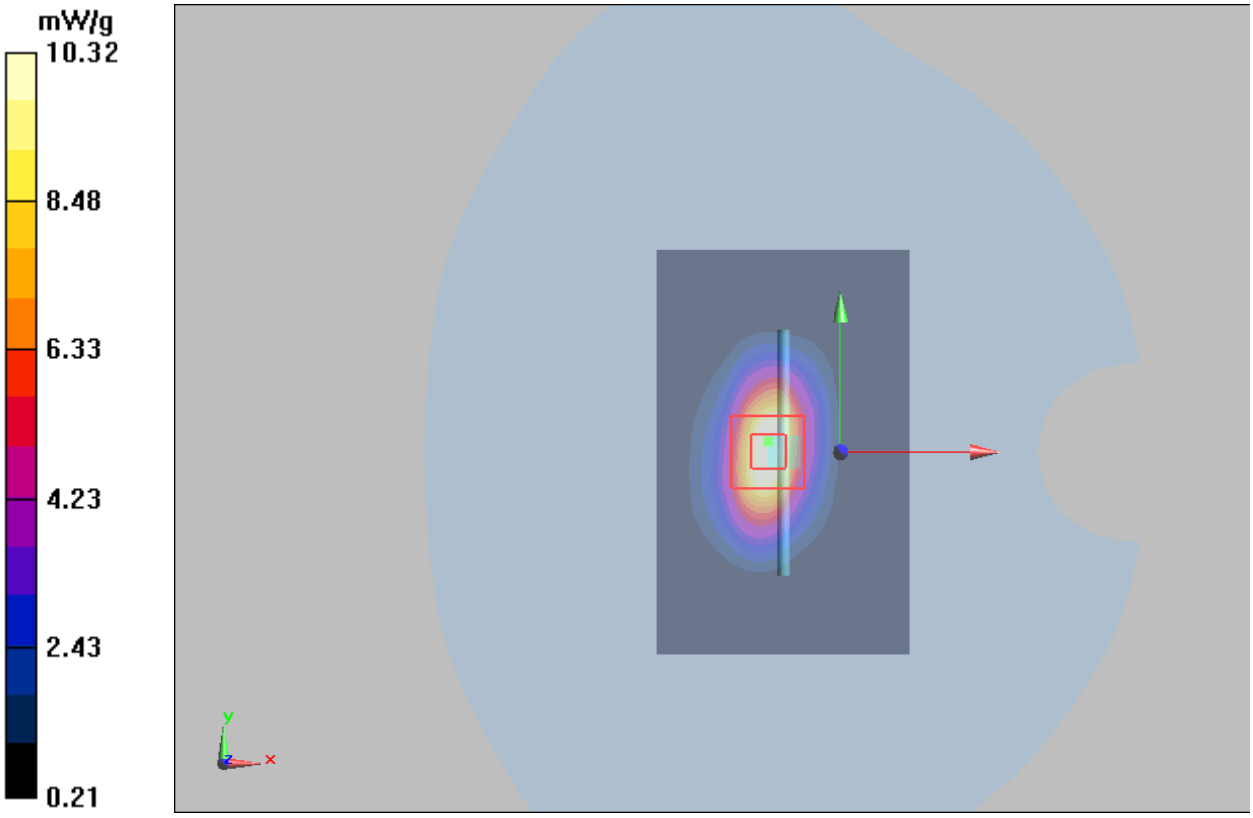
d=10mm, Pin=250mW/Area Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.41 mho/m; ε_r = 40.1; ρ = 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

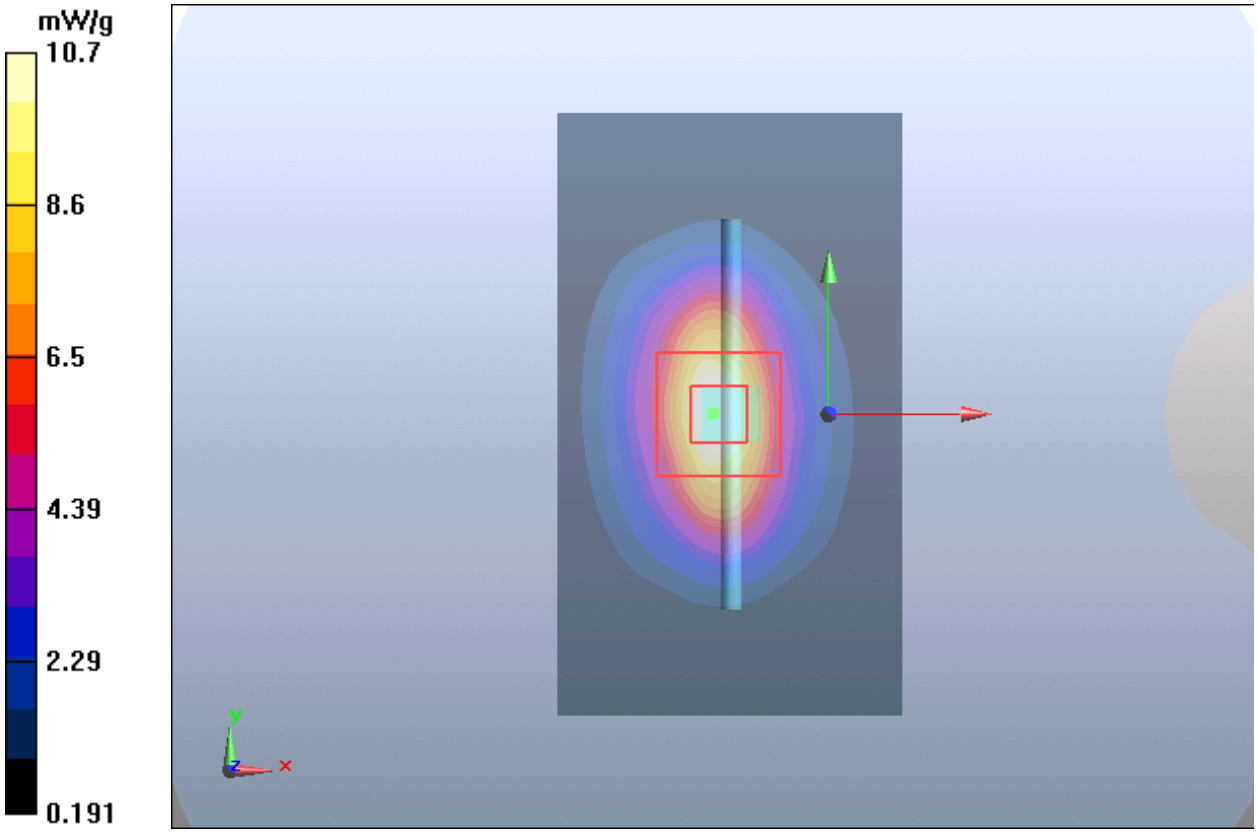
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.43 mho/m; ε_r = 40.2; ρ = 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

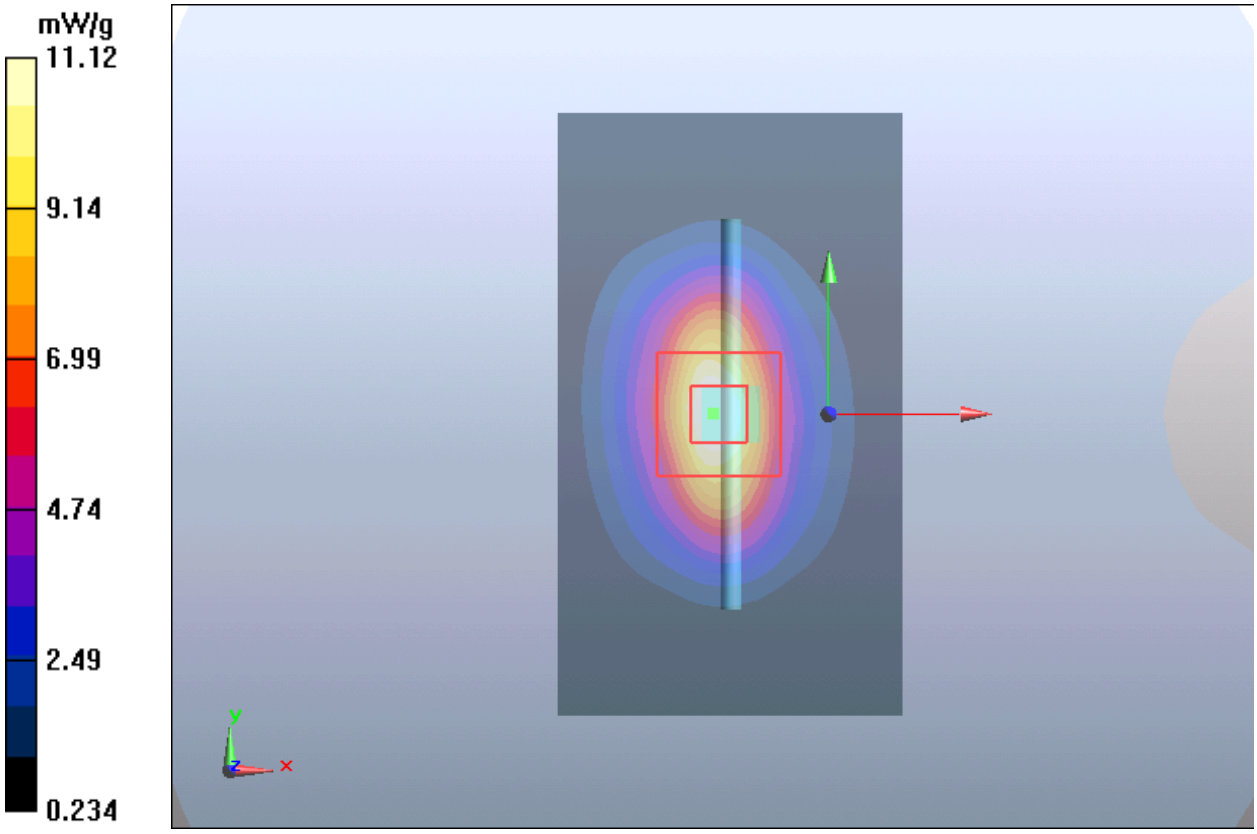
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.41 mho/m; ε_r = 40.1; ρ = 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

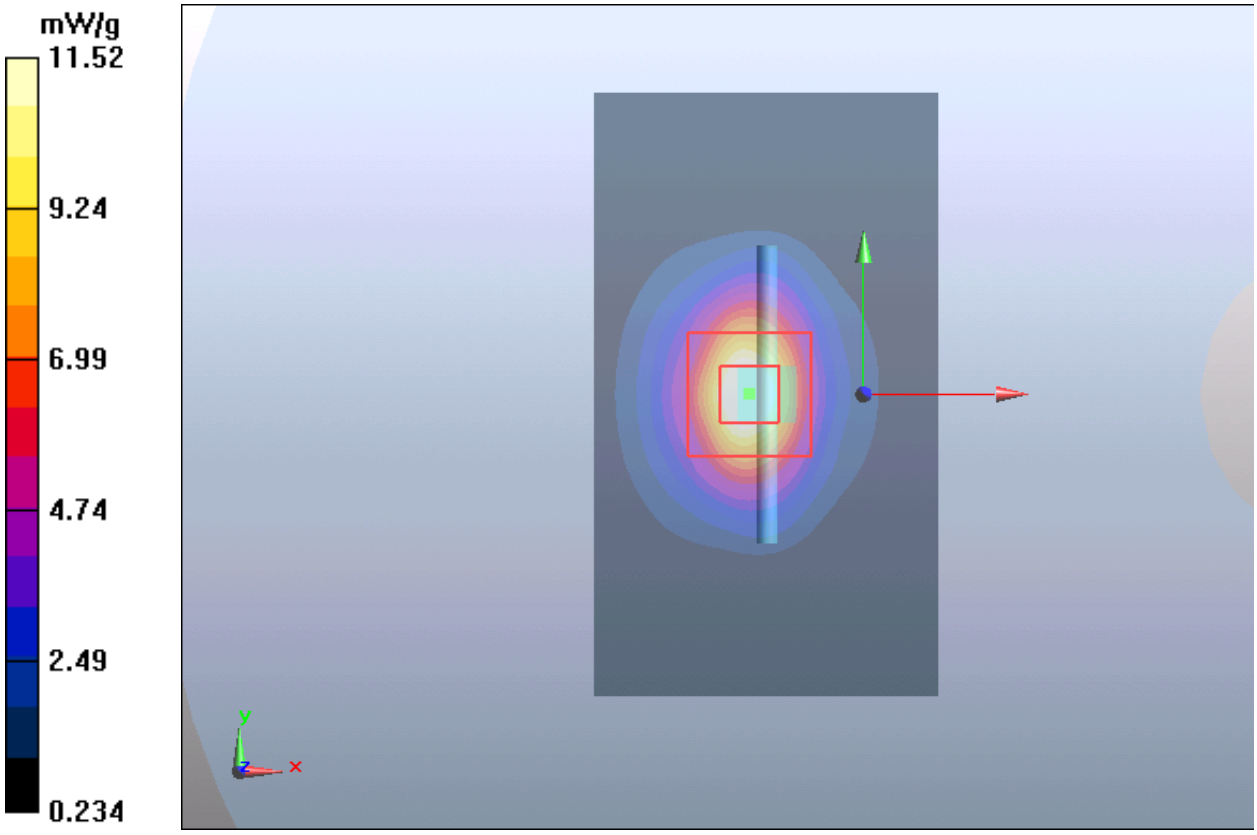
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.51 mho/m; ε_r = 52.6; ρ = 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

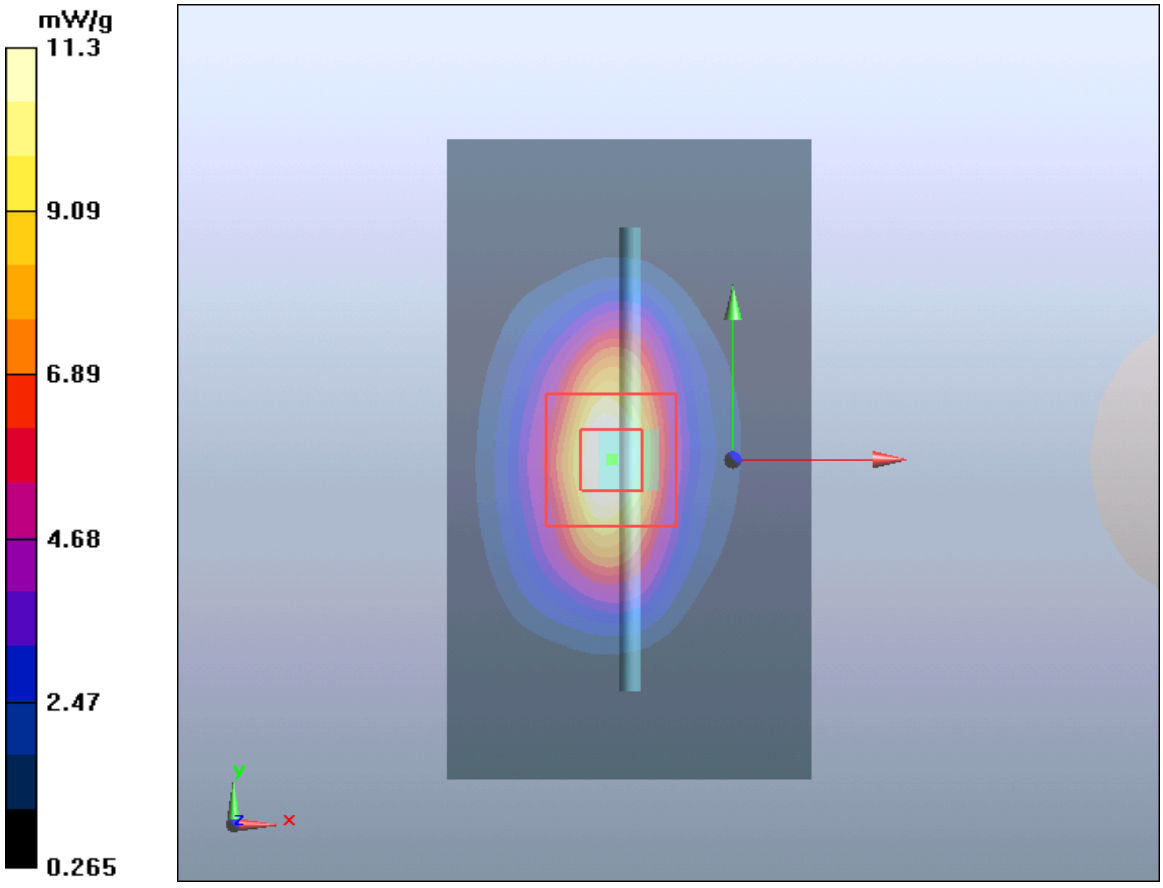
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.51 mho/m; ε_r = 52.8; ρ = 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

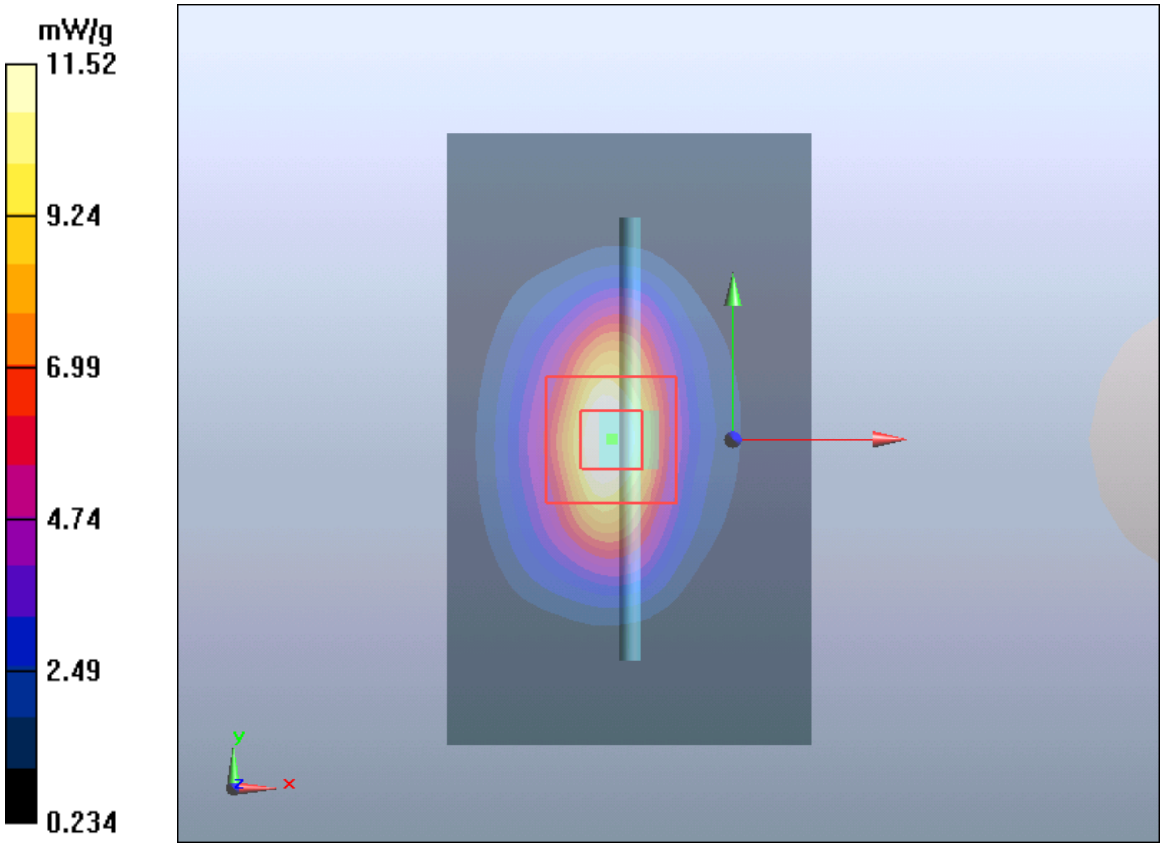
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.81 mho/m; ε_r = 38.6; ρ = 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

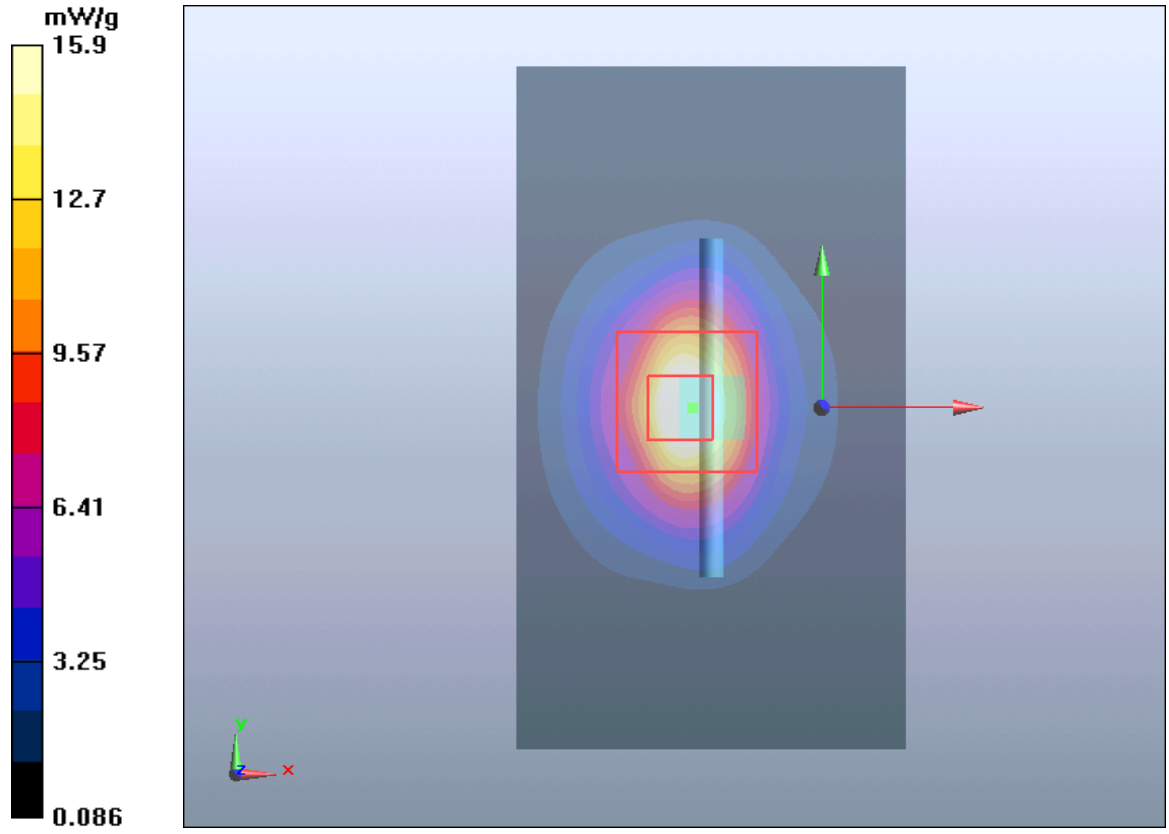
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 1.98 mho/m; ε_r = 52.5; ρ = 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

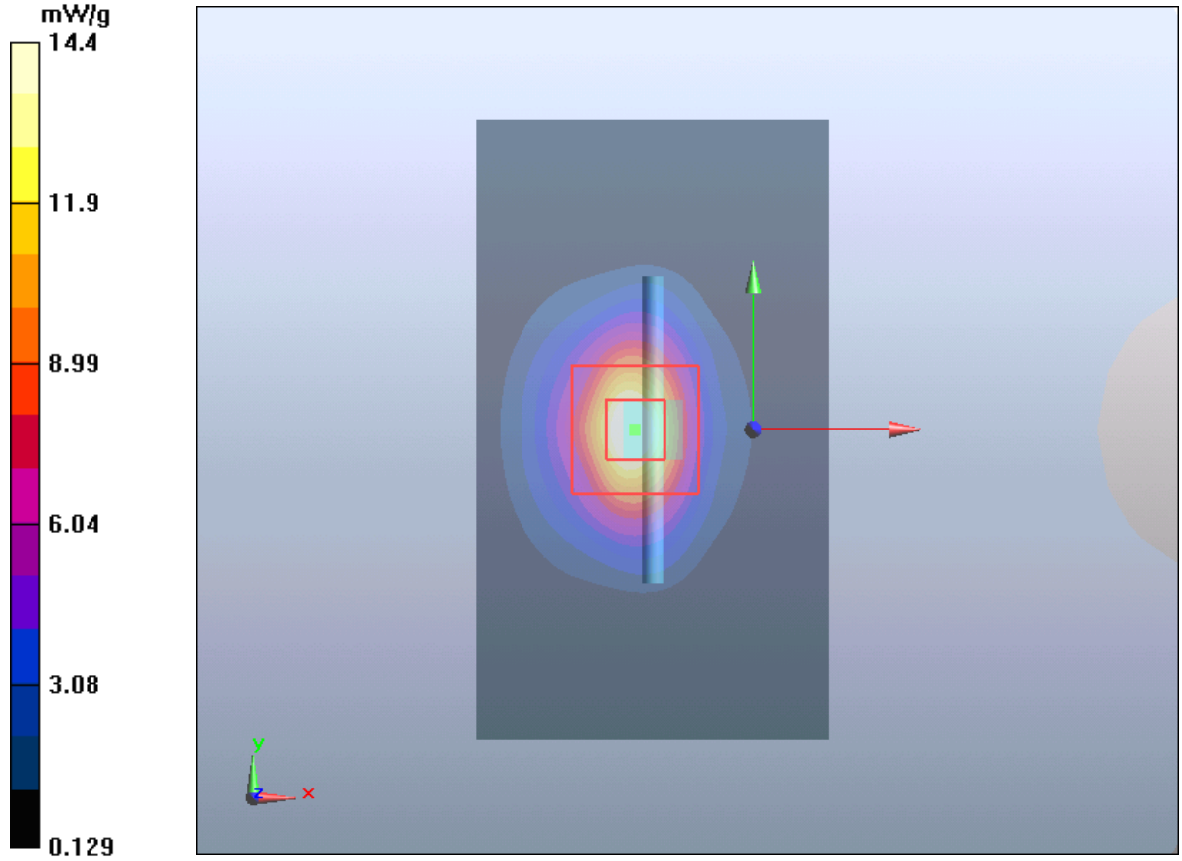
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 2.01 mho/m; ε_r = 38.2; ρ = 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

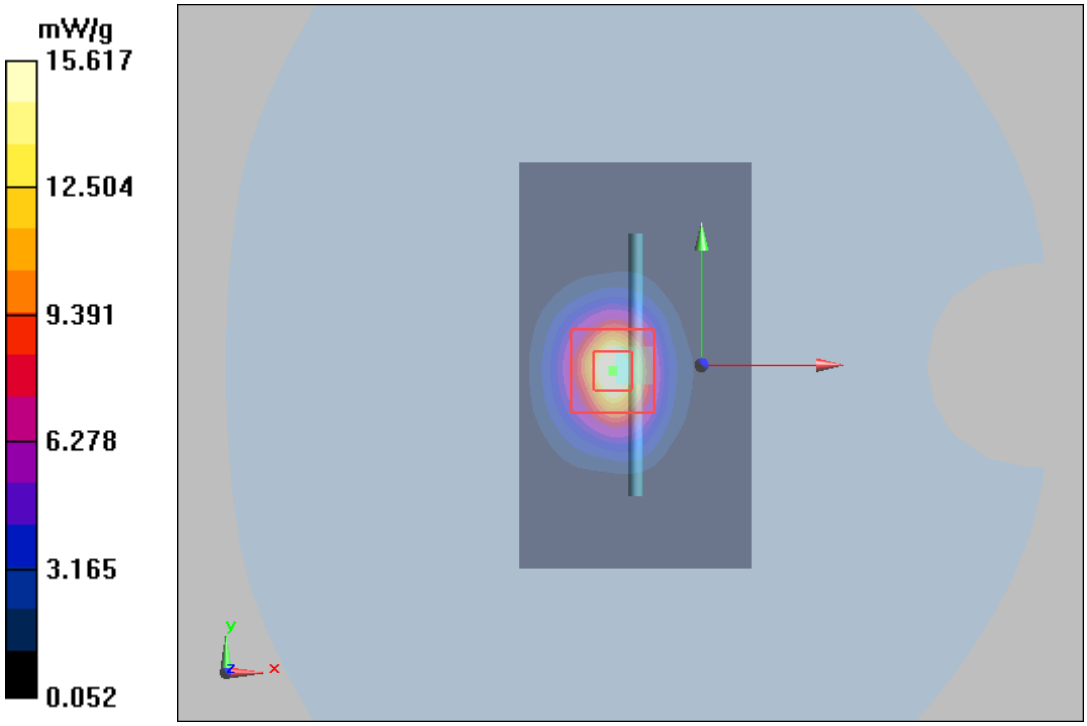
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ =1.94mho/m; ε_r = 38.4; ρ = 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

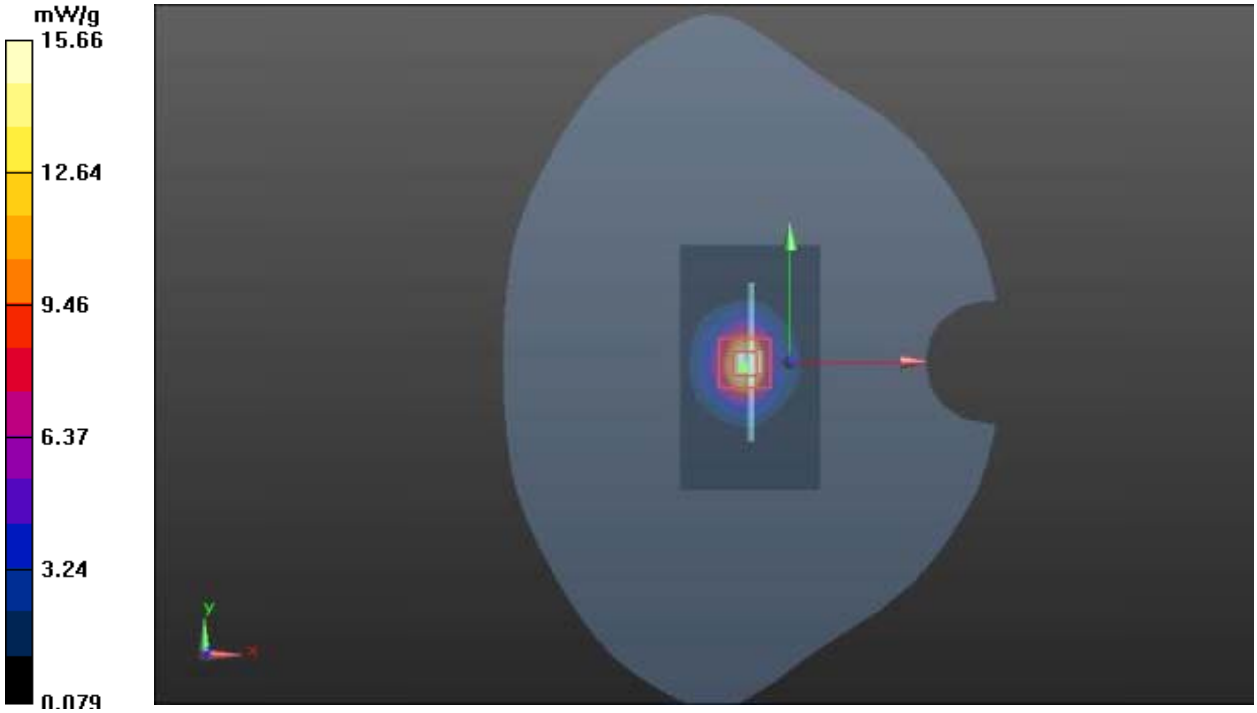
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 1.99 mho/m; ε_r = 38.3; ρ = 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

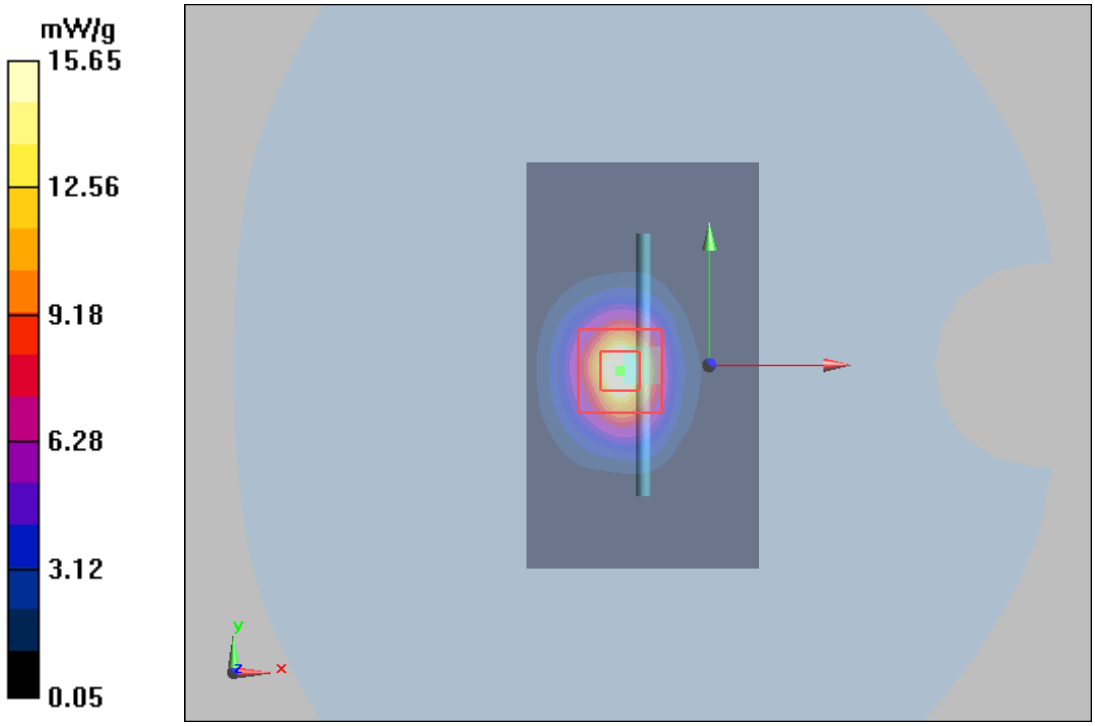
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 2.01mho/m; ε_r = 38.2; ρ = 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

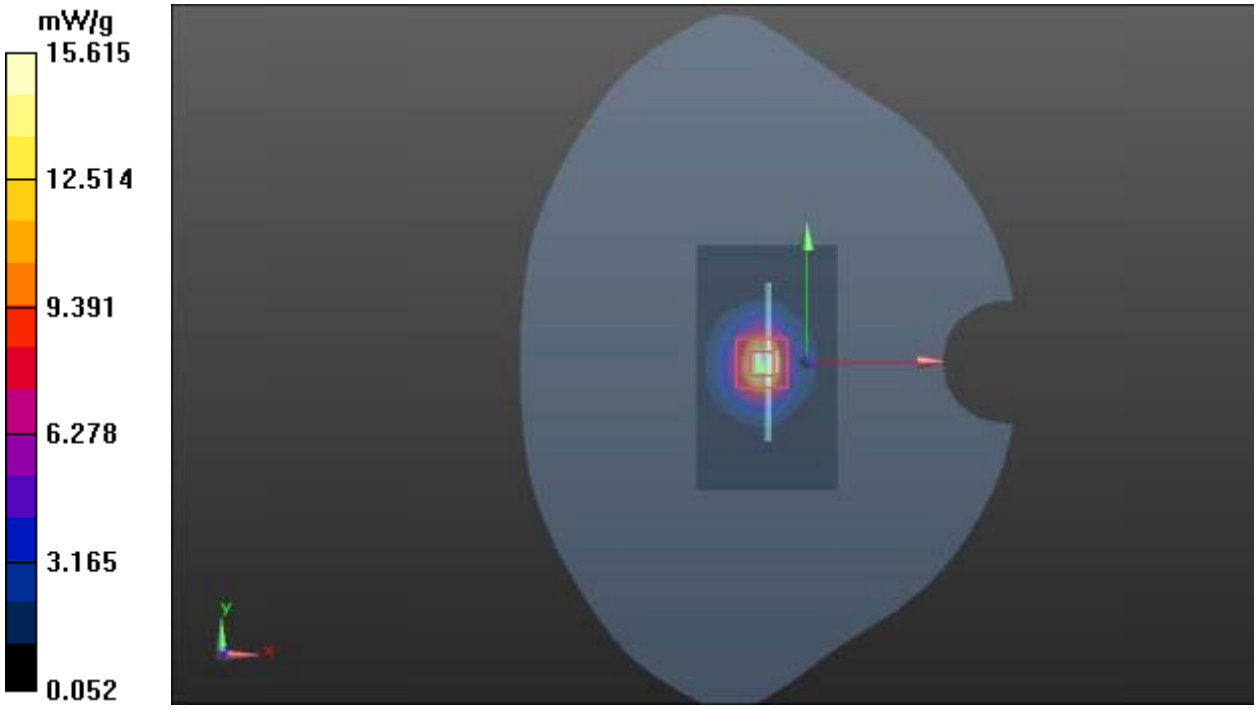
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 2.23 mho/m; ε_r = 51.5; ρ = 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

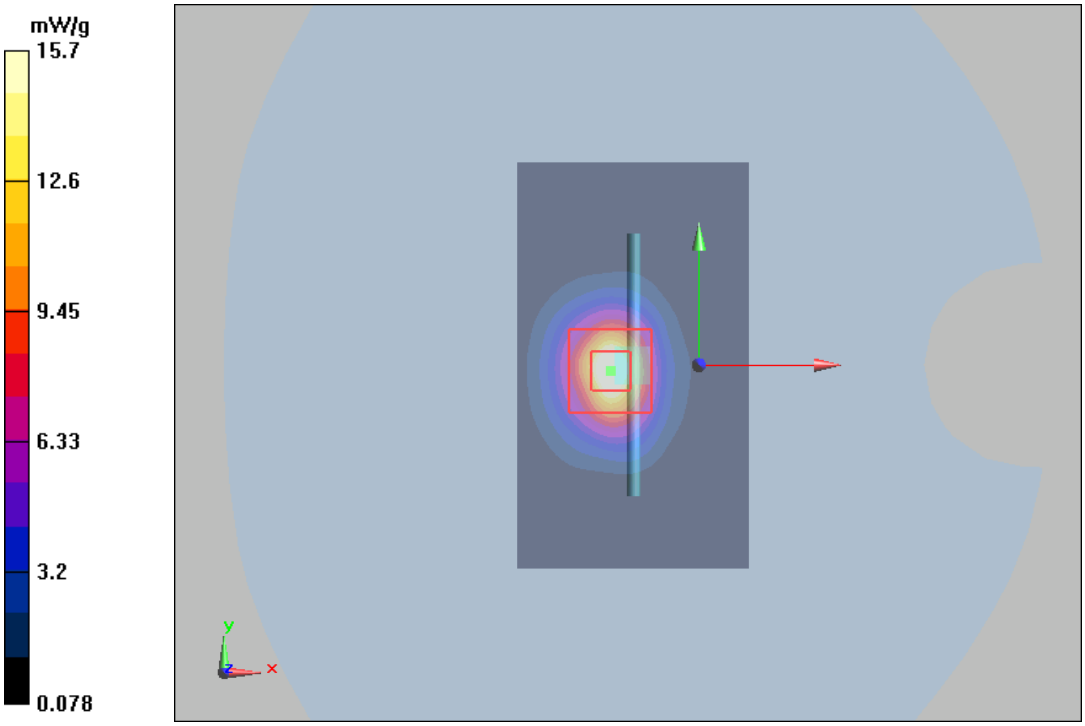
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 2.21 mho/m; ε_r = 51.7; ρ = 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

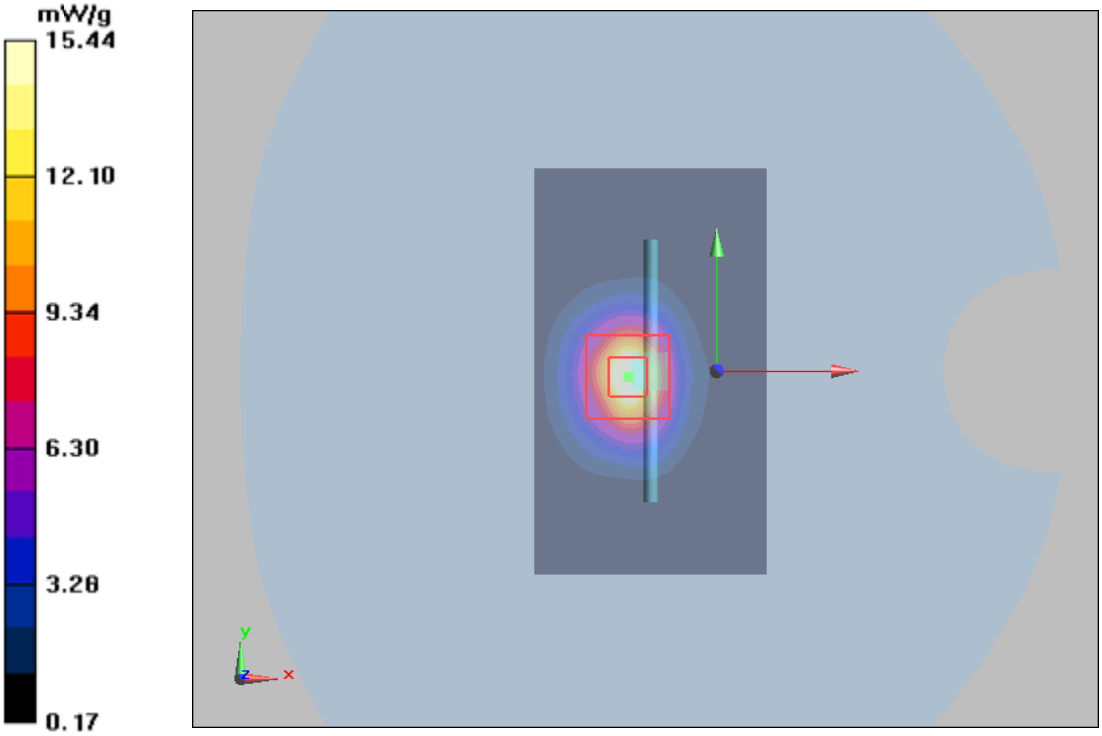
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 2.20 mho/m; ε_r = 51.8; ρ = 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

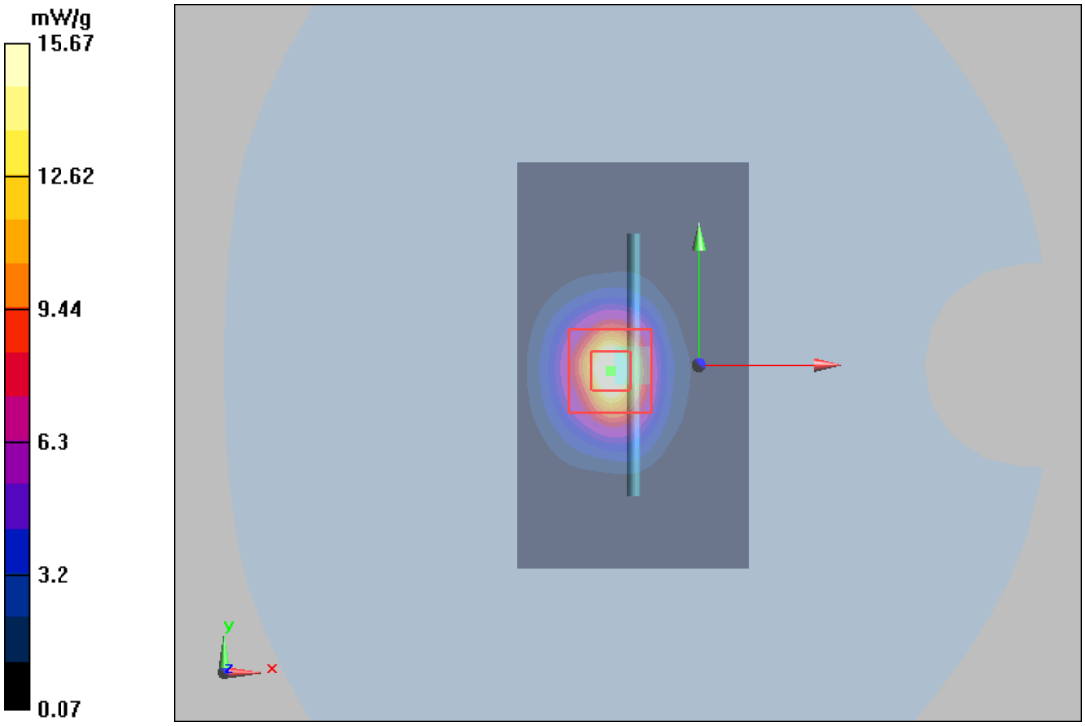
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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; σ = 5.32 mho/m; ε_r = 48.1; ρ = 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

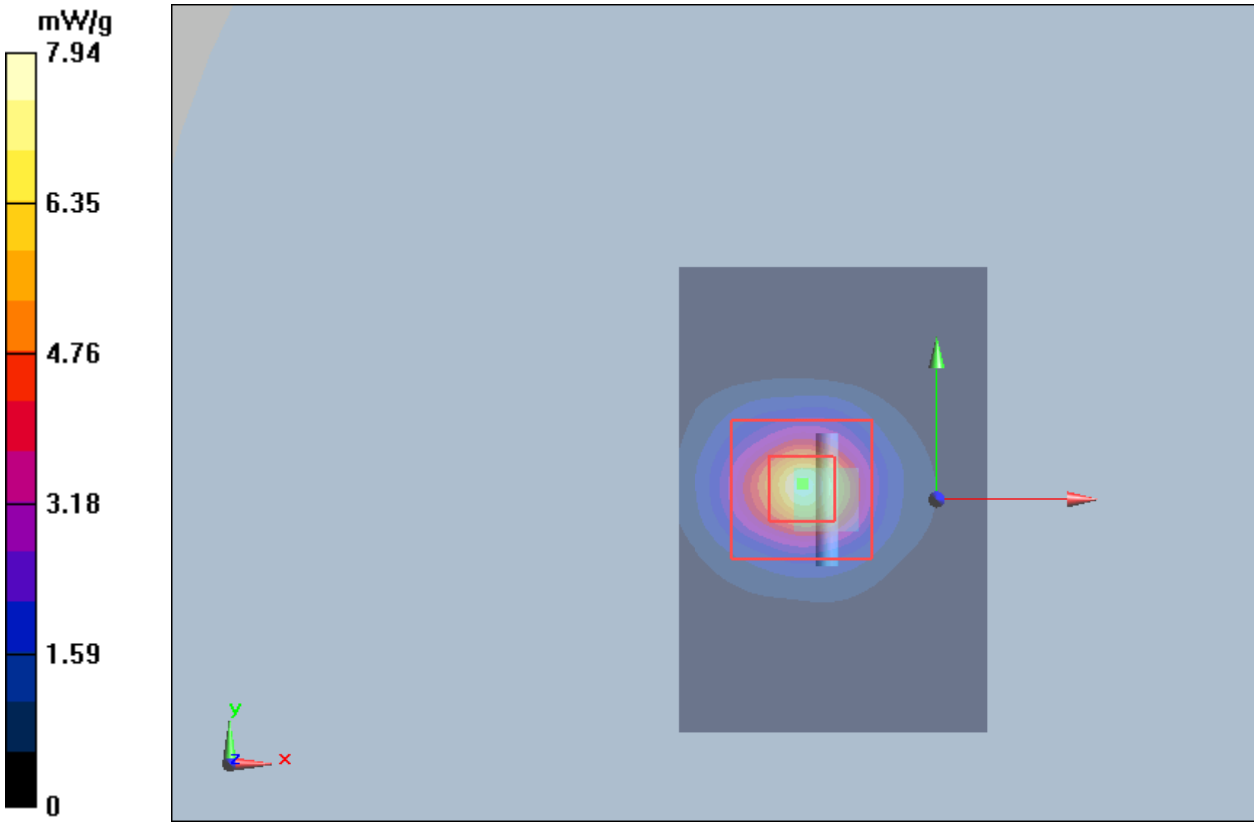
d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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; σ = 4.95 mho/m; ε_r = 35.2; ρ = 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

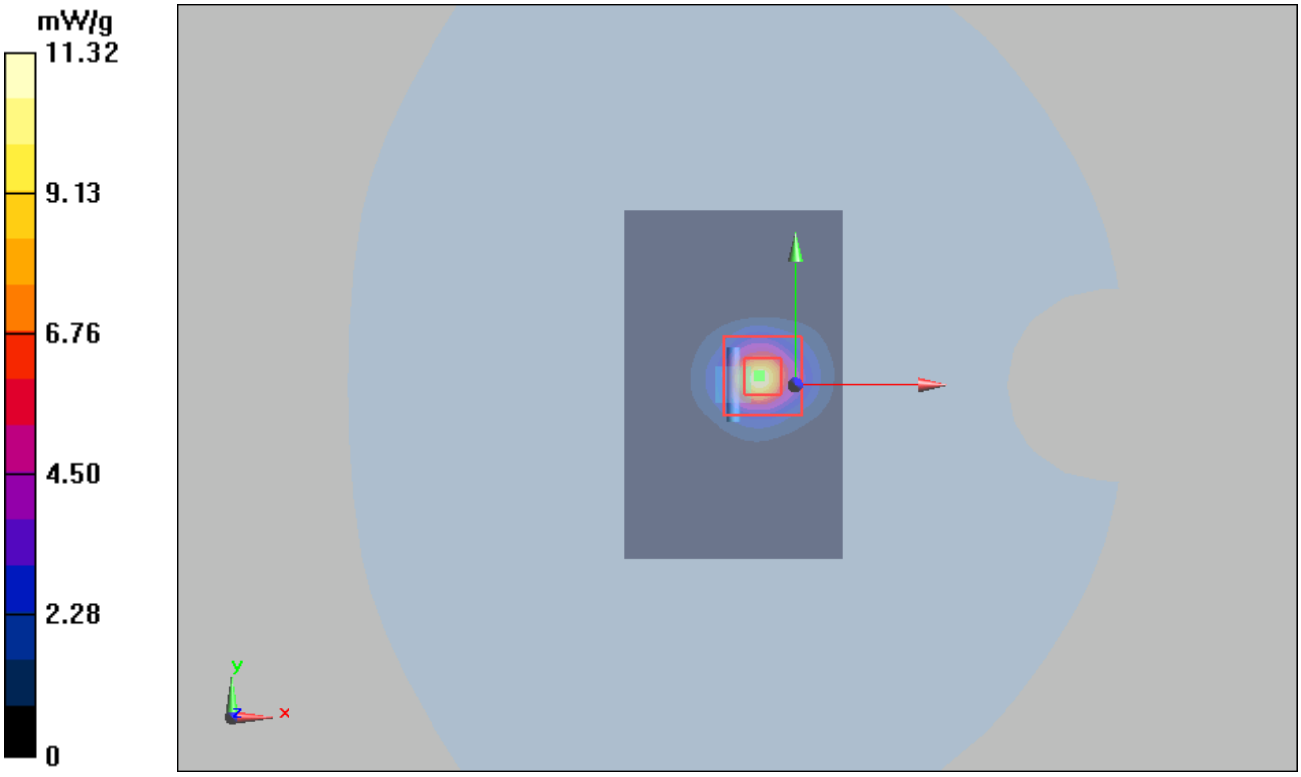
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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; σ = 5.30 mho/m; ε_r = 48.4; ρ = 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

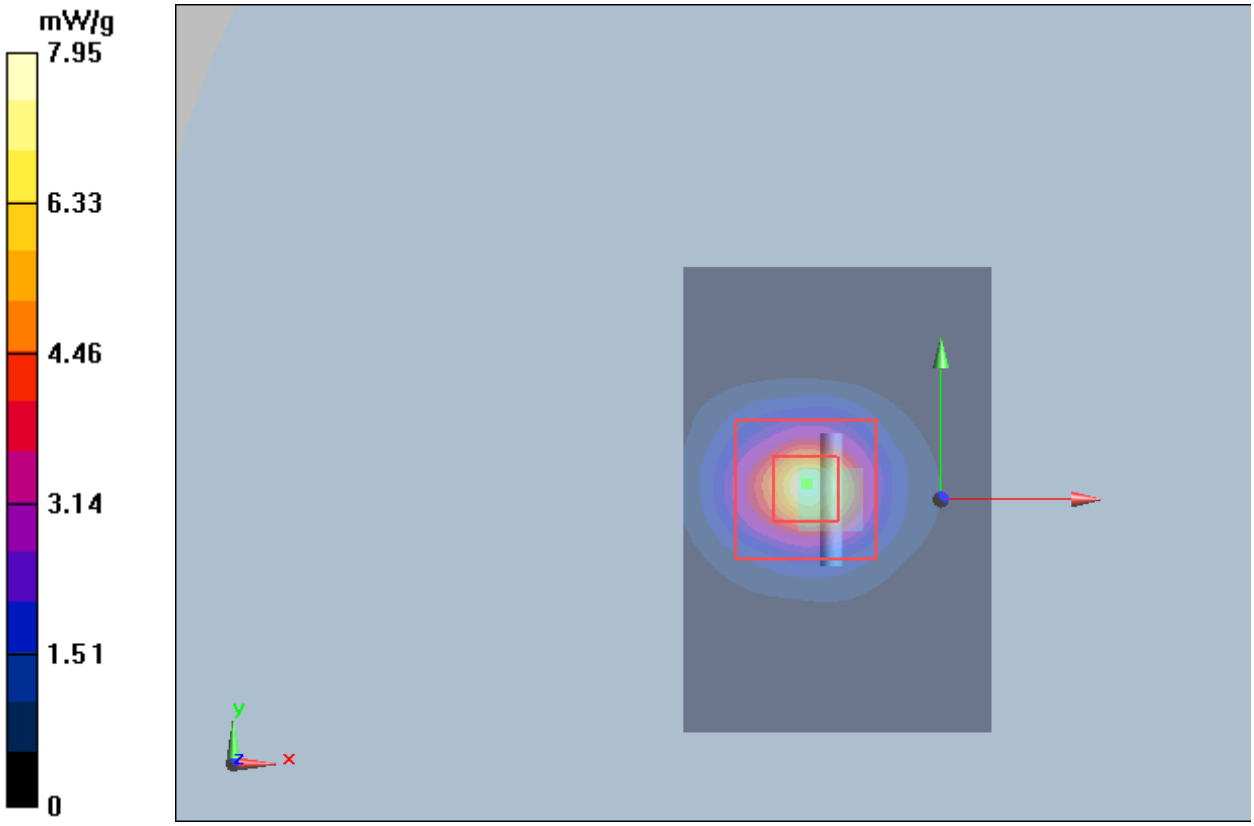
d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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; σ = 5.21 mho/m; ε_r = 34.2; ρ = 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

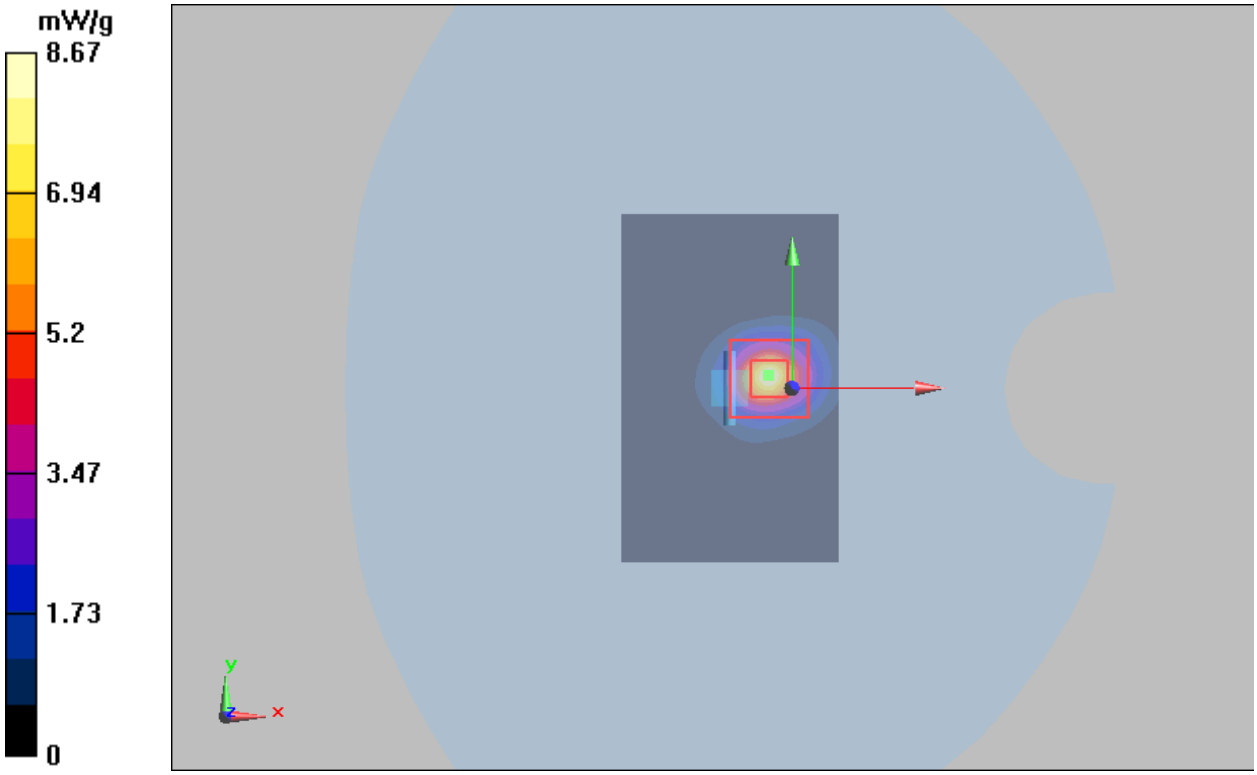
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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; σ = 5.78 mho/m; ε_r = 47.9; ρ = 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

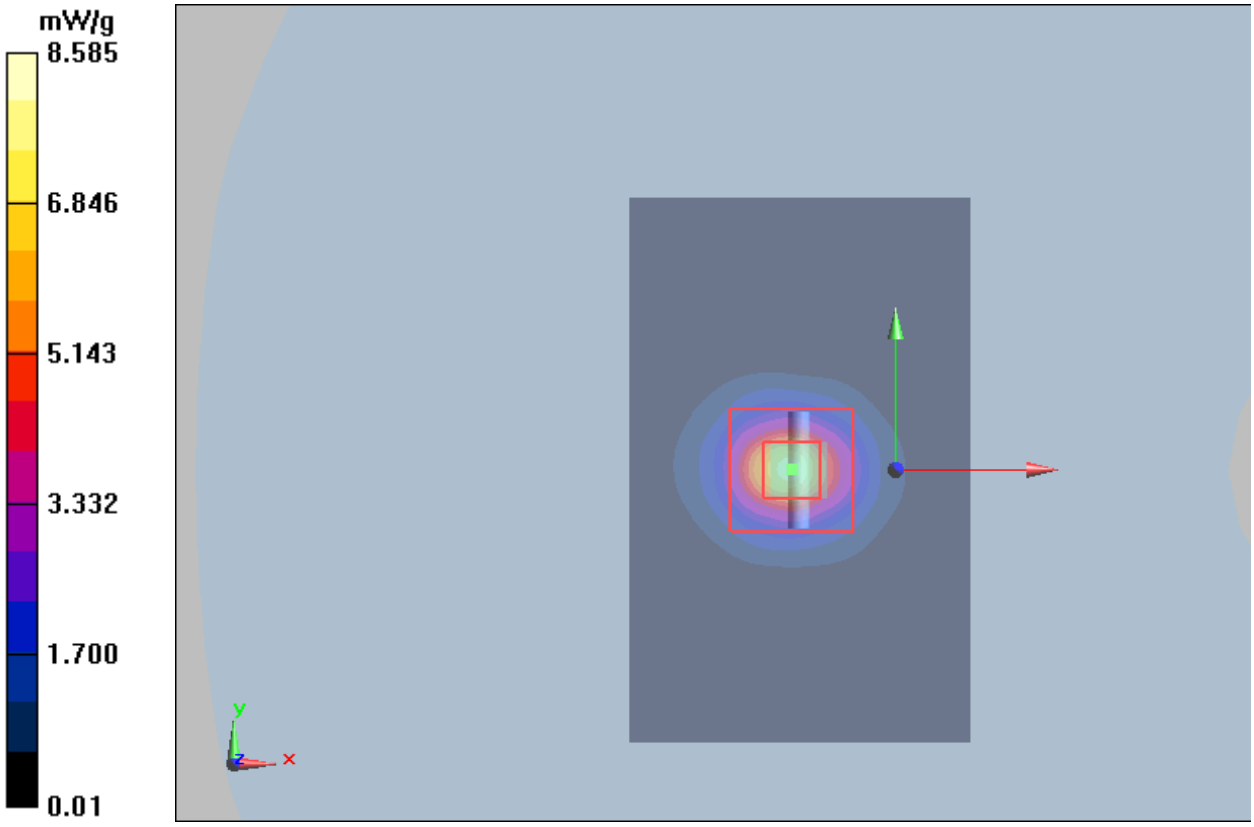
d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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; σ = 5.21 mho/m; ε_r = 34.9; ρ = 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

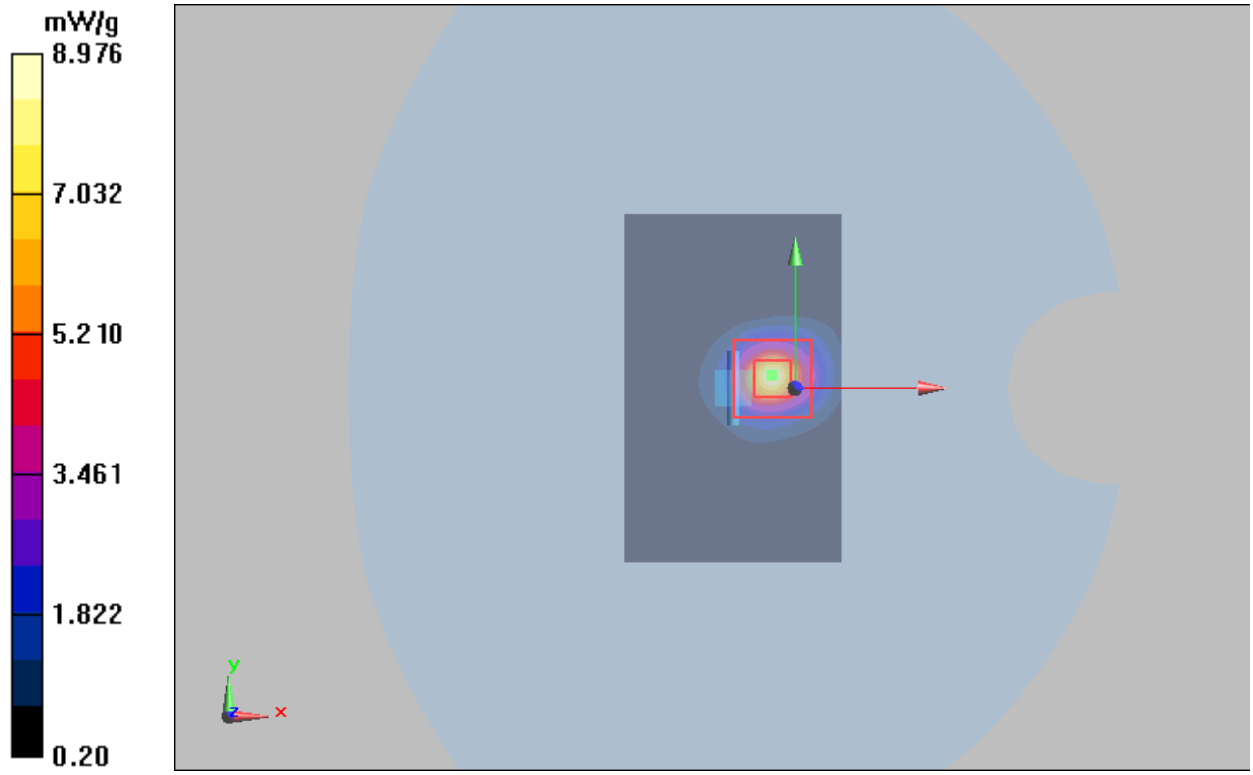
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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; σ = 6.14 mho/m; ε_r = 47.6; ρ = 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

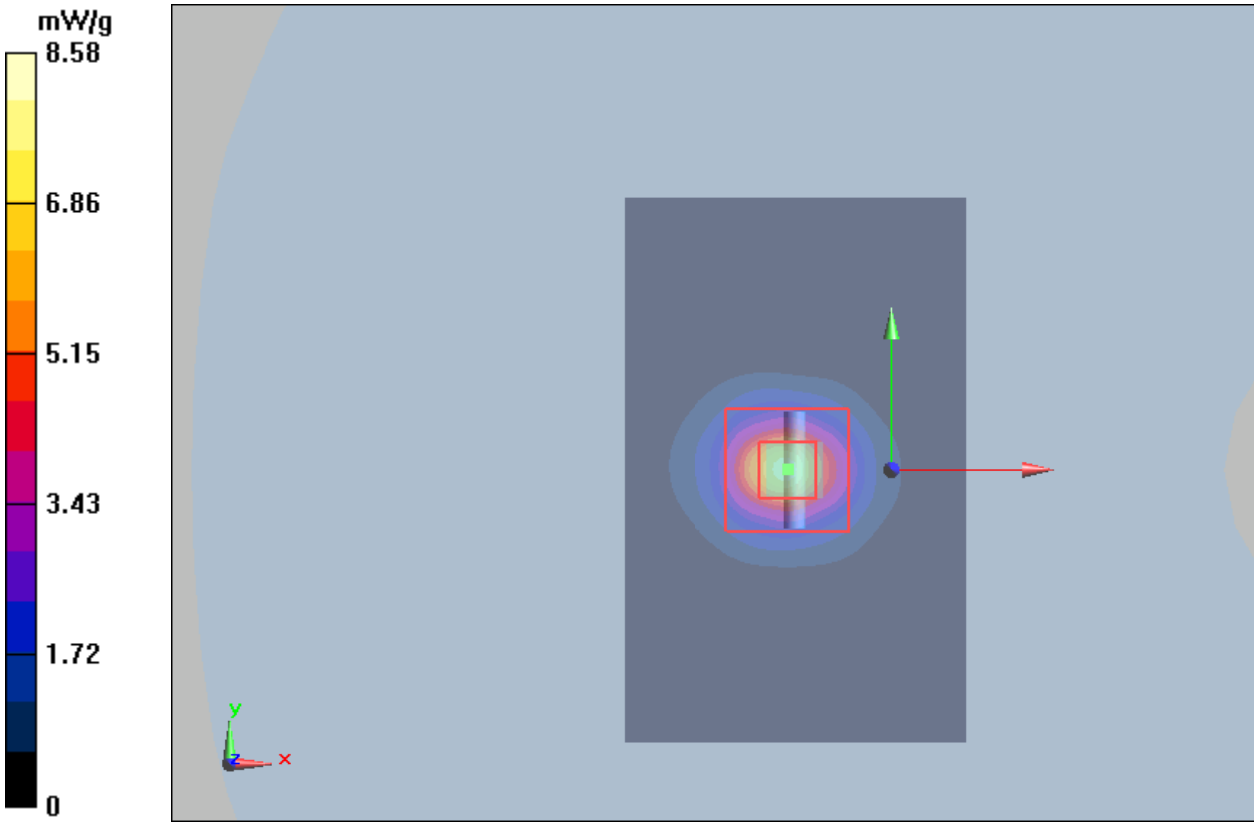
d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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; σ = 0.919 S/m; ε_r = 41.514; ρ = 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

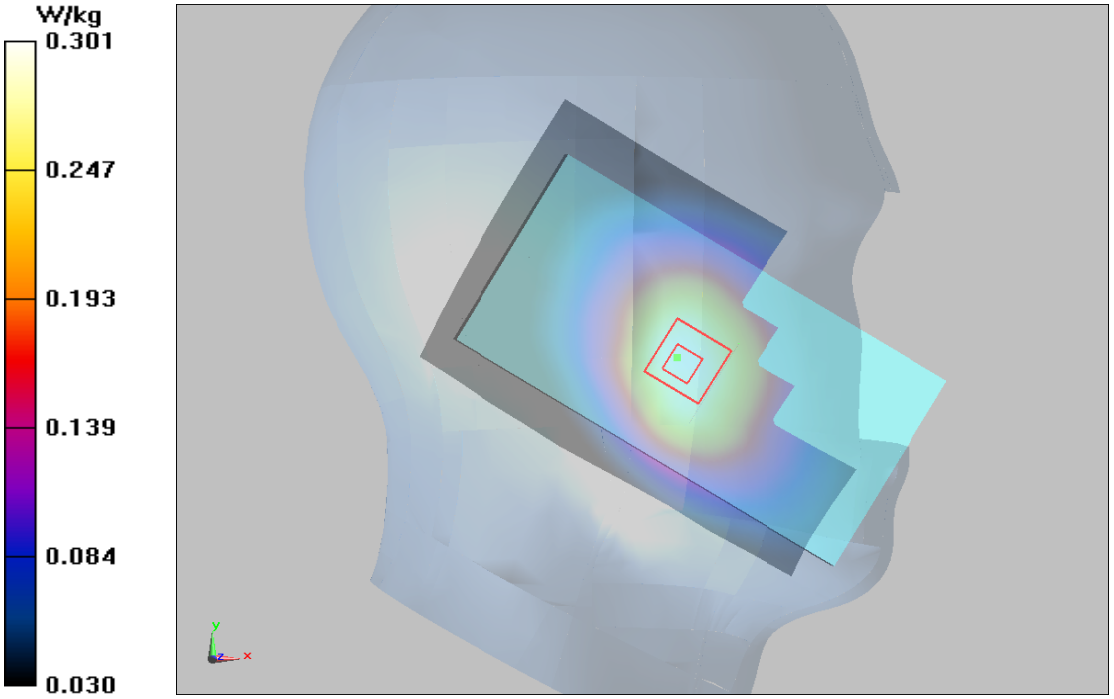
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.028 S/m; ε_r = 55.335; ρ = 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

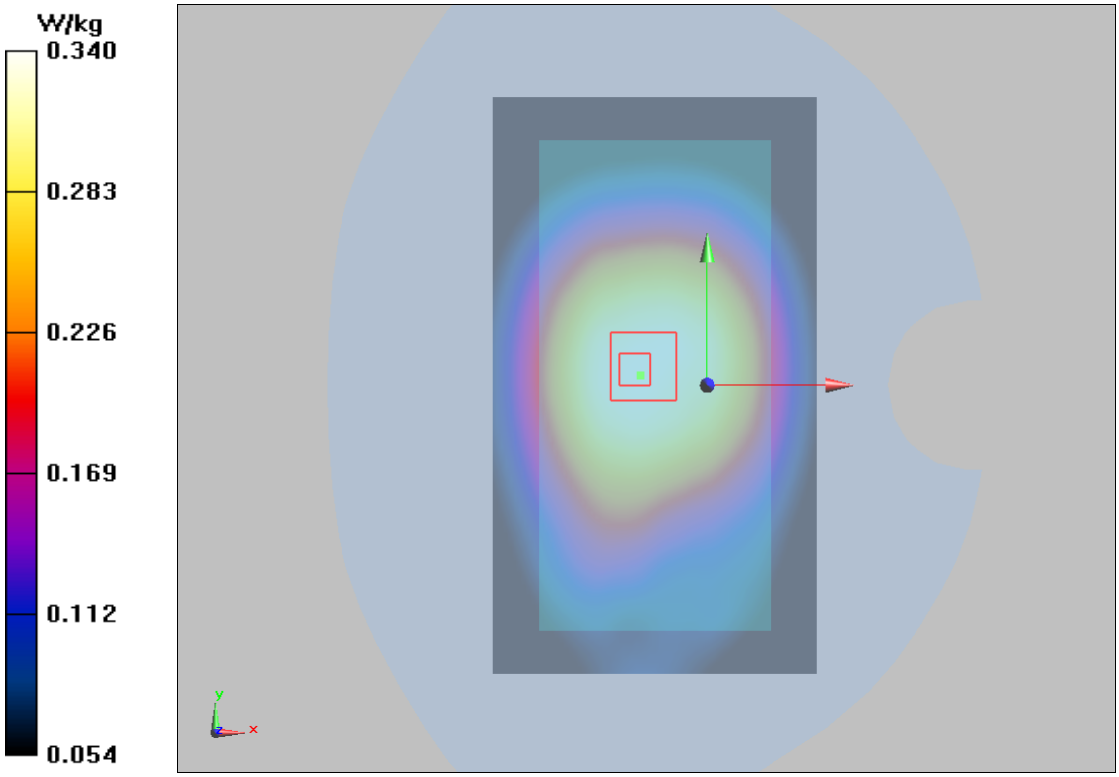
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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; σ = 1.028 S/m; ε_r = 55.335; ρ = 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

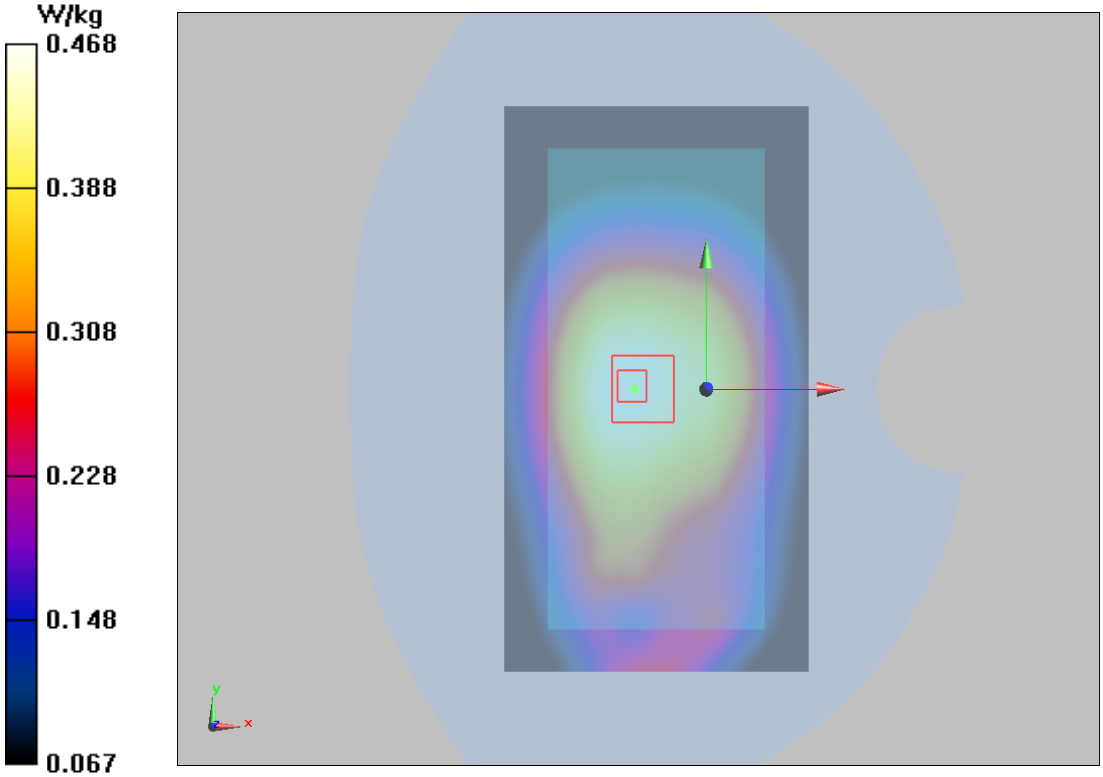
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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

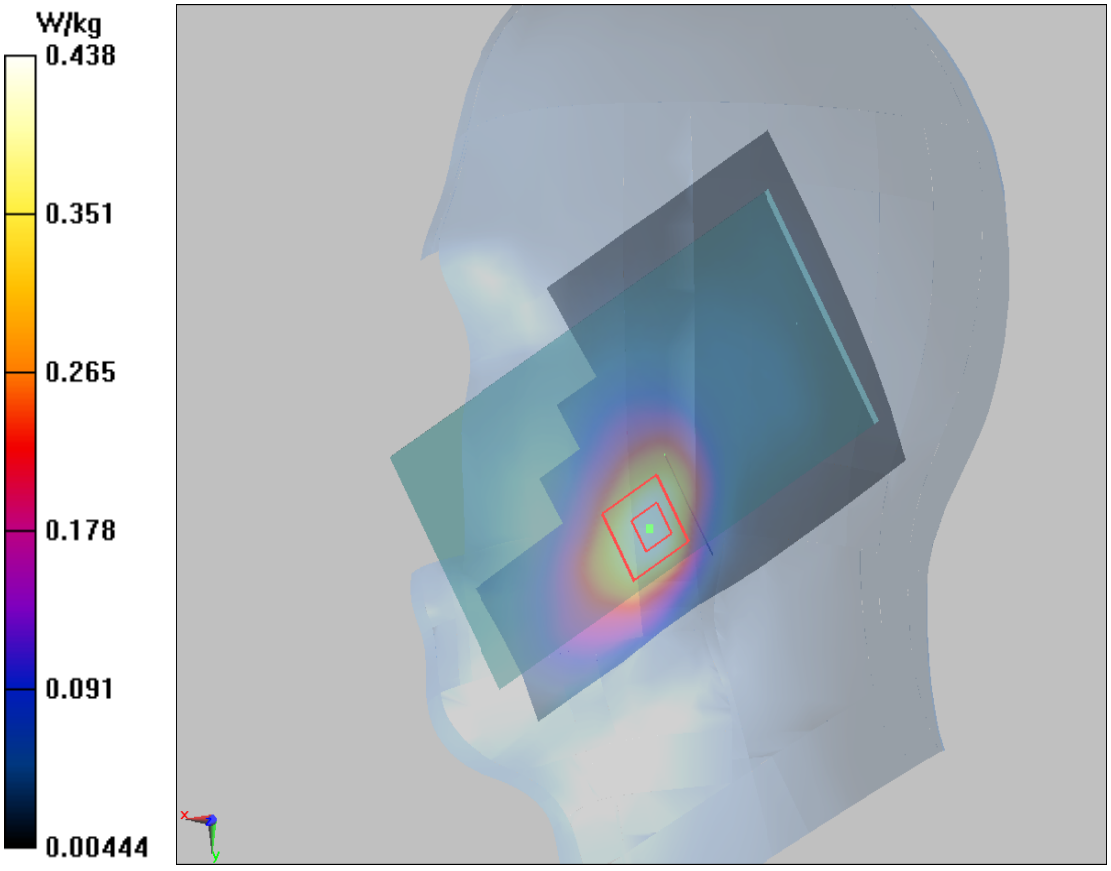


Plot 40 GSM 1900 Right Cheek Middle (State1, Battery2)

Date: 12/12/2016
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; σ = 1.363 S/m; ε_r = 39.073; ρ = 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

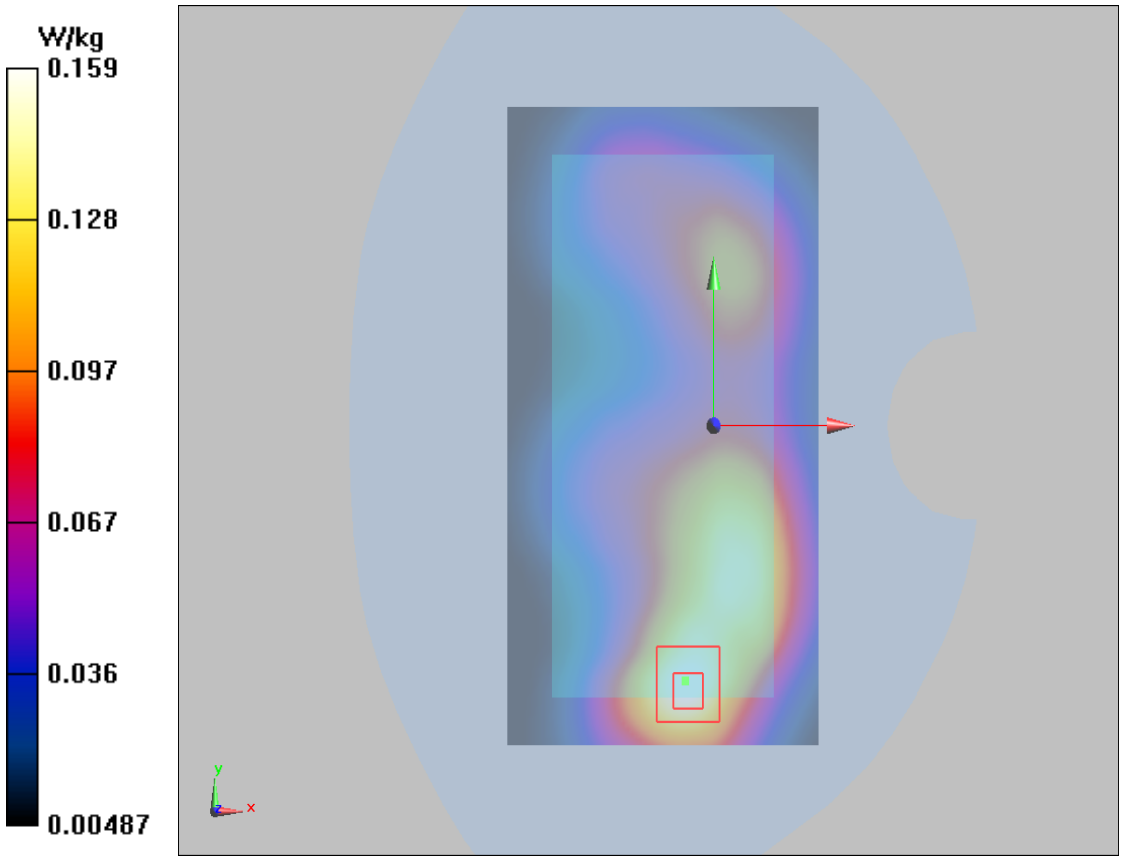


Plot 41 GSM 1900 Front Side Middle (Distance 15mm, State2)

Date: 2016/12/8
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; σ = 1.477 S/m; ε_r = 51.607; ρ = 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

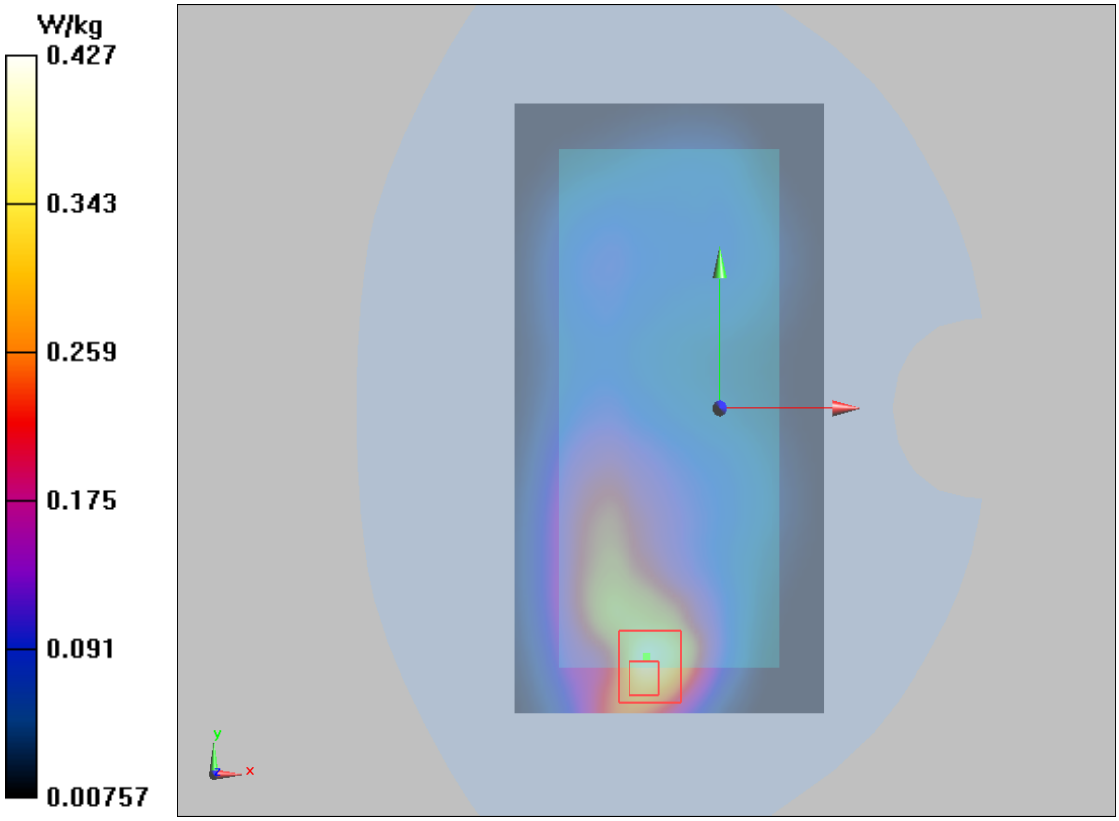


Plot 42 GSM 1900 GPRS (2Txslots) Back Side Middle (Distance 10mm, State2)

Date: 2016/12/8
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1880 MHz; σ = 1.477 S/m; ε_r = 51.607; ρ = 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; σ = 1.339 S/m; ε_r = 39.172; ρ = 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

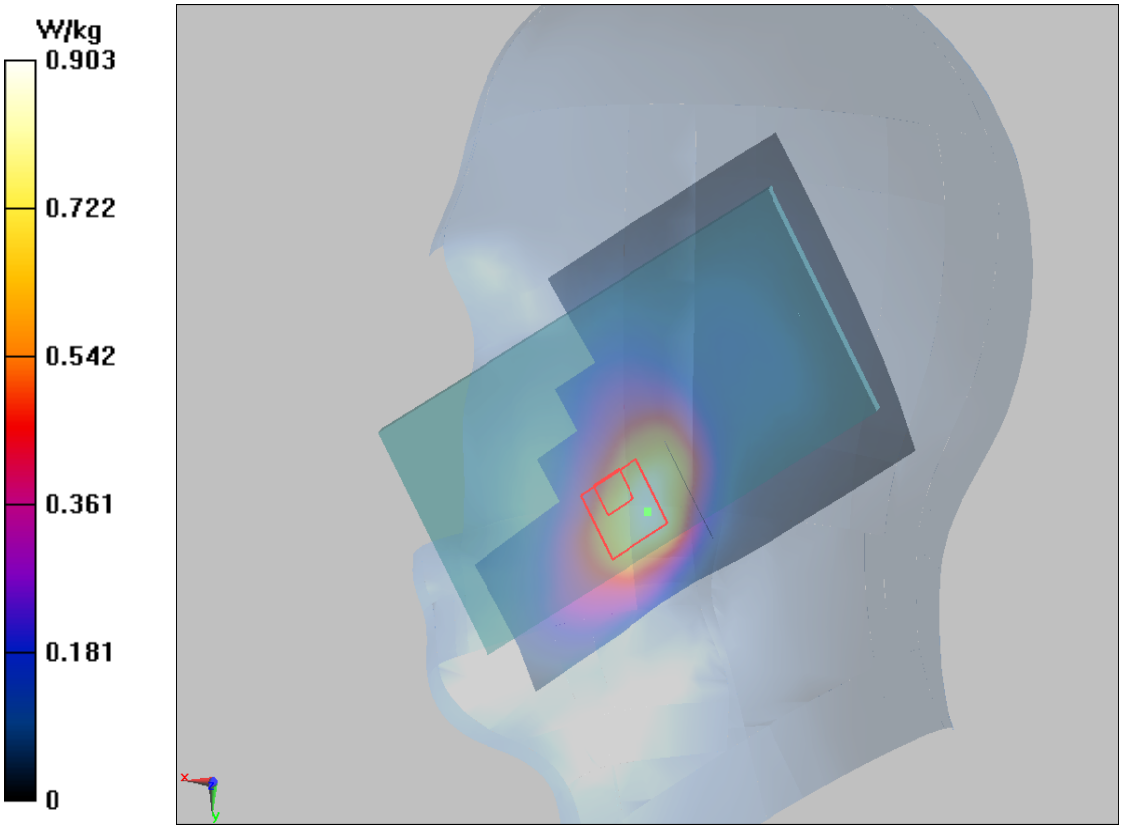
Right Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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

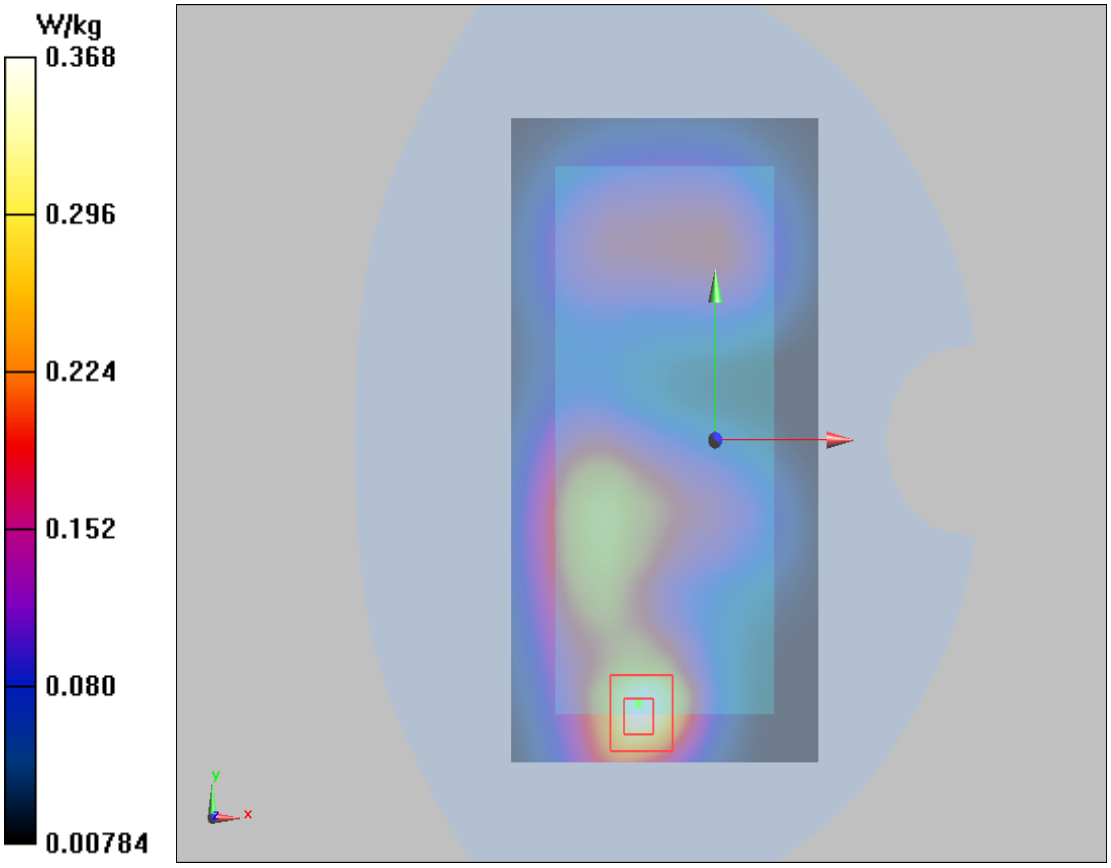


Plot 44 UMTS Band II Back Side Middle (Distance 15mm, State2)

Date: 2016/12/8
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.477 S/m; ε_r = 51.607; ρ = 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

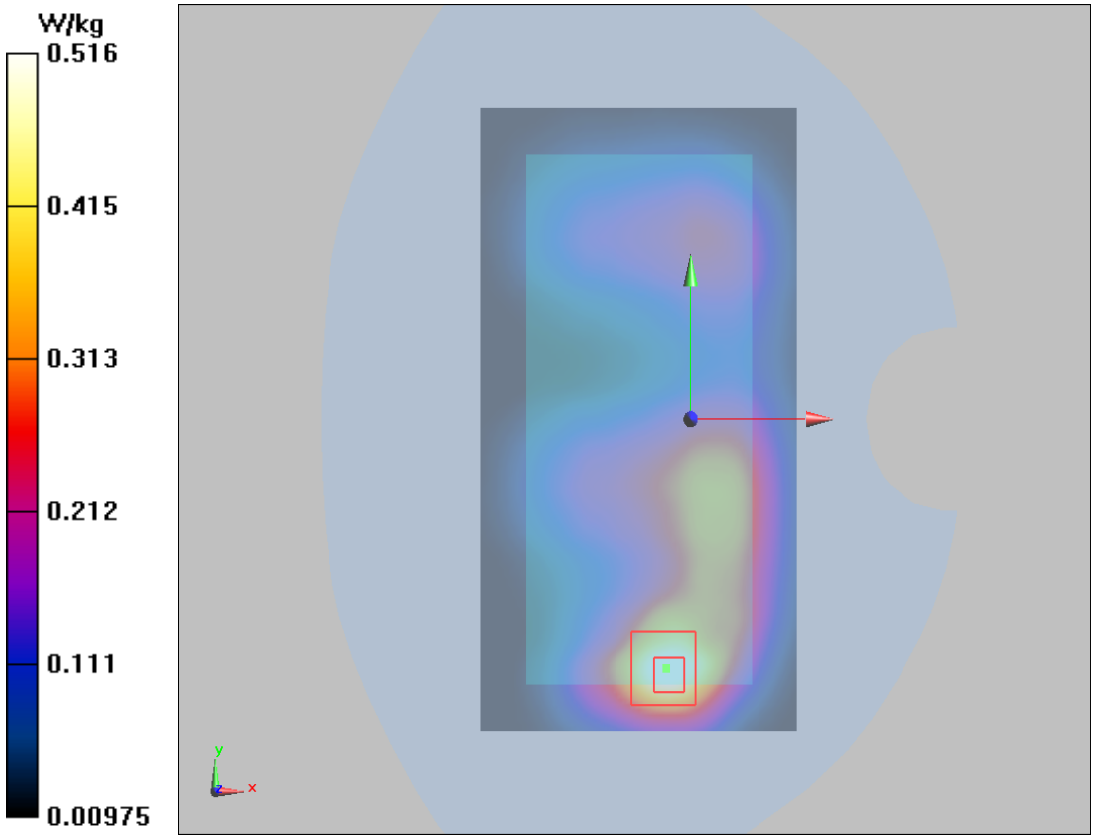


Plot 45 UMTS Band II Front Side Middle (Distance 10mm, State2)

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; σ = 1.477 S/m; ε_r = 51.607; ρ = 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

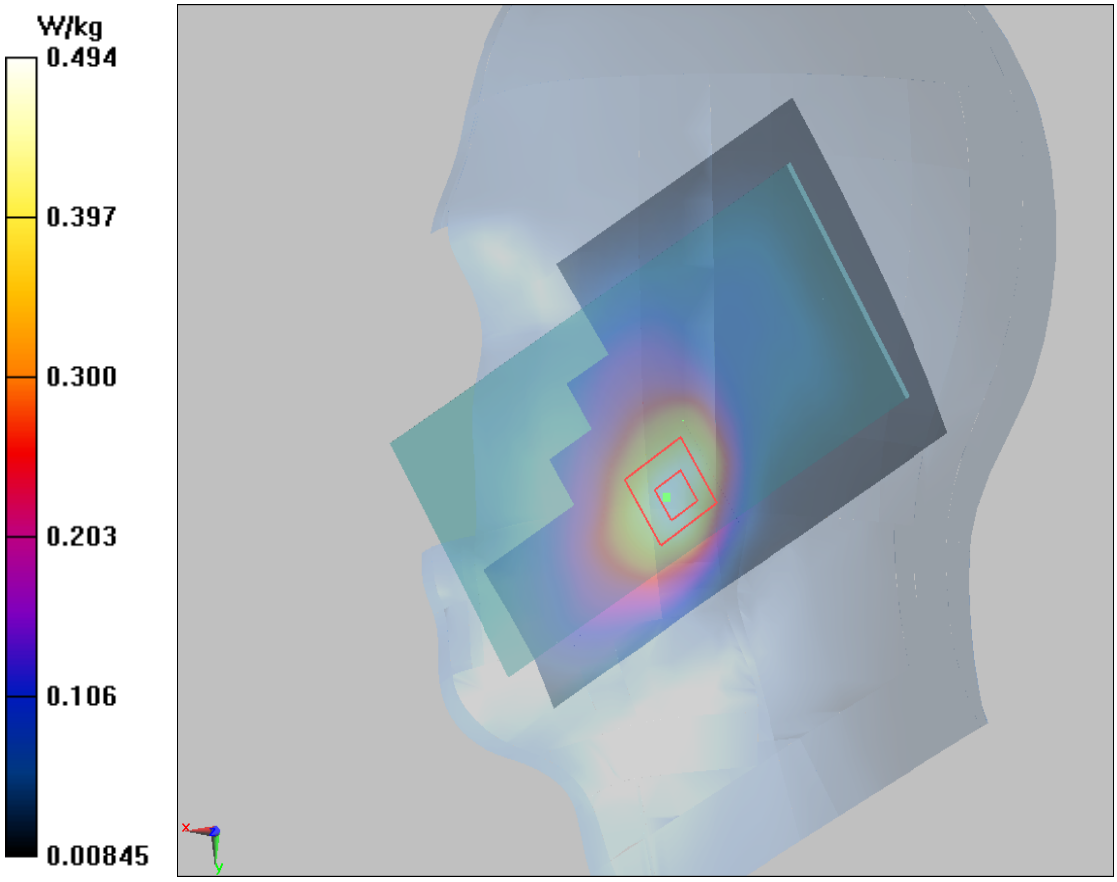


Plot 46 UMTS Band IV Right Cheek Middle (State1)

Date: 12/11/2016
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1733 MHz; σ = 1.358 S/m; ε_r = 38.629; ρ = 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; σ = 1.464 S/m; ε_r = 51.657; ρ = 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