SAR TEST REPORT

Applicant	Xiaomi Communications Co., Ltd.
FCC ID	2AFZZK7AG
Product	Mobile Phone
Brand	Redmi
Model	M2101K7AG
Report No.	R2012A0833-S1V1
Issue Date	January 18, 2021

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528- 2013, ANSI C95.1: 1992, IEEE C95.1: 1991.** The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Yu Wang Guangchang Fan

Prepared by: Yu Wang *Approved by: Guangchang Fan*

TA Technology (Shanghai) Co., Ltd.

No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
TEL: +86-021-50791141/2/3
FAX: +86-021-50791141/2/3-8000

Table of Contents

Version	Revision description	Issue Date
Rev.0	/	January 15, 2021
Rev.1	Update description in Page 25.	January 18, 2021
Note This revised report (Report No. R2012A0833-S1V1) supersedes and replaces the previously issued report (Report No. R2012A0833-S1). Please discard or destroy the previously issued report and dispose of it accordingly.		

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.

1.2 Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

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

A2LA (Certificate Number: 3857.01)

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

1.3 Testing Location

Company:	TA Technology (Shanghai) Co., Ltd.
Address:	No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
City:	Shanghai
Post code:	201201
Country:	P. R. China
Contact:	Fan Guangchang
Telephone:	+86-021-50791141/2/3
Fax:	+86-021-50791141/2/3-8000
Website:	http://www.ta-shanghai.com
E-mail:	fanguangchang@ta-shanghai.com

1.4 Laboratory Environment

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

2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:

Table 1: Highest Reported SAR

Mode	Highest Reported SAR (W/kg)			
	1g SAR Head	1g SAR Body-worn	1g SAR Hotspot	Product Specific 10-g SAR
GSM 850	0.776	0.267	0.235	NA
GSM 1900	0.524	0.369	0.540	NA
WCDMA Band II	0.892	0.681	0.678	1.845
WCDMA Band IV	0.527	0.338	0.525	1.638
WCDMA Band V	0.690	0.242	0.275	NA
LTE FDD 2	**1.085**	**1.090**	0.750	**2.023**
LTE FDD 4	0.548	0.524	0.505	1.541
LTE FDD 5	0.794	0.331	0.387	NA
LTE FDD 7	0.859	0.665	0.549	1.829
LTE TDD 38	0.699	0.231	0.456	NA
LTE TDD 41	0.613	0.326	0.549	NA
Wi-Fi (2.4G)	0.670	0.173	0.173	NA
Wi-Fi (5G)	0.711	0.323	**1.026**	1.944
BT	NA	NA	NA	NA
Date of Testing: December 17, 2020 ~ January 11, 2021 Date of Sample Received: December 2, 2020				
Note: 1. 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 C95.1: 1992/IEEE C95.1: 1991, and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528-2013. 2.All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.				

Table 2: Highest Simultaneous Transmission SAR

Exposure Configuration	1g SAR Head	1g SAR Body-worn	1g SAR Hotspot	Product Specific 10-g SAR
Highest Simultaneous Transmission SAR (W/kg)	1.553	1.221	1.595	3.647
Note: The detail for simultaneous transmission consideration is described in chapter 10.4.				

3 Description of Equipment under Test

Client Information

Applicant	Xiaomi Communications Co., Ltd.
Applicant address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Manufacturer	Xiaomi Communications Co., Ltd.
Manufacturer address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

General Technologies

Application Purpose	Original Grant
EUT Stage	Identical Prototype
Model	M2101K7AG
IMEI	IMEI1: 868824050044464/00 IMEI2: 868824050044472/00
Hardware Version	P2
Software Version	MIUI12
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: 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: max power LTE TDD 38/41: max power
Note: The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.	

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (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
	1900			1850 ~ 1910
	Does this device support DTM (Dual Transfer Mode)? ☐Yes ☒No			
UMTS	Band II	QPSK, 16QAM	HSDPA HSUPA DC-HSDPA HSPA+	1850 ~ 1910
	Band IV			1710 ~ 1755
	Band V			824 ~ 849
LTE	FDD 2	QPSK, 16QAM, 64QAM	Rel.12	1850 ~ 1910
	FDD 4			1710 ~ 1755
	FDD 5			824 ~ 849
	FDD 7			2500 ~ 2570
	TDD 38			2570 ~ 2620
	TDD 41			2535 ~ 2655
	Does this device support Carrier Aggregation (CA). ☒Yes ☐No			
	Does this device support SV-LTE (1xRTT-LTE)? ☐Yes ☒No			
BT	2.4G	Version 5.0 LE		2402 ~2480
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462
	5G	OFDM	802.11a/n HT20/ HT40/ ac VHT20/ VHT40/ VHT80	5150 ~ 5350 5470 ~ 5850
	Does this device support MIMO ☐Yes ☒No			

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 C95.1: 1992, IEEE C95.1: 1991, the following FCC Published RF exposure KDB procedures:

IEC 62209-1

Reference Standards

KDB 248227 D01 802.11Wi-Fi SAR v02r02
KDB 447498 D01 General RF Exposure Guidance v06
KDB 648474 D04 Handset SAR v01r03
KDB 690783 D01 SAR Listings on Grants v01r03
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
KDB 865664 D02 RF Exposure Reporting v01r02
KDB 941225 D01 3G SAR Procedures v03r01
KDB 941225 D05 SAR for LTE Devices v02r05
KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
KDB 941225 D06 Hotspot Mode v02r01

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.

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 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, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. 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. Product specific 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 product specific 10-g 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 3: 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

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested. GSM voice and GPRS data use GMSK, which is a constant amplitude modulation with minimal peak to average power difference within the time-slot burst. For EDGE, GMSK is used for MCS 1 – MCS 4 and 8-PSK is used for MCS 5 – MCS 9; where 8-PSK has an inherently higher peak-to-average power ratio. The GMSK and 8-PSK EDGE configurations are considered separately for SAR compliance. The GMSK EDGE configurations are grouped with GPRS and considered with respect to time-averaged maximum output power to determine compliance. The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode.

5.3.2 UMTS Test Configuration

5.3.2.1 3G SAR Test Reduction Procedure

The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations modes according to output power, exposure conditions and device operating capabilities. Maximum output power is verified by applying the applicable versions of 3GPP TS 34.121.

5.3.2.2 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 SAR configuration in 12.2 kbps RMC for head exposure.

5.3.2.3 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 EUT with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading 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 EUT, 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

5.3.2.4 Release 5 HSDPA Test Configuration

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 SAR body-worn accessory exposure configuration in 12.2 kbps RMC. EUT 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 4: 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

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

Note 2: CM=1 for β_c/β_d =12/15, β_{hs}/β_c=24/15.

Note 3: For subtest 2 the β_c/β_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.

5.3.2.5 Release 6 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 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 EUT’ and ‘Release 5 HSDPA Data Devices’ sections of this document

Table 5: 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 ⇔ $A_{hs} = \beta_{hs}/\beta_c$ = 30/15 ⇔β_{hs}= 30/15 *β_c.
Note 2: CM = 1 for β_c/β_d =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 β_c/β_d 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 β_c = 10/15 and β_d = 15/15.
Note 4: For subtest 5 the β_c/β_d 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 β_c = 14/15 and β_d = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Figure 5.1g.
Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Table 6: HSUPA UE category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCHTTI (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)						

5.3.2.6 HSPA, HSPA+ and DC-HSDPA Test Configuration

SAR test exclusion may apply to 3GPP Rel. 6 HSPA and Rel. 8 DC-HSDPA. When SAR measurement is required for 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. Without prior KDB confirmation to determine the SAR results are acceptable, a PAG is required for equipment 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. 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. 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 3GPP 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 7: HS-DSCH UE category

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. 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 Additional requirements for 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:

Uplink-downlink configurations for uplink-downlink configurations and Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS) for Special subframe configurations.

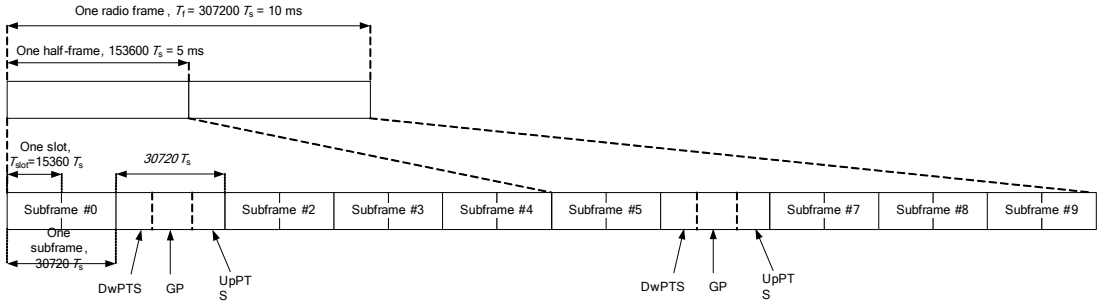


Figure 1: Frame structure type 2

Table 8: 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 9: 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 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: Uplink-downlink configurations:

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

About the uplink component of Special subframes, we can figure out by Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS):

Uplink Component = UpPTS

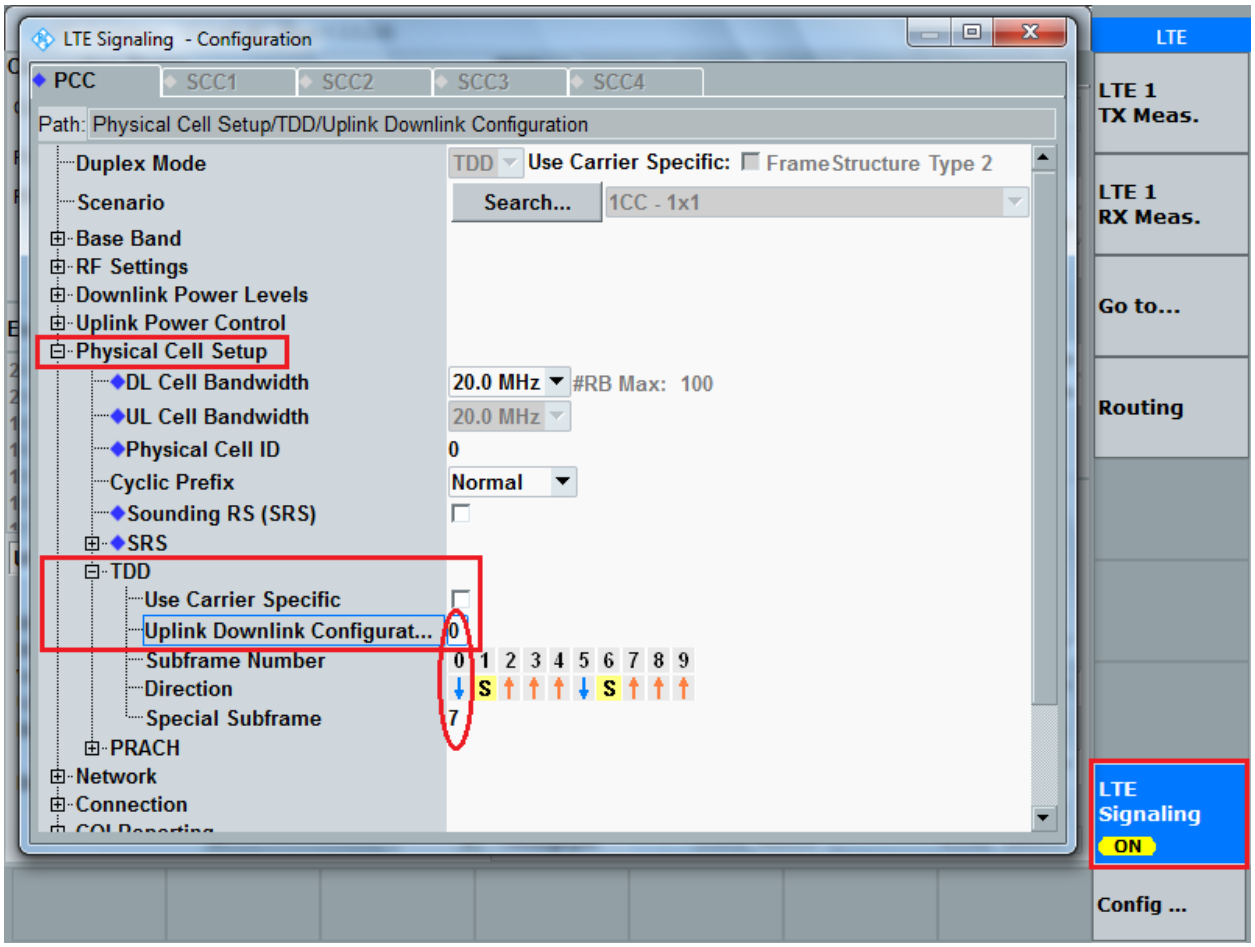
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

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 LTE CA specification

The device supports LTE advanced Rel. 12, Carrier Aggregation (CA) on downlink for Intra band and inter-band. CA is supported for Intra band only, more details information is provided in tables below:

1) DL CA Intra band contiguous

E-UTRA CA configuration / Bandwidth combination set								
E-UTRA CA configuration	Uplink CA configurations (NOTE 3)	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]	Channel bandwidths for carrier [MHz]	Channel bandwidths for carrier [MHz]		
CA_7C	CA_7C	15	15				40	0
		20	20					
		10	20				40	1
		15	15, 20					
		20	10, 15, 20					
		15	10, 15				40	2
		20	15, 20					
CA_38C	CA_38C	15	15				40	0
		20	20					

NOTE 1: The CA configuration refers to an operating band and a CA bandwidth class specified in Table 5.6A-1 (the indexing letter). Absence of a CA bandwidth class for an operating band implies support of all classes.

NOTE 2: For the supported CC bandwidth combinations, the CC downlink and uplink bandwidths are equal.

NOTE 3: Uplink CA configurations are the configurations supported by the present release of specifications.

NOTE 4: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band is paired with the uplink operating band (external) of the carrier aggregation configuration that is supporting the configured Pcell.

5.3.6 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.

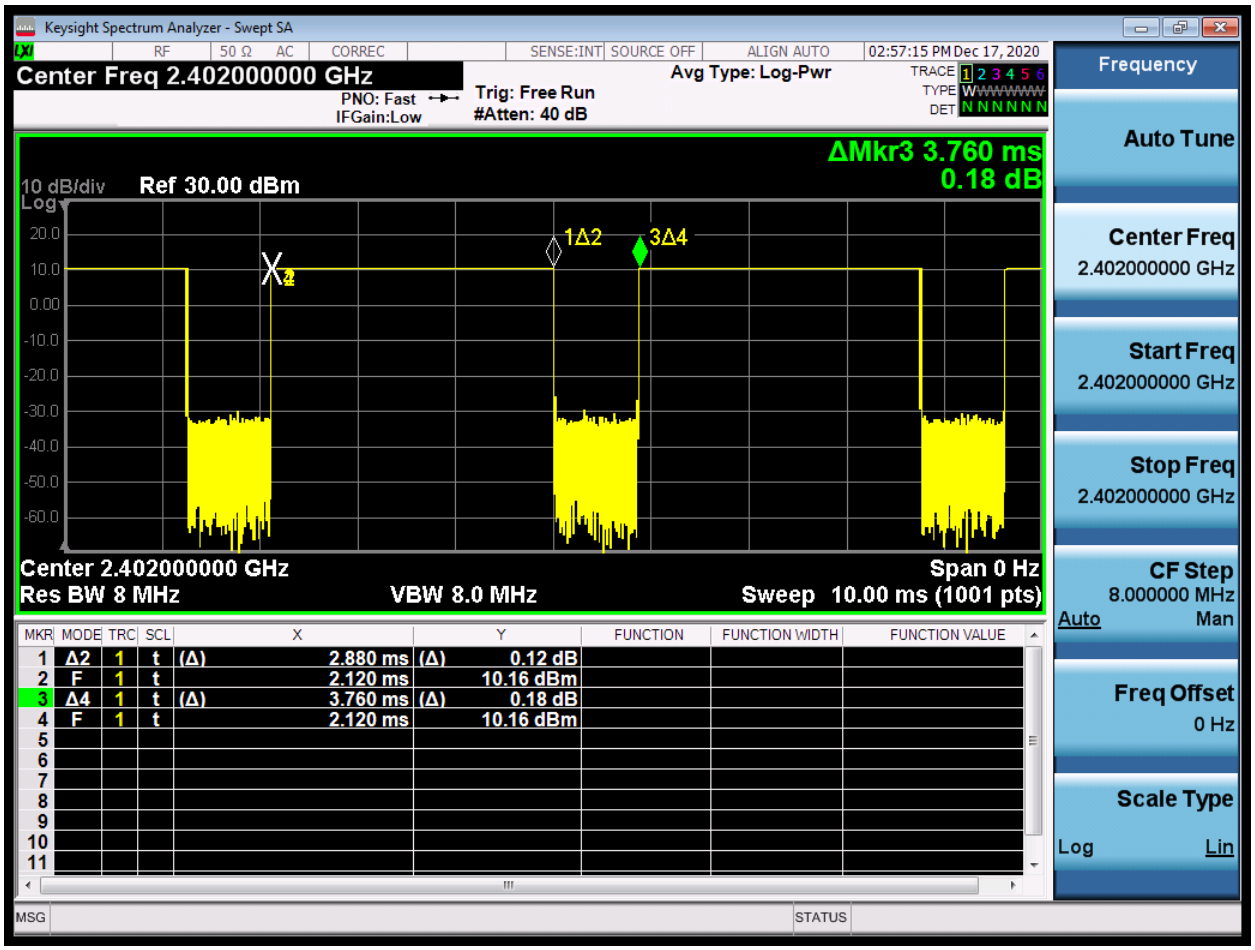
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

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.

5.3.7 BT Test Configuration

For BT SAR testing, BT engineering testing software installed on the EUT can provide continuous transmitting RF signal with maximum output power. And the CBT control the EUT operating with hoping off and data rate set for DH5.

The SAR measurement takes full account of the BT duty cycle and is reflected in the report, and the duty factor of the device is as follow:



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=2.880/3.760=76.6%

5.3.8 Proximity sensor& Receiver Power reduction information

The Methods For scenario detection are shown in the following figure.

a. Audio receiverdetection

b. Capacitive proximitysensor

Power reduce processstrategy

SAR Sensor Detect	Near	Far
Back	<=20mm	>20mm
Front	<=15mm	>15mm
Bottom	<=20mm	>20mm
Top	<=20mm	>20mm
Right	Not Detect	Not Detect
Left	Not Detect	Not Detect

Maximum transmit power reduce process follow below strategy when mobile connect network.

position	Audio Reciver	SAR sensor (BOT)	SAR sensor (TOP)	TX Power reduce
Body	Off	Near/Far	Near	Yes_dsi4
	Off	Near	Far	Yes_dsi3
	Off	Far	Far	No_dsi2 (defult power)
Head	On	/	/	No_dsi1 (defult power)

Note:

1) Since the capacitive proximity sensor triggering distance for the front/back/top/ bottom side is N mm , a conservative distance of N-1 mm was requried for addtional SAR test at maximum power level with sensor off.

Receiver detection mechanism clarifications

ThedevicesupportstheAudioreceiverdetectionmechanism.Theaudioreceiverisusedto determine head. When operating in a call at the head, the relevant power levels are set for 2G&3G&4G accordingly, inordertocomply with SAR requirement. For WWAN transmitter

When operating in a call at the head, the LAT Antenna simultaneous transmission with WLAN antenna or in standalone operations, the WWAN will be enter to the WWAN Power table1.

Proximity sensor configuration

The device uses one sensor chip and one proximity sensors (metallic electrode) to reduce the maximum output power in selected wireless mode and operating configurations to ensure SAR compliance. The proximity sensor shares the same metallic electrode with the 2G/3G/4G main antennas. The sensor implementation can identify and facilitate triggering different max power levels for different scenarios including different exposure test positions(front side/Back side/Bottom side/Top side) when the device is closed to a user's body. The main purpose for the implementation is to distinguish the scenarios of Body, minimize triggering associated with power reduction for different scenarios and provide enhanced user experience.

Based on the summery table of Receiver detection mechanism above,

Main antenna												
Power Reduction Scenario	Power Level	GSM850	GSM1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B38	LTE B41
Full Power		33.5	30.5	24.0	24.0	24.0	25.5	25.5	25.5	25.5	25.5	25.5
Receiver on (head)	D1(DSI1)	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Receiver off + Sensor off (Body-Worn/Hotspot)	D2(DSI2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Receiver off + Sensor on (Body-Worn/Hotspot)	D3(DSI3/4)	0.0	1.5	4.0	5.0	0.0	5.5	6.5	6.5	4.5	2.5	2.5

Second antenna												
Power Reduction Scenario		GSM850	GSM1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B38	LTE B41
Full Power		33.5	30.5	24.0	24.0	24.0	25.5	25.5	25.5	25.5	25.5	25.5
Receiver on (head)	D1(DSI1)	1.5	8.5	9	8	1.5	9.5	8.5	2.5	4.5	4.5	4.5
Receiver off + Sensor off (Body-Worn/Hotspot)	D2(DSI2)	0.0	0	0	0	0	0	0	0	0	0	0
Receiver off + Sensor on (Body-Worn/Hotspot)	D3(DSI4)	0.0	4	9	8	0	9.5	8.5	1.5	4.5	4.5	4.5

WIFI antenna											
Power Reduction Scenario		WiFi 2.4G 11b	WiFi 2.4G 11g	WiFi 2.4G 11n HT20	WiFi 2.4G 11n HT40	WiFi 5G 11a	WiFi 5G 11n HT20	WiFi 5G 11n HT40	WiFi 5G 802.11ac -VHT20	WiFi 5G 802.11ac- VHT40	WiFi 5G 802.11ac -VHT80
Full Power		19	18.5	13.5	13.5	17.5	15.5	15.5	13.5	13.5	13.5
Receiver on (head)	D1(DSI1)	1	0.5	0	0	6	4	4	2	2	2
Receiver off (Body-Worn/Hotspot)	D2(DSI2)	0	0	0	0	0	0	0	0	0	0

The proximity sensor triggering distance measurement method are as below:

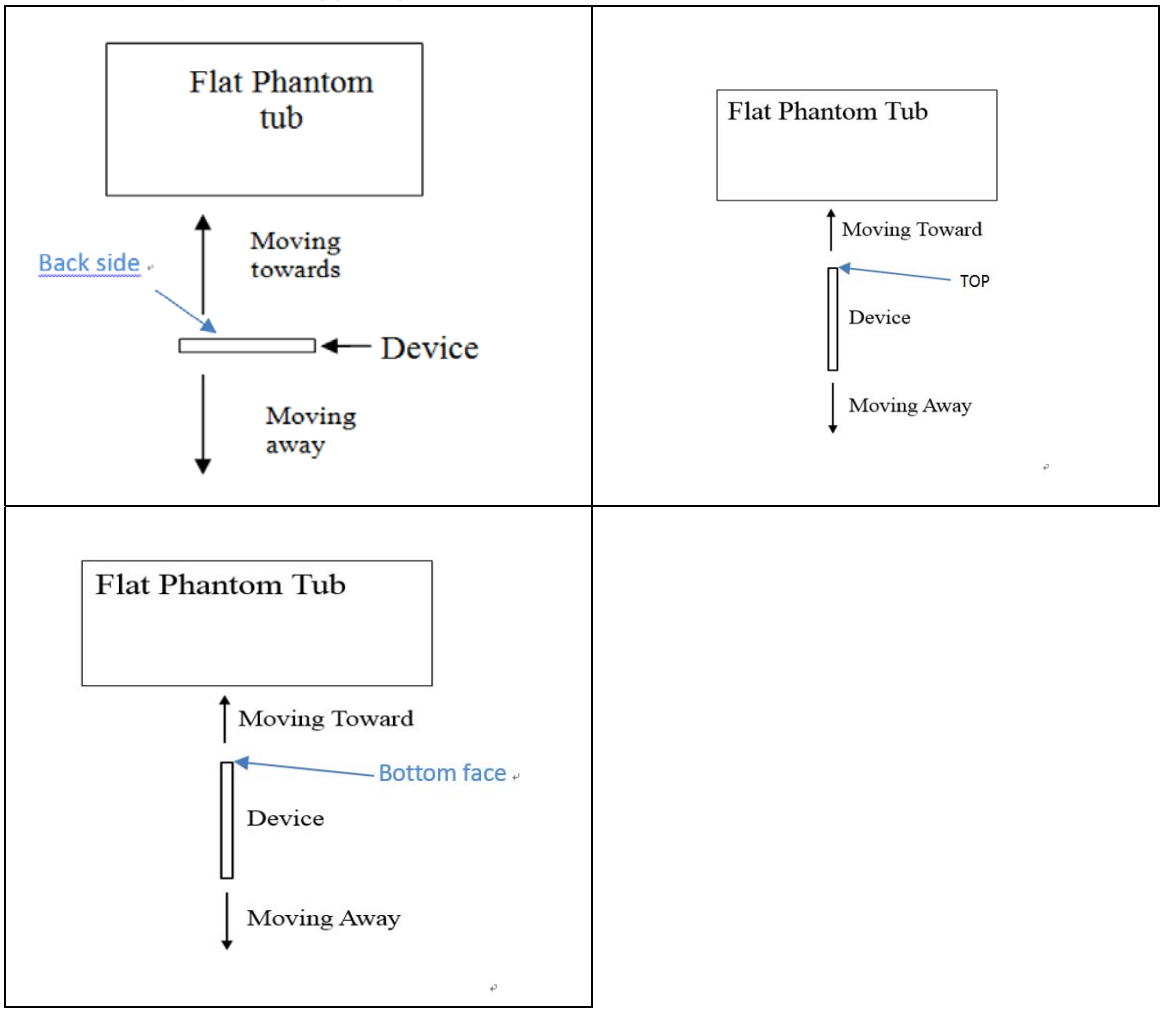


Table: Full power (Moving away from phantom)

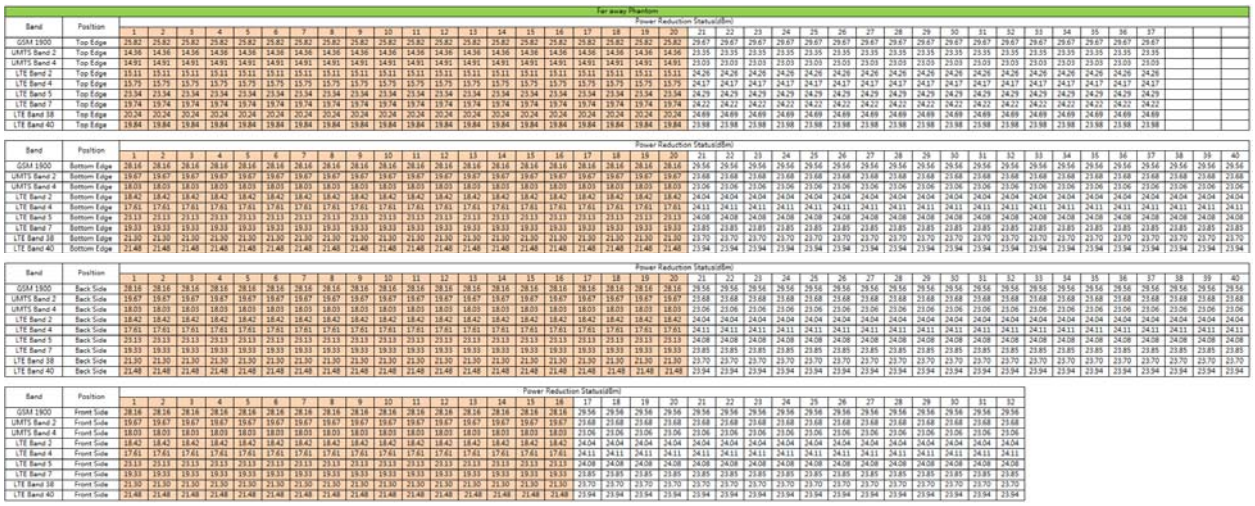
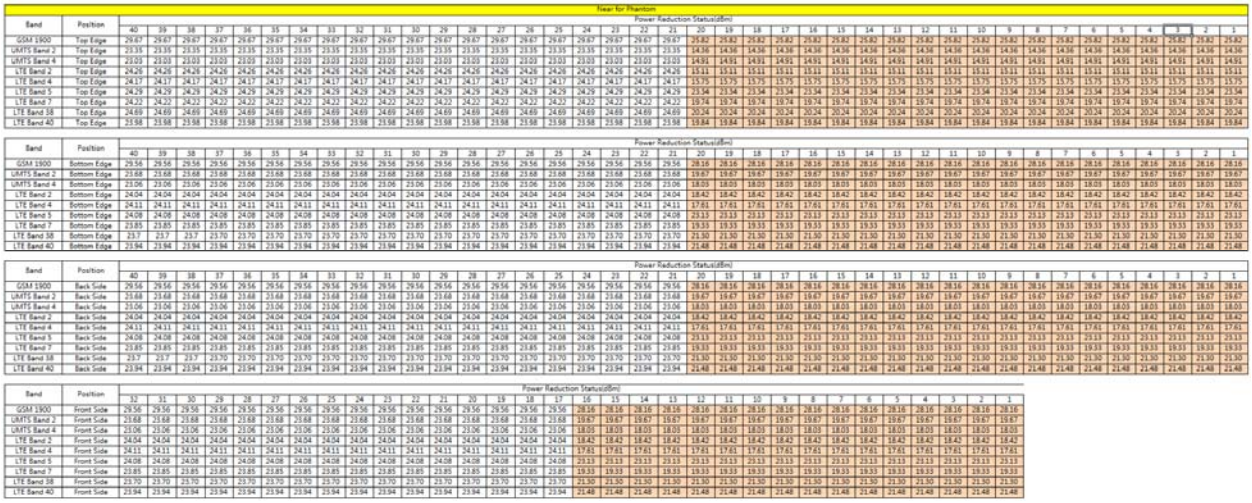


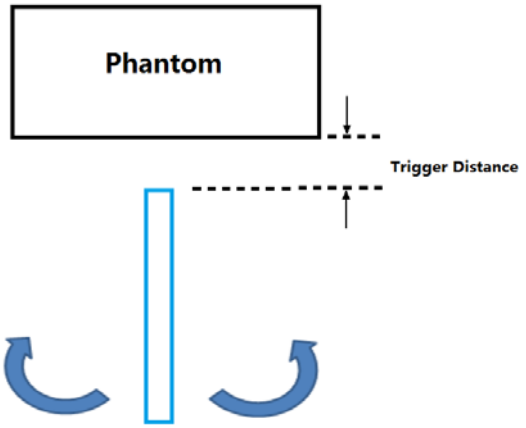
Table: Reduced power (Moving toward phantom)



The DUT was positioned directly below the flat phantom at the minimum measured trigger distance for each band.

If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated.

This procedure was repeated until the power remained reduced for all angles up to +/-45°



Picture: Proximity sensor tilt angle assessment

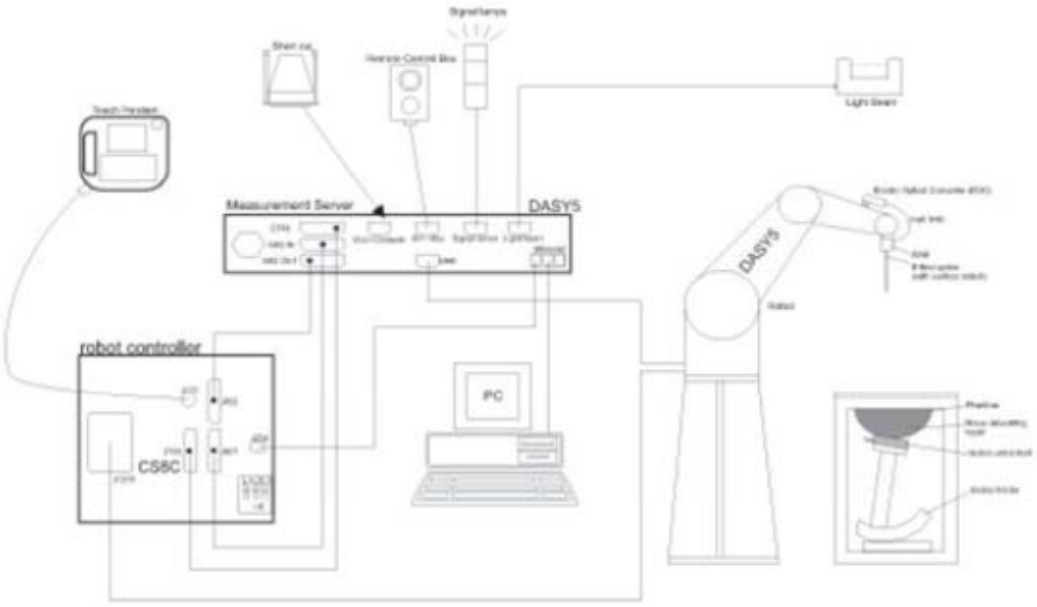
Summary of tablet Tilt angle Influence to Proximity Sensor Triggering (Top Edge)

Band	Power reduction status										
	-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
GSM 1900	on	on	on	on	on	on	on	on	on	on	on
WCDMA B2	on	on	on	on	on	on	on	on	on	on	on
WCDMA B4	on	on	on	on	on	on	on	on	on	on	on
LTE B2	on	on	on	on	on	on	on	on	on	on	on
LTE B4	on	on	on	on	on	on	on	on	on	on	on
LTE B5	on	on	on	on	on	on	on	on	on	on	on
LTE B7	on	on	on	on	on	on	on	on	on	on	on
LTE B38	on	on	on	on	on	on	on	on	on	on	on
LTE B40	on	on	on	on	on	on	on	on	on	on	on

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 EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

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.

<table>
<tr><td></td><td>≤3 GHz</td><td>> 3 GHz</td></tr>
<tr><td>Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface</td><td>5 ± 1 mm</td><td>½·δ·ln(2) ± 0.5 mm</td></tr>
<tr><td>Maximum probe angle from probe axis to phantom surface normal at the measurement location</td><td>30° ± 1°</td><td>20° ± 1°</td></tr>
<tr><td rowspan="2">Maximum area scan spatial resolution: ΔxArea, ΔyArea</td><td>≤ 2 GHz: ≤ 15 mm
2 – 3 GHz: ≤ 12 mm</td><td>3 – 4 GHz: ≤ 12 mm
4 – 6 GHz: ≤ 10 mm</td></tr>
<tr><td colspan="2">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.</td></tr>
</table>

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.

<table>
<tr><td colspan="3"></td><td>≤3GHz</td><td>> 3 GHz</td></tr>
<tr><td colspan="3">Maximum zoom scan spatial resolution: $\triangle x_{zoom} \triangle y_{zoom}$</td><td>≤2GHz: ≤8mm
2 – 3GHz: ≤5mm*</td><td>3 – 4GHz: ≤5mm*
4 – 6GHz: ≤4mm*</td></tr>
<tr><td rowspan="3">Maximum zoom scan spatial resolution, normal to phantom surface</td><td colspan="2">Uniform grid: $\triangle z_{zoom}(n)$</td><td>≤5mm</td><td>3 – 4GHz: ≤4mm
4 – 5GHz: ≤3mm
5 – 6GHz: ≤2mm</td></tr>
<tr><td rowspan="2">Graded grid</td><td>$\triangle z_{zoom}(1)$: between 1st two points closest to phantom surface</td><td>≤4mm</td><td>3 – 4GHz: ≤3mm
4 – 5GHz: ≤2.5mm
5 – 6GHz: ≤2mm</td></tr>
<tr><td>$\triangle z_{zoom}(n>1)$: between subsequent points</td><td colspan="2">≤1.5•$\triangle z_{zoom}(n-1)$</td></tr>
<tr><td>Minimum zoom scan volume</td><td colspan="2">X, y, z</td><td>≥30mm</td><td>3 – 4GHz: ≥28mm
4 – 5GHz: ≥25mm
5 – 6GHz: ≥22mm</td></tr>
<tr><td colspan="5">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 <u>reported</u> 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.</td></tr>
</table>

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	2020-05-17	2021-05-16
Dielectric Probe Kit	HP	85070E	US44020115	2020-05-17	2021-05-16
Power meter	Agilent	E4417A	GB41291714	2020-05-17	2021-05-16
Power sensor	Agilent	N8481H	MY50350004	2020-05-17	2021-05-16
Power sensor	Agilent	E9327A	US40441622	2020-05-17	2021-05-16
Dual directional coupler	Agilent	778D-012	50519	/	/
Dual directional coupler	Agilent	777D	50146	/	/
Dual directional coupler	UCL	UCL-DDC0 56G-S	20010600118	/	/
Amplifier	INDEXSAR	IXA-020	0401	2020-05-17	2021-05-16
Wireless communication tester	Anritsu	MT8820C	6201342015	2020-05-17	2021-05-16
Wireless communication tester	Key sight	E5515C	MY48360988	2020-12-13	2021-12-12
Wideband radio communication tester	R&S	CMW 500	113645	2020-05-17	2021-05-16
Base Station Simulator	R&S	CMW270	100673	2020-05-17	2021-05-16
E-field Probe	SPEAG	EX3DV4	3677	2020-07-06	2021-07-05
DAE	SPEAG	DAE4	1291	2020-02-24	2021-02-23
Validation Kit 835MHz	SPEAG	D835V2	4d020	2020-08-28	2023-08-27
Validation Kit 1750MHz	SPEAG	D1750V2	1033	2020-02-25	2023-02-24
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	2020-08-27	2023-08-26
Validation Kit 2450MHz	SPEAG	D2450V2	786	2020-08-27	2023-08-26
Validation Kit 2600MHz	SPEAG	D2600V2	1025	2018-05-02	2021-05-01
Validation Kit 5GHz	SPEAG	D5GHzV2	1151	2020-02-27	2023-02-26
Temperature Probe	Tianjin jinming	JM222	381	2020-05-25	2021-05-24
Hygrothermograph	Anymetr	HTC-1	TY2020A043	2020-05-19	2021-05-18
Twin SAM Phantom	Speag	SAM1	1534	/	/
Software for Test	Speag	DASY52	/	/	/
Softwarefor Tissue	Agilent	85070	/	/	/

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 24 hours 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)
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
Frequency (MHz)	**Water (%)**	**Diethylenglycol monohexylether**			**Triton X-100**		**ε_r**	**σ(s/m)**
5250	65.53	17.24			17.23		35.9	4.71
5600	65.53	17.24			17.23		35.5	5.07
5750	65.53	17.24			17.23		35.4	5.22

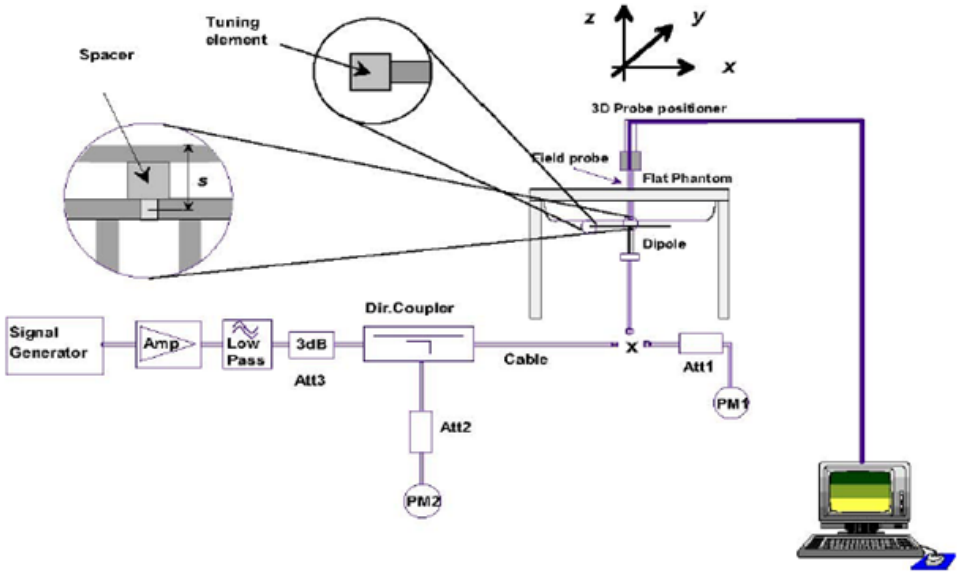
Measurements results

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(%)
835	12/28/2020	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	12/29/2020	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
1750	1/10/2021	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	1/11/2021	21.5	40.1	1.34	40.1	1.37	0.00	-2.19
1900	12/31/2020	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	1/1/2021	21.5	40.2	1.43	40.0	1.40	0.50	2.14
	1/2/2021	21.5	40.0	1.40	40.0	1.40	0.00	0.00
	1/3/2021	21.5	40.5	1.34	40.0	1.40	1.25	-4.29
2450	12/18/2020	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	12/24/2020	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	12/26/2020	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02
	1/7/2021	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
	1/8/2021	21.5	38.5	1.95	39.0	1.96	-1.28	-0.51
	1/9/2021	21.5	38.2	1.96	39.0	1.96	-2.05	0.00
5250	12/19/2020	21.5	35.5	4.80	35.9	4.71	-1.11	1.91
5600	12/18/2020	21.5	34.2	5.21	35.5	5.07	-3.66	2.76
5750	12/17/2020	21.5	34.9	5.21	35.4	5.22	-1.41	-0.19
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 1System 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 D2600V2 SN: 1025	Head Liquid	5/2/2018	-22.0	/	48.1	/
		5/1/2019	-22.5	-2.2	48.7	-0.6

System Check results

Frequency (MHz)	Test Date	Temp ℃	250mW /100mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
835	12/28/2020	21.5	2.44	9.76	9.65	1.14	1
	12/29/2020	21.5	2.46	9.84	9.65	1.97	2
1750	1/10/2021	21.5	8.95	35.80	35.90	-0.28	3
	1/11/2021	21.5	9.11	36.44	35.90	1.50	4
1900	12/31/2020	21.5	9.88	39.52	39.50	0.05	5
	1/1/2021	21.5	9.85	39.40	39.50	-0.25	6
	1/2/2021	21.5	10.55	42.20	39.50	6.84	7
	1/3/2021	21.5	10.50	42.00	39.50	6.33	8
2450	12/18/2020	21.5	13.70	54.80	52.30	4.78	9
2600	12/24/2020	21.5	13.90	55.60	54.10	2.77	10
	12/26/2020	21.5	13.88	55.52	54.10	2.62	11
	1/7/2021	21.5	13.94	55.76	54.10	3.07	12
	1/8/2021	21.5	13.90	55.60	54.10	2.77	13
	1/9/2021	21.5	13.90	55.60	54.10	2.77	14
5250	12/19/2020	21.5	7.87	78.70	78.00	0.90	15
5600	12/18/2020	21.5	7.67	76.70	80.50	-4.72	16
5750	12/17/2020	21.5	7.66	76.60	77.40	-1.03	17
Note: Target Values used derive from the calibration certificate Data Storage and Evaluation.							

8.3 SAR System Validation

Per FCC KDB 865664 D02v01, SAR system verification is required to confirm measurement accuracy. The SAR systems (including SAR probes, system components and software versions) used for this device were validated against its performance specifications prior to the SAR measurements. Reference dipoles are used with the required tissue-equivalent media for system validation, according to the procedures outlined in FCC KDB 865664 D01 and IEEE 1528-2013. Since SAR probe calibrations are frequency dependent, each probe calibration point must be validated at a frequency within the valid frequency range of the probe calibration point, using the system that normally operates with the probe for routine SAR measurements and according to the required tissue-equivalent media.

A tabulated summary of the system validation status, measurement frequencies, SAR probes, calibrated signal type(s) and tissue dielectric parameters has been included.

Frequency [MHz]	Date	Probe SN	Probe Type	Probe Cal Point		PERM (Er)	COND (Σ)	CW Validation			Mod. Validation		
								Sensitivity	Probe Linearity	Probe Isotropy	Mod. Type	Duty Factor	PAR
750	7/6/2020	3677	EX3DV4	750	Head	42.81	0.85	PASS	PASS	PASS	FDD	PASS	N/A
835	7/6/2020	3677	EX3DV4	835	Head	42.22	0.90	PASS	PASS	PASS	GMSK	PASS	N/A
1750	7/6/2020	3677	EX3DV4	1750	Head	39.91	1.32	PASS	PASS	PASS	NA	N/A	N/A
1900	7/6/2020	3677	EX3DV4	1900	Head	39.43	1.42	PASS	PASS	PASS	GMSK	PASS	N/A
2450	7/6/2020	3677	EX3DV4	2450	Head	38.19	1.83	PASS	PASS	PASS	OFDM	PASS	PASS
2600	7/6/2020	3677	EX3DV4	2600	Head	37.60	1.99	PASS	PASS	PASS	TDD	PASS	N/A
5250	7/6/2020	3677	EX3DV4	5250	Head	35.36	4.83	PASS	PASS	PASS	OFDM	N/A	PASS
5600	7/6/2020	3677	EX3DV4	5600	Head	34.43	5.29	PASS	PASS	PASS	OFDM	N/A	PASS
5750	7/6/2020	3677	EX3DV4	5750	Head	34.07	5.47	PASS	PASS	PASS	OFDM	N/A	PASS
750	7/6/2020	3677	EX3DV4	750	Body	55.35	0.99	PASS	PASS	PASS	FDD	PASS	N/A
835	7/6/2020	3677	EX3DV4	835	Body	54.88	0.98	PASS	PASS	PASS	GMSK	PASS	N/A
1750	7/6/2020	3677	EX3DV4	1750	Body	51.24	1.44	PASS	PASS	PASS	NA	N/A	N/A
1900	7/6/2020	3677	EX3DV4	1900	Body	50.98	1.56	PASS	PASS	PASS	GMSK	PASS	N/A
2450	7/6/2020	3677	EX3DV4	2450	Body	50.59	1.95	PASS	PASS	PASS	OFDM	PASS	PASS
2600	7/6/2020	3677	EX3DV4	2600	Body	50.14	2.13	PASS	PASS	PASS	TDD	PASS	N/A
5250	7/6/2020	3677	EX3DV4	5250	Body	47.37	5.44	PASS	PASS	PASS	OFDM	N/A	PASS
5600	7/6/2020	3677	EX3DV4	5600	Body	46.42	5.99	PASS	PASS	PASS	OFDM	N/A	PASS
5750	7/6/2020	3677	EX3DV4	5750	Body	46.02	6.23	PASS	PASS	PASS	OFDM	N/A	PASS

NOTE: While the probes have been calibrated for both CW and modulated signals, all measurements were performed using communication systems calibrated for CW signals only. Modulations in the table above represent test configurations for which the measurement system has been validated per FCC KDB Publication 865664D01v01 for scenarios when CW probe calibrations are used with other signal types. SAR systems were validated for modulated signals with a periodic duty cycle, such as GMSK, or with a high peak to average ratio (>5dB), such as OFDM according to KDB 865664.

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 D1&D2&D3		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	128 /824.2	190 /836.6	251 /848.8		MAX	128 /824.2	190 /836.6	251 /848.8
GSM	CS	33.50	32.73	32.96	32.68	9.03	24.47	23.70	23.93	23.65
GPRS/ EGPRS (GMSK)	1 Tx Slot	33.50	32.70	33.01	32.65	9.03	24.47	23.67	23.98	23.62
	2 Tx Slots	30.00	29.51	29.65	29.86	6.02	23.98	23.49	23.63	23.84
	3 Tx Slots	28.50	27.92	27.92	28.11	4.26	24.24	23.66	23.66	23.85
	4 Tx Slots	27.50	26.70	26.82	26.72	3.01	**24.49**	23.69	23.81	23.71
EGPRS (8PSK)	1 Tx Slot	27.50	26.93	27.04	27.17	9.03	18.47	17.90	18.01	18.14
	2 Tx Slots	25.00	24.41	24.27	24.60	6.02	18.98	18.39	18.25	18.58
	3 Tx Slots	23.50	22.55	22.65	23.16	4.26	19.24	18.29	18.39	18.90
	4 Tx Slots	22.50	21.43	21.54	21.98	3.01	19.49	18.42	18.53	18.97
GSM 1900 D1		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GSM	CS	28.00	27.41	27.69	27.85	9.03	18.97	18.38	18.66	18.82
GPRS/ EGPRS (GMSK)	1 Tx Slot	28.00	27.49	27.81	27.93	9.03	18.97	18.46	18.78	18.90
	2 Tx Slots	26.50	25.90	26.25	26.41	6.02	20.48	19.88	20.23	20.39
	3 Tx Slots	25.00	24.29	24.57	24.85	4.26	20.74	20.03	20.31	20.59
	4 Tx Slots	24.00	23.15	23.59	23.73	3.01	**20.99**	20.14	20.58	20.72
EGPRS (8PSK)	1 Tx Slot	26.50	25.72	25.79	25.92	9.03	17.47	16.69	16.76	16.89
	2 Tx Slots	24.00	23.22	23.52	23.83	6.02	17.98	17.20	17.50	17.81
	3 Tx Slots	22.50	21.83	21.89	22.12	4.26	18.24	17.57	17.63	17.86
	4 Tx Slots	21.80	21.19	21.29	21.50	3.01	18.79	18.18	18.28	18.49
GSM 1900 D2		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GSM	CS	30.50	29.44	29.56	29.80	9.03	21.47	20.41	20.53	20.77
GPRS/	1 Tx Slot	30.50	29.52	29.69	29.86	9.03	**21.47**	20.49	20.66	20.83

EGPRS (GMSK)	2 Tx Slots	26.50	25.85	26.24	26.37	6.02	20.48	19.83	20.22	20.35
	3 Tx Slots	25.00	24.25	24.56	24.82	4.26	20.74	19.99	20.30	20.56
	4 Tx Slots	24.00	23.10	23.56	23.68	3.01	20.99	20.09	20.55	20.67
EGPRS (8PSK)	1 Tx Slot	26.50	25.73	25.82	26.42	9.03	17.47	16.70	16.79	17.39
	2 Tx Slots	24.00	22.92	23.53	23.73	6.02	17.98	16.90	17.51	17.71
	3 Tx Slots	22.50	21.68	22.03	22.35	4.26	18.24	17.42	17.77	18.09
	4 Tx Slots	21.80	21.19	21.27	21.30	3.01	18.79	18.18	18.26	18.29
GSM 1900 D3		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GSM	CS	29.00	28.00	28.16	28.45	9.03	19.97	18.97	19.13	19.42
GPRS/ EGPRS (GMSK)	1 Tx Slot	29.00	28.02	28.18	28.49	9.03	**19.97**	18.99	19.15	19.46
	2 Tx Slots	25.00	23.87	24.11	24.45	6.02	18.98	17.85	18.09	18.43
	3 Tx Slots	23.50	22.32	22.64	22.98	4.26	19.24	18.06	18.38	18.72
	4 Tx Slots	22.50	21.13	21.57	21.86	3.01	19.49	18.12	18.56	18.85
EGPRS (8PSK)	1 Tx Slot	26.50	25.17	25.31	25.56	9.03	17.47	16.14	16.28	16.53
	2 Tx Slots	24.00	23.16	23.07	23.17	6.02	17.98	17.14	17.05	17.15
	3 Tx Slots	22.50	21.29	21.49	22.08	4.26	18.24	17.03	17.23	17.82
	4 Tx Slots	21.80	20.73	20.84	21.31	3.01	18.79	17.72	17.83	18.30

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:
1. Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 1 time slot for Max power, based on the output power measurements above..

Second – Antenna

GSM 850 D1		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	128 /824.2	190 /836.6	251 /848.8		MAX	128 /824.2	190 /836.6	251 /848.8
GSM	CS	32.00	31.57	31.61	31.59	9.03	22.97	22.54	22.58	22.56
GPRS/ EGPRS (GMSK)	1 Tx Slot	32.00	31.31	30.65	31.21	9.03	**22.97**	22.28	21.62	22.18
	2 Tx Slots	28.50	27.55	27.50	27.70	6.02	22.48	21.53	21.48	21.68
	3 Tx Slots	27.00	25.88	25.91	26.15	4.26	22.74	21.62	21.65	21.89
	4 Tx Slots	25.00	23.91	23.88	24.11	3.01	21.99	20.90	20.87	21.10
EGPRS (8PSK)	1 Tx Slot	27.50	26.91	26.98	27.23	9.03	18.47	17.88	17.95	18.20
	2 Tx Slots	25.00	24.23	24.28	24.58	6.02	18.98	18.21	18.26	18.56
	3 Tx Slots	23.50	22.57	22.76	22.97	4.26	19.24	18.31	18.50	18.71
	4 Tx Slots	22.50	21.60	21.80	21.91	3.01	19.49	18.59	18.79	18.90

GSM 850 D2&D3		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	128 /824.2	190 /836.6	251 /848.8		MAX	128 /824.2	190 /836.6	251 /848.8
GSM	CS	33.50	32.40	32.45	32.47	9.03	24.47	23.37	23.42	23.44
GPRS/ EGPRS (GMSK)	1 Tx Slot	33.50	32.23	32.08	32.14	9.03	24.47	23.20	23.05	23.11
	2 Tx Slots	30.00	29.02	29.11	29.28	6.02	23.98	23.00	23.09	23.26
	3 Tx Slots	28.50	27.44	27.30	27.60	4.26	24.24	23.18	23.04	23.34
	4 Tx Slots	27.50	26.27	26.38	26.29	3.01	**24.49**	23.26	23.37	23.28
EGPRS (8PSK)	1 Tx Slot	27.50	26.94	26.95	27.25	9.03	18.47	17.91	17.92	18.22
	2 Tx Slots	25.00	24.24	24.38	24.63	6.02	18.98	18.22	18.36	18.61
	3 Tx Slots	23.50	22.61	22.78	22.97	4.26	19.24	18.35	18.52	18.71
	4 Tx Slots	22.50	21.52	21.90	21.70	3.01	19.49	18.51	18.89	18.69

GSM 1900 D1		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GSM	CS	22.00	21.32	21.60	21.86	9.03	12.97	12.29	12.57	12.83
GPRS/ EGPRS (GMSK)	1 Tx Slot	22.00	21.37	21.64	21.88	9.03	12.97	12.34	12.61	12.85
	2 Tx Slots	21.00	20.19	20.50	20.77	6.02	14.98	14.17	14.48	14.75
	3 Tx Slots	19.50	18.63	18.87	19.13	4.26	**15.24**	14.37	14.61	14.87
	4 Tx Slots	16.50	16.03	16.28	16.36	3.01	13.49	13.02	13.27	13.35
EGPRS (8PSK)	1 Tx Slot	22.00	21.31	21.57	21.77	9.03	12.97	12.28	12.54	12.74
	2 Tx Slots	21.00	20.09	20.37	20.46	6.02	14.98	14.07	14.35	14.44
	3 Tx Slots	19.50	18.46	18.75	18.89	4.26	15.24	14.20	14.49	14.63
	4 Tx Slots	16.50	15.47	15.83	15.96	3.01	13.49	12.46	12.82	12.95

GSM 1900 D2		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GSM	CS	30.50	29.59	29.67	29.81	9.03	21.47	20.56	20.64	20.78
GPRS/ EGPRS (GMSK)	1 Tx Slot	30.50	29.61	29.63	29.87	9.03	**21.47**	20.58	20.60	20.84
	2 Tx Slots	26.50	25.83	26.14	26.36	6.02	20.48	19.81	20.12	20.34
	3 Tx Slots	25.00	24.21	24.42	24.72	4.26	20.74	19.95	20.16	20.46
	4 Tx Slots	24.00	22.98	23.38	23.51	3.01	20.99	19.97	20.37	20.50
EGPRS (8PSK)	1 Tx Slot	26.50	26.23	26.31	26.30	9.03	17.47	17.20	17.28	17.27
	2 Tx Slots	24.00	23.61	23.63	23.71	6.02	17.98	17.59	17.61	17.69
	3 Tx Slots	22.50	21.90	21.92	22.00	4.26	18.24	17.64	17.66	17.74
	4 Tx Slots	21.80	20.96	21.01	20.99	3.01	18.79	17.95	18.00	17.98
GSM 1900 D3		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1850.2	661 /1880	810 /1909.8		MAX	512 /1850.2	661 /1880	810 /1909.8
GSM	CS	26.50	25.59	25.82	26.08	9.03	17.47	16.56	16.79	17.05
GPRS/ EGPRS (GMSK)	1 Tx Slot	26.50	25.63	25.90	26.12	9.03	17.47	16.60	16.87	17.09
	2 Tx Slots	24.00	23.47	23.83	23.95	6.02	17.98	17.45	17.81	17.93
	3 Tx Slots	23.00	22.38	22.64	22.88	4.26	18.74	18.12	18.38	18.62
	4 Tx Slots	22.00	21.20	21.48	21.76	3.01	**18.99**	18.19	18.47	18.75
EGPRS (8PSK)	1 Tx Slot	26.00	25.66	25.88	25.96	9.03	16.97	16.63	16.85	16.93
	2 Tx Slots	24.00	23.13	23.71	23.76	6.02	17.98	17.11	17.69	17.74
	3 Tx Slots	22.50	21.87	21.98	22.13	4.26	18.24	17.61	17.72	17.87
	4 Tx Slots	21.80	20.96	21.09	21.11	3.01	18.79	17.95	18.08	18.10

Notes: The worst-case configuration and mode for SAR testing is determined to be as follows:
1. Standalone: GSM 850 GMSK (GPRS) mode with 1 time slot (D1) /4 time slots (D2&D3) for Max power, GSM 1900 GMSK (GPRS) mode with 3 time slot (D1) / 1 time slot (D2) / 4 time slots (D3) for Max power, based on the output power measurements above..

9.2 WCDMA Mode

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

Main- Antenna

WCDMA		Band II(dBm) D1&D2				Band IV(dBm) D1&D2				Band V(dBm) D1&D2&D3			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	23.59	23.68	**23.78**	24.00	23.01	**23.06**	22.92	24.00	23.51	**23.62**	23.56	24.00
AMR	12.2kbps	23.49	23.59	23.65	24.00	22.91	22.97	22.79	24.00	23.41	23.53	23.43	24.00
HSDPA	Sub 1	22.11	22.20	22.30	22.50	22.43	22.48	22.34	22.50	22.33	22.44	22.38	22.50
	Sub 2	22.10	22.19	22.29	22.50	22.42	22.47	22.33	22.50	22.32	22.43	22.37	22.50
	Sub 3	21.89	21.98	22.08	22.50	21.91	21.96	21.82	22.50	21.81	21.92	21.86	22.50
	Sub 4	21.88	21.97	22.07	22.50	21.90	21.95	21.81	22.50	21.80	21.91	21.85	22.50
HSUPA	Sub 1	20.97	21.06	21.16	21.50	20.99	21.04	20.90	21.50	20.89	21.00	20.94	21.50
	Sub 2	20.56	20.65	20.75	21.50	20.58	20.63	20.49	21.50	20.48	20.59	20.53	21.50
	Sub 3	21.24	21.34	21.44	21.50	21.16	21.22	21.08	21.50	21.16	21.28	21.22	21.50
	Sub 4	19.93	20.03	20.13	21.50	20.35	20.41	20.27	21.50	20.35	20.47	20.41	21.50
	Sub 5	21.22	21.32	21.42	21.50	21.14	21.20	21.06	21.50	21.14	21.26	21.20	21.50
DC-HSDPA	Sub 1	22.03	22.14	22.22	22.50	22.35	22.42	22.26	22.50	22.25	22.38	22.30	22.50
	Sub 2	22.02	22.13	22.21	22.50	22.34	22.41	22.25	22.50	22.24	22.37	22.29	22.50
	Sub 3	21.90	21.92	22.02	22.50	21.92	21.90	21.76	22.50	21.82	21.86	21.80	22.50
	Sub 4	21.89	21.91	22.01	22.50	21.91	21.89	21.75	22.50	21.81	21.85	21.79	22.50
HSPA+	16QAM	21.08	21.19	21.29	21.50	21.10	21.17	21.03	21.50	21.00	21.13	21.07	21.50
Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.													

WCDMA		Band II(dBm) D3				Band IV(dBm) D3			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
RMC	12.2kbps	19.52	19.67	**19.72**	20.00	**18.06**	18.03	17.93	19.00
AMR	12.2kbps	19.42	19.58	19.59	20.00	17.96	17.94	17.80	19.00
HSDPA	Sub 1	18.94	19.09	19.14	20.00	17.48	17.45	17.35	19.00
	Sub 2	18.93	19.08	19.13	20.00	17.47	17.44	17.34	19.00
	Sub 3	18.92	19.07	19.12	20.00	18.56	18.53	18.43	19.00
	Sub 4	18.91	19.06	19.11	20.00	18.55	18.52	18.42	19.00
HSUPA	Sub 1	19.10	19.25	19.30	20.00	17.64	17.61	17.51	19.00
	Sub 2	19.09	19.24	19.29	20.00	17.23	17.20	17.10	19.00

	Sub 3	18.97	19.13	19.18	20.00	18.21	18.19	18.09	19.00
	Sub 4	18.96	19.12	19.17	20.00	18.20	18.18	18.08	19.00
	Sub 5	18.95	19.11	19.16	20.00	18.19	18.17	18.07	19.00
DC-HSDPA	Sub 1	19.26	19.43	19.46	20.00	17.40	17.39	17.27	19.00
	Sub 2	19.35	19.52	19.55	20.00	17.39	17.38	17.26	19.00
	Sub 3	18.93	19.01	19.06	20.00	18.57	18.47	18.37	19.00
	Sub 4	18.92	19.00	19.05	20.00	18.56	18.46	18.36	19.00
HSPA+	16QAM	19.21	19.38	19.43	20.00	17.75	17.74	17.64	19.00
Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.									

Second - Antenna

WCDMA		Band II(dBm) D1&D3				Band IV(dBm) D1&D3				Band V(dBm) D1			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	14.31	14.36	**14.48**	15.00	14.83	**14.91**	14.15	16.00	21.82	**21.91**	21.88	22.50
AMR	12.2kbps	14.21	14.27	14.35	15.00	14.73	14.82	14.02	16.00	21.72	21.82	21.75	22.50
HSDPA	Sub 1	14.43	14.48	14.60	15.00	15.05	15.13	15.23	16.00	21.84	21.93	21.90	22.50
	Sub 2	14.42	14.47	14.59	15.00	15.04	15.12	15.12	16.00	21.83	21.92	21.89	22.50
	Sub 3	14.21	14.26	14.38	15.00	15.43	15.51	14.75	16.00	21.32	21.41	21.38	22.50
	Sub 4	14.20	14.25	14.37	15.00	15.42	15.50	14.74	16.00	21.31	21.40	21.37	22.50
HSUPA	Sub 1	14.79	14.84	14.96	15.00	15.31	15.39	14.35	16.00	20.40	20.49	20.46	21.50
	Sub 2	14.38	14.43	14.55	15.00	14.90	14.98	15.23	16.00	19.99	20.08	20.05	21.50
	Sub 3	14.56	14.62	14.74	15.00	15.08	15.17	15.04	16.00	20.97	21.07	21.04	21.50
	Sub 4	14.05	14.11	14.23	15.00	15.27	15.36	15.36	16.00	19.96	20.06	20.03	21.50
	Sub 5	14.54	14.60	14.72	15.00	15.06	15.15	15.26	16.00	20.95	21.05	21.02	21.50
DC-HSDPA	Sub 1	14.35	14.42	14.52	15.00	14.97	15.07	15.49	16.00	21.76	21.87	21.82	22.50
	Sub 2	14.34	14.41	14.51	15.00	14.96	15.06	15.48	16.00	21.75	21.86	21.81	22.50
	Sub 3	14.22	14.20	14.32	15.00	15.44	15.45	14.69	16.00	21.33	21.35	21.32	22.50
	Sub 4	14.21	14.19	14.31	15.00	15.43	15.44	14.68	16.00	21.32	21.34	21.31	22.50
HSPA+	16QAM	14.40	14.47	14.59	15.00	15.42	15.52	15.26	16.00	20.51	20.62	20.59	21.50
Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.													

WCDMA		Band II(dBm) D2				Band IV(dBm) D2				Band V(dBm)			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-up Limit	4132	4183	4233	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6		826.4	836.6	846.6	
RMC	12.2kbps	23.34	23.35	**23.47**	24.00	23.01	**23.03**	22.97	24.00	23.33	**23.41**	23.34	24.00
AMR	12.2kbps	23.24	23.26	23.34	24.00	22.91	22.94	22.84	24.00	23.23	23.32	23.21	24.00
HSDPA	Sub 1	22.16	22.17	22.29	22.50	22.43	22.45	22.39	22.50	22.15	22.23	22.16	22.50
	Sub 2	22.15	22.16	22.28	22.50	22.42	22.44	22.38	22.50	22.14	22.22	22.15	22.50
	Sub 3	22.24	22.25	22.37	22.50	21.91	21.93	21.87	22.50	21.63	21.71	21.64	22.50
	Sub 4	22.23	22.24	22.36	22.50	21.90	21.92	21.86	22.50	21.62	21.70	21.63	22.50
HSUPA	Sub 1	21.32	21.33	21.45	21.50	20.99	21.01	20.95	21.50	20.71	20.79	20.72	21.50
	Sub 2	20.91	20.92	21.04	21.50	20.58	20.60	20.54	21.50	20.30	20.38	20.31	21.50
	Sub 3	21.29	21.31	21.43	21.50	20.86	20.89	20.83	21.50	21.28	21.37	21.30	21.50
	Sub 4	20.68	20.70	20.82	21.50	20.65	20.68	20.62	21.50	20.27	20.36	20.29	21.50
	Sub 5	21.27	21.29	21.41	21.50	20.84	20.87	20.81	21.50	21.26	21.35	21.28	21.50
DC-HSDPA	Sub 1	22.08	22.11	22.21	22.50	22.35	22.39	22.31	22.50	22.07	22.17	22.08	22.50
	Sub 2	22.07	22.10	22.20	22.50	22.34	22.38	22.30	22.50	22.06	22.16	22.07	22.50
	Sub 3	22.25	22.19	22.31	22.50	21.92	21.87	21.81	22.50	21.64	21.65	21.58	22.50
	Sub 4	22.24	22.18	22.30	22.50	21.91	21.86	21.80	22.50	21.63	21.64	21.57	22.50
HSPA+	16QAM	20.83	20.86	20.98	21.50	21.10	21.14	21.08	21.50	20.82	20.92	20.85	21.50
Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.													

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
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3

Main- Antenna

LTE FDD Band 2 D1&D2				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	23.89	24.09	24.10	25.50
		1	2	23.81	24.08	24.19	25.50
		1	5	23.74	23.91	24.10	25.50
		3	0	23.96	24.08	24.13	25.50
		3	2	23.85	24.15	24.21	25.50
		3	3	23.80	24.05	24.15	25.50
		6	0	23.08	23.20	23.11	24.50
	16QAM	1	0	23.29	23.26	23.22	24.50
		1	2	23.27	23.25	23.20	24.50
		1	5	23.19	23.34	23.27	24.50
		3	0	23.21	23.10	23.08	24.50
		3	2	23.15	23.20	23.23	24.50
		3	3	23.10	23.13	22.94	24.50
		6	0	22.17	22.22	22.26	23.50
	64QAM	1	0	23.22	23.11	23.23	23.50
		1	2	23.19	23.14	23.21	23.50
		1	5	23.17	23.20	23.24	23.50
		3	0	23.17	23.27	23.26	23.50
		3	2	23.22	23.16	23.20	23.50
		3	3	23.16	23.16	23.09	23.50
		6	0	22.18	22.20	22.24	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	23.91	24.13	24.13	25.50

		1	7	23.79	24.11	24.23	25.50
		1	14	23.77	23.96	24.14	25.50
		8	0	23.06	23.20	23.26	24.50
		8	4	22.97	23.25	23.33	24.50
		8	7	22.90	23.16	23.25	24.50
		15	0	23.08	23.24	23.14	24.50
	16QAM	1	0	23.32	23.28	23.25	24.50
		1	7	23.30	23.25	23.24	24.50
		1	14	23.21	23.38	23.30	24.50
		8	0	22.32	22.23	22.20	23.50
		8	4	22.26	22.33	22.35	23.50
		8	7	22.20	22.25	22.07	23.50
		15	0	22.20	22.26	22.29	23.50
	64QAM	1	0	23.25	23.13	23.26	23.50
		1	7	23.22	23.14	23.23	23.50
		1	14	23.19	23.19	23.27	23.50
		8	0	22.28	22.40	22.38	22.50
		8	4	22.33	22.29	22.32	22.50
		8	7	22.26	22.28	22.22	22.50
		15	0	22.21	22.24	22.27	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	23.88	24.11	24.09	25.50
		1	13	23.77	24.07	24.20	25.50
		1	24	23.74	23.91	24.10	25.50
		12	0	23.03	23.15	23.22	24.50
		12	6	22.95	23.21	23.28	24.50
		12	13	22.88	23.14	23.21	24.50
		25	0	23.08	23.23	23.12	24.50
	16QAM	1	0	23.29	23.24	23.22	24.50
		1	13	23.27	23.23	23.21	24.50
		1	24	23.18	23.36	23.26	24.50
		12	0	22.30	22.19	22.17	23.50
		12	6	22.23	22.28	22.31	23.50
		12	13	22.17	22.20	22.03	23.50
		25	0	22.18	22.22	22.24	23.50
	64QAM	1	0	23.22	23.13	23.23	23.50
		1	13	23.19	23.16	23.20	23.50
		1	24	23.20	23.17	23.23	23.50
		12	0	22.26	22.36	22.39	22.50
		12	6	22.30	22.24	22.28	22.50
		12	13	22.23	22.23	22.18	22.50
		25	0	22.19	22.20	22.22	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	23.90	24.12	24.12	25.50
		1	25	23.80	24.12	24.24	25.50
		1	49	23.76	23.95	24.13	25.50
		25	0	23.06	23.20	23.26	24.50
		25	13	22.98	23.26	23.32	24.50
		25	25	22.90	23.18	23.26	24.50
		50	0	23.12	23.25	23.16	24.50
	16QAM	1	0	23.31	23.27	23.24	24.50
		1	25	23.30	23.27	23.24	24.50
		1	49	23.21	23.38	23.29	24.50
		25	0	22.33	22.24	22.21	23.50
		25	13	22.25	22.32	22.34	23.50
		25	25	22.20	22.25	22.07	23.50
		50	0	22.21	22.27	22.28	23.50
	64QAM	1	0	23.24	23.12	23.25	23.50
		1	25	23.22	23.16	23.23	23.50
		1	49	23.19	23.19	23.26	23.50
		25	0	22.29	22.41	22.39	22.50
		25	13	22.32	22.28	22.31	22.50
		25	25	22.26	22.28	22.22	22.50
		50	0	22.22	22.25	22.26	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	23.89	24.08	24.10	25.50
		1	38	23.78	24.11	24.21	25.50
		1	74	23.73	23.90	24.09	25.50
		36	0	23.04	23.16	23.23	24.50
		36	18	22.95	23.21	23.28	24.50
		36	39	22.87	23.15	23.22	24.50
		75	0	23.10	23.21	23.11	24.50
	16QAM	1	0	23.26	23.25	23.22	24.50
		1	38	23.28	23.24	23.22	24.50
		1	74	23.18	23.34	23.26	24.50
		36	0	22.30	22.22	22.18	23.50
		36	18	22.22	22.27	22.30	23.50
		36	39	22.18	22.21	22.04	23.50
		75	0	22.18	22.22	22.24	23.50
	64QAM	1	0	23.19	23.10	23.23	23.50
		1	38	23.20	23.13	23.21	23.50
		1	74	23.20	23.18	23.27	23.50
		36	0	22.28	22.43	22.40	22.50

		36	18	22.30	22.25	22.30	22.50
		36	39	22.24	22.24	22.19	22.50
		75	0	22.19	22.20	22.22	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	**23.86**	24.04	24.07	25.50
		1	50	23.77	**24.07**	**24.19**	25.50
		1	99	23.71	23.89	24.06	25.50
		50	0	**23.01**	23.11	23.19	24.50
		50	25	22.93	**23.17**	**23.25**	24.50
		50	50	22.84	23.10	23.18	24.50
		100	0	23.07	**23.16**	23.07	24.50
	16QAM	1	0	23.15	23.21	23.17	24.50
		1	50	23.24	23.22	23.18	24.50
		1	99	23.16	23.31	23.24	24.50
		50	0	22.27	22.18	22.15	23.50
		50	25	22.19	22.25	22.27	23.50
		50	50	22.15	22.16	22.00	23.50
		100	0	22.16	22.18	22.21	23.50
	64QAM	1	0	23.17	23.06	23.18	23.50
		1	50	23.16	23.11	23.17	23.50
		1	99	23.14	23.12	23.21	23.50
		50	0	22.23	22.35	22.33	22.50
		50	25	22.26	22.21	22.24	22.50
		50	50	22.21	22.19	22.15	22.50
		100	0	22.17	22.16	22.19	22.50

LTE FDD Band 2 D3				**Conducted Power(dBm)**			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	18.49	18.55	18.67	20.00
		1	2	18.59	18.60	18.76	20.00
		1	5	18.38	18.51	18.66	20.00
		3	0	18.63	18.69	18.70	20.00
		3	2	18.55	18.61	18.83	20.00
		3	3	18.46	18.61	18.77	20.00
		6	0	18.48	18.61	18.75	20.00
	16QAM	1	0	18.87	18.71	18.69	20.00
		1	2	18.89	18.81	18.83	20.00
		1	5	18.82	18.77	18.70	20.00
		3	0	18.83	18.76	18.70	20.00
		3	2	18.99	18.93	18.89	20.00

		3	3	18.99	18.96	18.87	20.00
		6	0	18.81	18.83	18.77	20.00
	64QAM	1	0	18.90	18.84	18.70	20.00
		1	2	18.92	18.77	18.76	20.00
		1	5	18.96	18.91	18.85	20.00
		3	0	18.91	18.86	18.79	20.00
		3	2	19.08	18.99	18.95	20.00
		3	3	18.92	18.90	18.82	20.00
		6	0	18.82	18.82	18.76	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	18.46	18.51	18.64	20.00
		1	7	18.58	18.56	18.74	20.00
		1	14	18.36	18.50	18.63	20.00
		8	0	18.60	18.64	18.66	20.00
		8	4	18.53	18.57	18.80	20.00
		8	7	18.43	18.56	18.73	20.00
		15	0	18.45	18.56	18.71	20.00
	16QAM	1	0	18.87	18.67	18.64	20.00
		1	7	18.85	18.79	18.79	20.00
		1	14	18.80	18.74	18.68	20.00
		8	0	18.80	18.72	18.67	20.00
		8	4	18.96	18.91	18.86	20.00
		8	7	18.96	18.91	18.83	20.00
		15	0	18.79	18.79	18.74	20.00
	64QAM	1	0	18.88	18.80	18.65	20.00
		1	7	18.88	18.75	18.72	20.00
		1	14	18.90	18.85	18.79	20.00
		8	0	18.86	18.78	18.72	20.00
		8	4	19.04	18.95	18.89	20.00
		8	7	18.89	18.85	18.78	20.00
		15	0	18.80	18.78	18.73	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	18.43	18.49	18.60	20.00
		1	13	18.56	18.52	18.71	20.00
		1	24	18.33	18.45	18.59	20.00
		12	0	18.57	18.59	18.62	20.00
		12	6	18.51	18.53	18.75	20.00
		12	13	18.41	18.54	18.69	20.00
		25	0	18.45	18.55	18.69	20.00
	16QAM	1	0	18.84	18.63	18.61	20.00
		1	13	18.82	18.77	18.76	20.00

		1	24	18.77	18.72	18.64	20.00
		12	0	18.78	18.68	18.64	20.00
		12	6	18.93	18.86	18.82	20.00
		12	13	18.93	18.86	18.79	20.00
		25	0	18.77	18.75	18.69	20.00
	64QAM	1	0	18.85	18.80	18.62	20.00
		1	13	18.85	18.77	18.69	20.00
		1	24	18.91	18.83	18.75	20.00
		12	0	18.84	18.74	18.73	20.00
		12	6	19.01	18.90	18.85	20.00
		12	13	18.86	18.80	18.74	20.00
		25	0	18.78	18.74	18.68	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	18.45	18.50	18.63	20.00
		1	25	18.59	18.57	18.75	20.00
		1	49	18.35	18.49	18.62	20.00
		25	0	18.60	18.64	18.66	20.00
		25	13	18.54	18.58	18.79	20.00
		25	25	18.43	18.58	18.74	20.00
		50	0	18.49	18.57	18.73	20.00
	16QAM	1	0	18.86	18.66	18.63	20.00
		1	25	18.85	18.81	18.79	20.00
		1	49	18.80	18.74	18.67	20.00
		25	0	18.81	18.73	18.68	20.00
		25	13	18.95	18.90	18.85	20.00
		25	25	18.96	18.91	18.83	20.00
		50	0	18.80	18.80	18.73	20.00
	64QAM	1	0	18.87	18.79	18.64	20.00
		1	25	18.88	18.77	18.72	20.00
		1	49	18.90	18.85	18.78	20.00
		25	0	18.87	18.79	18.73	20.00
		25	13	19.03	18.94	18.88	20.00
		25	25	18.89	18.85	18.78	20.00
		50	0	18.81	18.79	18.72	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	18.44	18.46	18.61	20.00
		1	38	18.57	18.56	18.72	20.00
		1	74	18.32	18.44	18.58	20.00
		36	0	18.58	18.60	18.63	20.00
		36	18	18.51	18.53	18.75	20.00
		36	39	18.40	18.55	18.70	20.00

		75	0	18.47	18.53	18.68	20.00
	16QAM	1	0	18.81	18.64	18.61	20.00
		1	38	18.83	18.78	18.77	20.00
		1	74	18.77	18.70	18.64	20.00
		36	0	18.78	18.71	18.65	20.00
		36	18	18.92	18.85	18.81	20.00
		36	39	18.94	18.87	18.80	20.00
		75	0	18.77	18.75	18.69	20.00
	64QAM	1	0	18.82	18.77	18.62	20.00
		1	38	18.86	18.74	18.70	20.00
		1	74	18.91	18.84	18.79	20.00
		36	0	18.86	18.81	18.74	20.00
		36	18	19.01	18.91	18.87	20.00
		36	39	18.87	18.81	18.75	20.00
		75	0	18.78	18.74	18.68	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	18.41	18.42	18.58	20.00
		1	50	**18.56**	**18.52**	**18.70**	20.00
		1	99	18.30	18.43	18.55	20.00
		50	0	**18.55**	**18.55**	18.59	20.00
		50	25	18.49	18.49	**18.72**	20.00
		50	50	18.37	18.50	18.66	20.00
		100	0	18.44	18.48	**18.64**	20.00
	16QAM	1	0	18.68	18.60	18.56	20.00
		1	50	18.79	18.76	18.73	20.00
		1	99	18.75	18.67	18.62	20.00
		50	0	18.75	18.67	18.62	20.00
		50	25	18.89	18.83	18.78	20.00
		50	50	18.91	18.82	18.76	20.00
		100	0	18.75	18.71	18.66	20.00
	64QAM	1	0	18.80	18.73	18.57	20.00
		1	50	18.82	18.72	18.66	20.00
		1	99	18.85	18.78	18.73	20.00
		50	0	18.81	18.73	18.67	20.00
		50	25	18.97	18.87	18.81	20.00
		50	50	18.84	18.76	18.71	20.00
		100	0	18.76	18.70	18.65	20.00

LTE FDD Band 4 D1&D2				**Conducted Power(dBm)**			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	

1.4MHz	QPSK	1	0	24.20	24.16	24.04	25.50
		1	2	24.20	24.13	24.06	25.50
		1	5	24.21	24.00	23.99	25.50
		3	0	24.33	24.10	24.07	25.50
		3	2	24.27	24.06	24.13	25.50
		3	3	24.24	24.10	24.12	25.50
		6	0	23.34	23.18	23.09	24.50
	16QAM	1	0	23.60	23.67	23.59	24.50
		1	2	23.58	23.57	23.45	24.50
		1	5	23.44	23.42	23.22	24.50
		3	0	23.22	23.17	22.97	24.50
		3	2	23.22	23.19	22.98	24.50
		3	3	23.19	23.18	22.95	24.50
		6	0	22.24	22.24	22.00	23.50
	64QAM	1	0	23.31	23.25	23.24	23.50
		1	2	23.31	23.27	23.21	23.50
		1	5	23.18	23.21	23.08	23.50
		3	0	23.29	23.24	23.17	23.50
		3	2	23.29	23.25	23.20	23.50
		3	3	23.20	23.19	23.08	23.50
		6	0	22.26	22.27	22.19	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	24.22	24.20	24.07	25.50
		1	7	24.18	24.16	24.10	25.50
		1	14	24.24	24.05	24.03	25.50
		8	0	23.43	23.22	23.20	24.50
		8	4	23.39	23.16	23.25	24.50
		8	7	23.34	23.21	23.22	24.50
		15	0	23.34	23.22	23.12	24.50
	16QAM	1	0	23.63	23.69	23.62	24.50
		1	7	23.61	23.57	23.49	24.50
		1	14	23.46	23.46	23.25	24.50
		8	0	22.33	22.30	22.09	23.50
		8	4	22.33	22.32	22.10	23.50
		8	7	22.29	22.30	22.08	23.50
		15	0	22.27	22.28	22.03	23.50
	64QAM	1	0	23.34	23.27	23.27	23.50
		1	7	23.34	23.27	23.23	23.50
		1	14	23.20	23.20	23.11	23.50
		8	0	22.40	22.37	22.29	22.50
		8	4	22.40	22.38	22.32	22.50
		8	7	22.30	22.31	22.21	22.50

		15	0	22.29	22.31	22.22	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	24.19	24.18	24.03	25.50
		1	13	24.16	24.12	24.07	25.50
		1	24	24.21	24.00	23.99	25.50
		12	0	23.40	23.17	23.16	24.50
		12	6	23.37	23.12	23.20	24.50
		12	13	23.32	23.19	23.18	24.50
		25	0	23.34	23.21	23.10	24.50
	16QAM	1	0	23.60	23.65	23.59	24.50
		1	13	23.58	23.55	23.46	24.50
		1	24	23.43	23.44	23.21	24.50
		12	0	22.31	22.26	22.06	23.50
		12	6	22.30	22.27	22.06	23.50
		12	13	22.26	22.25	22.04	23.50
		25	0	22.25	22.24	21.98	23.50
	64QAM	1	0	23.31	23.27	23.24	23.50
		1	13	23.31	23.29	23.20	23.50
		1	24	23.21	23.18	23.07	23.50
		12	0	22.38	22.33	22.30	22.50
		12	6	22.37	22.33	22.28	22.50
		12	13	22.27	22.26	22.17	22.50
		25	0	22.27	22.27	22.17	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	24.21	24.19	24.06	25.50
		1	25	24.19	24.17	24.11	25.50
		1	49	24.23	24.04	24.02	25.50
		25	0	23.43	23.22	23.20	24.50
		25	13	23.40	23.17	23.24	24.50
		25	25	23.34	23.23	23.23	24.50
		50	0	23.38	23.23	23.14	24.50
	16QAM	1	0	23.62	23.68	23.61	24.50
		1	25	23.61	23.59	23.49	24.50
		1	49	23.46	23.46	23.24	24.50
		25	0	22.34	22.31	22.10	23.50
		25	13	22.32	22.31	22.09	23.50
		25	25	22.29	22.30	22.08	23.50
		50	0	22.28	22.29	22.02	23.50
	64QAM	1	0	23.33	23.26	23.26	23.50
		1	25	23.34	23.29	23.23	23.50
		1	49	23.20	23.20	23.10	23.50

		25	0	22.41	22.38	22.30	22.50
		25	13	22.39	22.37	22.31	22.50
		25	25	22.30	22.31	22.21	22.50
		50	0	22.30	22.32	22.21	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	24.20	24.15	24.04	25.50
		1	38	24.17	24.16	24.08	25.50
		1	74	24.20	23.99	23.98	25.50
		36	0	23.41	23.18	23.17	24.50
		36	18	23.37	23.12	23.20	24.50
		36	39	23.31	23.20	23.19	24.50
		75	0	23.36	23.19	23.09	24.50
	16QAM	1	0	23.57	23.66	23.59	24.50
		1	38	23.59	23.56	23.47	24.50
		1	74	23.43	23.42	23.21	24.50
		36	0	22.31	22.29	22.07	23.50
		36	18	22.29	22.26	22.05	23.50
		36	39	22.27	22.26	22.05	23.50
		75	0	22.25	22.24	21.98	23.50
	64QAM	1	0	23.28	23.24	23.24	23.50
		1	38	23.32	23.26	23.21	23.50
		1	74	23.21	23.19	23.11	23.50
		36	0	22.40	22.40	22.31	22.50
		36	18	22.37	22.34	22.30	22.50
		36	39	22.28	22.27	22.18	22.50
		75	0	22.27	22.27	22.17	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	24.17	24.11	24.01	25.50
		1	50	24.16	**24.12**	**24.06**	25.50
		1	99	**24.18**	23.98	23.95	25.50
		50	0	**23.38**	23.13	23.13	24.50
		50	25	23.35	23.08	**23.17**	24.50
		50	50	23.28	**23.15**	23.15	24.50
		100	0	**23.33**	23.14	23.05	24.50
	16QAM	1	0	23.65	23.62	23.54	24.50
		1	50	23.55	23.54	23.43	24.50
		1	99	23.41	23.39	23.19	24.50
		50	0	22.28	22.25	22.04	23.50
		50	25	22.26	22.24	22.02	23.50
		50	50	22.24	22.21	22.01	23.50
		100	0	22.23	22.20	21.95	23.50

	64QAM	1	0	23.26	23.20	23.19	23.50
		1	50	23.28	23.24	23.17	23.50
		1	99	23.15	23.13	23.05	23.50
		50	0	22.35	22.32	22.24	22.50
		50	25	22.33	22.30	22.24	22.50
		50	50	22.25	22.22	22.14	22.50
		100	0	22.25	22.23	22.14	22.50

LTE FDD Band 4 D3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	17.71	17.74	17.70	19.00
		1	2	17.63	17.63	17.56	19.00
		1	5	17.60	17.41	17.48	19.00
		3	0	17.67	17.72	17.69	19.00
		3	2	17.79	17.67	17.61	19.00
		3	3	17.77	17.60	17.53	19.00
		6	0	17.78	17.63	17.56	19.00
	16QAM	1	0	17.76	17.67	17.74	19.00
		1	2	17.78	17.67	17.74	19.00
		1	5	17.93	17.78	17.82	19.00
		3	0	17.89	17.75	17.79	19.00
		3	2	17.94	17.82	17.87	19.00
		3	3	17.87	17.75	17.78	19.00
		6	0	17.69	17.72	17.72	19.00
	64QAM	1	0	17.91	17.76	17.82	19.00
		1	2	17.89	17.66	17.77	19.00
		1	5	17.82	17.69	17.73	19.00
		3	0	17.89	17.77	17.81	19.00
		3	2	18.04	17.84	17.93	19.00
		3	3	17.82	17.73	17.75	19.00
		6	0	17.65	17.59	17.62	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	17.68	17.70	17.67	19.00
		1	7	17.62	17.59	17.54	19.00
		1	14	17.58	17.40	17.45	19.00
		8	0	17.64	17.67	17.65	19.00
		8	4	17.77	17.63	17.58	19.00
		8	7	17.74	17.55	17.49	19.00
		15	0	17.75	17.58	17.52	19.00
	16QAM	1	0	17.76	17.63	17.69	19.00

		1	7	17.74	17.65	17.70	19.00
		1	14	17.91	17.75	17.80	19.00
		8	0	17.86	17.71	17.76	19.00
		8	4	17.91	17.80	17.84	19.00
		8	7	17.84	17.70	17.74	19.00
		15	0	17.67	17.68	17.69	19.00
	64QAM	1	0	17.89	17.72	17.77	19.00
		1	7	17.85	17.64	17.73	19.00
		1	14	17.76	17.63	17.67	19.00
		8	0	17.84	17.69	17.74	19.00
		8	4	18.00	17.80	17.87	19.00
		8	7	17.79	17.68	17.71	19.00
		15	0	17.63	17.55	17.59	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	17.65	17.68	17.63	19.00
		1	13	17.60	17.55	17.51	19.00
		1	24	17.55	17.35	17.41	19.00
		12	0	17.61	17.62	17.61	19.00
		12	6	17.75	17.59	17.53	19.00
		12	13	17.72	17.53	17.45	19.00
		25	0	17.75	17.57	17.50	19.00
	16QAM	1	0	17.73	17.59	17.66	19.00
		1	13	17.71	17.63	17.67	19.00
		1	24	17.88	17.73	17.76	19.00
		12	0	17.84	17.67	17.73	19.00
		12	6	17.88	17.75	17.80	19.00
		12	13	17.81	17.65	17.70	19.00
		25	0	17.65	17.64	17.64	19.00
	64QAM	1	0	17.86	17.72	17.74	19.00
		1	13	17.82	17.66	17.70	19.00
		1	24	17.77	17.61	17.63	19.00
		12	0	17.82	17.65	17.75	19.00
		12	6	17.97	17.75	17.83	19.00
		12	13	17.76	17.63	17.67	19.00
		25	0	17.61	17.51	17.54	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	17.67	17.69	17.66	19.00
		1	25	17.63	17.60	17.55	19.00
		1	49	17.57	17.39	17.44	19.00
		25	0	17.64	17.67	17.65	19.00
		25	13	17.78	17.64	17.57	19.00

		25	25	17.74	17.57	17.50	19.00
		50	0	17.79	17.59	17.54	19.00
	16QAM	1	0	17.75	17.62	17.68	19.00
		1	25	17.74	17.67	17.70	19.00
		1	49	17.91	17.75	17.79	19.00
		25	0	17.87	17.72	17.77	19.00
		25	13	17.90	17.79	17.83	19.00
		25	25	17.84	17.70	17.74	19.00
		50	0	17.68	17.69	17.68	19.00
	64QAM	1	0	17.88	17.71	17.76	19.00
		1	25	17.85	17.66	17.73	19.00
		1	49	17.76	17.63	17.66	19.00
		25	0	17.85	17.70	17.75	19.00
		25	13	17.99	17.79	17.86	19.00
		25	25	17.79	17.68	17.71	19.00
		50	0	17.64	17.56	17.58	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	17.66	17.65	17.64	19.00
		1	38	17.61	17.59	17.52	19.00
		1	74	17.54	17.34	17.40	19.00
		36	0	17.62	17.63	17.62	19.00
		36	18	17.75	17.59	17.53	19.00
		36	39	17.71	17.54	17.46	19.00
		75	0	17.77	17.55	17.49	19.00
	16QAM	1	0	17.70	17.60	17.66	19.00
		1	38	17.72	17.64	17.68	19.00
		1	74	17.88	17.71	17.76	19.00
		36	0	17.84	17.70	17.74	19.00
		36	18	17.87	17.74	17.79	19.00
		36	39	17.82	17.66	17.71	19.00
		75	0	17.65	17.64	17.64	19.00
	64QAM	1	0	17.83	17.69	17.74	19.00
		1	38	17.83	17.63	17.71	19.00
		1	74	17.77	17.62	17.67	19.00
		36	0	17.84	17.72	17.76	19.00
		36	18	17.97	17.76	17.85	19.00
		36	39	17.77	17.64	17.68	19.00
		75	0	17.61	17.51	17.54	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	**17.63**	**17.61**	**17.61**	19.00
		1	50	17.60	17.55	17.50	19.00

		1	99	17.52	17.33	17.37	19.00
		50	0	17.59	**17.58**	**17.58**	19.00
		50	25	**17.73**	17.55	17.50	19.00
		50	50	17.68	17.49	17.42	19.00
		100	0	**17.74**	17.50	17.45	19.00
	16QAM	1	0	17.71	17.56	17.61	19.00
		1	50	17.68	17.62	17.64	19.00
		1	99	17.86	17.68	17.74	19.00
		50	0	17.81	17.66	17.71	19.00
		50	25	17.84	17.72	17.76	19.00
		50	50	17.79	17.61	17.67	19.00
		100	0	17.63	17.60	17.61	19.00
	64QAM	1	0	17.81	17.65	17.69	19.00
		1	50	17.79	17.61	17.67	19.00
		1	99	17.71	17.56	17.61	19.00
		50	0	17.79	17.64	17.69	19.00
		50	25	17.93	17.72	17.79	19.00
		50	50	17.74	17.59	17.64	19.00
		100	0	17.59	17.47	17.51	19.00

LTE FDD Band 5 D1&D2				**Conducted Power(dBm)**			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	24.06	24.13	24.04	25.50
		1	2	24.02	23.98	23.91	25.50
		1	5	23.97	23.88	23.89	25.50
		3	0	24.14	24.17	24.07	25.50
		3	2	24.05	24.09	24.13	25.50
		3	3	24.05	23.97	24.05	25.50
		6	0	23.10	23.00	23.02	24.50
	16QAM	1	0	23.00	23.10	23.04	24.50
		1	2	22.98	22.91	22.92	24.50
		1	5	23.04	22.89	22.87	24.50
		3	0	23.21	23.03	23.09	24.50
		3	2	23.08	23.01	23.07	24.50
		3	3	23.04	22.98	23.01	24.50
		6	0	22.14	22.14	22.12	23.50
	64QAM	1	0	23.04	22.98	23.05	23.50
		1	2	23.00	22.89	23.02	23.50
		1	5	22.86	22.86	23.17	23.50
		3	0	23.18	23.10	23.01	23.50
		3	2	23.14	23.00	23.12	23.50

		3	3	23.03	22.93	23.05	23.50
		6	0	22.16	22.15	22.17	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	24.05	24.15	24.03	25.50
		1	7	23.98	23.97	23.92	25.50
		1	14	23.97	23.88	23.89	25.50
		8	0	23.21	23.24	23.16	24.50
		8	4	23.15	23.15	23.20	24.50
		8	7	23.13	23.06	23.11	24.50
		15	0	23.10	23.03	23.03	24.50
	16QAM	1	0	23.00	23.08	23.04	24.50
		1	7	22.98	22.89	22.93	24.50
		1	14	23.03	22.91	22.86	24.50
		8	0	22.30	22.12	22.18	23.50
		8	4	22.16	22.09	22.15	23.50
		8	7	22.11	22.05	22.10	23.50
		15	0	22.15	22.14	22.10	23.50
	64QAM	1	0	23.04	23.00	23.05	23.50
		1	7	23.00	22.91	23.01	23.50
		1	14	22.89	22.83	23.16	23.50
		8	0	22.27	22.19	22.14	22.50
		8	4	22.22	22.08	22.20	22.50
		8	7	22.10	22.00	22.14	22.50
		15	0	22.17	22.15	22.15	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	24.06	24.12	24.04	25.50
		1	13	23.99	24.01	23.93	25.50
		1	24	23.96	23.87	23.88	25.50
		12	0	23.22	23.25	23.17	24.50
		12	6	23.15	23.15	23.20	24.50
		12	13	23.12	23.07	23.12	24.50
		25	0	23.12	23.01	23.02	24.50
	16QAM	1	0	22.97	23.09	23.04	24.50
		1	13	22.99	22.90	22.94	24.50
		1	24	23.03	22.89	22.86	24.50
		12	0	22.30	22.15	22.19	23.50
		12	6	22.15	22.08	22.14	23.50
		12	13	22.12	22.06	22.11	23.50
		25	0	22.15	22.14	22.10	23.50
	64QAM	1	0	23.01	22.97	23.05	23.50
		1	13	23.01	22.88	23.02	23.50

		1	24	22.89	22.84	23.20	23.50
		12	0	22.29	22.26	22.15	22.50
		12	6	22.22	22.09	22.22	22.50
		12	13	22.11	22.01	22.15	22.50
		25	0	22.17	22.15	22.15	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	**24.03**	**24.08**	**24.01**	25.50
		1	25	23.98	23.97	23.91	25.50
		1	49	23.94	23.86	23.85	25.50
		25	0	**23.19**	**23.20**	23.13	24.50
		25	13	23.13	23.11	**23.17**	24.50
		25	25	23.09	23.02	23.08	24.50
		50	0	**23.09**	22.96	22.98	24.50
	16QAM	1	0	23.14	23.05	22.99	24.50
		1	25	22.95	22.88	22.90	24.50
		1	49	23.01	22.86	22.84	24.50
		25	0	22.27	22.11	22.16	23.50
		25	13	22.12	22.06	22.11	23.50
		25	25	22.09	22.01	22.07	23.50
		50	0	22.13	22.10	22.07	23.50
	64QAM	1	0	22.99	22.93	23.00	23.50
		1	25	22.97	22.86	22.98	23.50
		1	49	22.83	22.78	23.14	23.50
		25	0	22.24	22.18	22.08	22.50
		25	13	22.18	22.05	22.16	22.50
		25	25	22.08	21.96	22.11	22.50
		50	0	22.15	22.11	22.12	22.50

LTE FDD Band 5 D3				**Conducted Power(dBm)**			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	23.20	23.18	23.19	24.50
		1	2	23.24	23.10	23.08	24.50
		1	5	23.14	23.04	23.08	24.50
		3	0	24.20	24.20	24.14	24.50
		3	2	24.12	24.17	24.22	24.50
		3	3	24.14	24.05	24.13	24.50
		6	0	23.23	23.16	23.15	24.50
	16QAM	1	0	22.74	23.09	23.17	24.50
		1	2	22.72	22.97	23.27	24.50
		1	5	22.68	23.10	23.31	24.50

		3	0	22.80	23.21	23.14	24.50
		3	2	22.71	23.16	23.26	24.50
		3	3	22.66	23.14	23.22	24.50
		6	0	21.79	22.25	22.24	23.50
	64QAM	1	0	22.69	23.17	23.14	23.50
		1	2	22.79	23.04	23.23	23.50
		1	5	22.70	23.04	23.10	23.50
		3	0	22.65	23.17	23.21	23.50
		3	2	22.59	23.26	23.26	23.50
		3	3	22.63	23.10	23.19	23.50
		6	0	21.67	22.11	22.29	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	23.20	23.17	23.19	24.50
		1	7	23.21	23.13	23.10	24.50
		1	14	23.13	23.03	23.07	24.50
		8	0	23.28	23.28	23.24	24.50
		8	4	23.22	23.23	23.29	24.50
		8	7	23.21	23.15	23.20	24.50
		15	0	23.25	23.17	23.15	24.50
	16QAM	1	0	22.71	23.08	23.17	24.50
		1	7	22.73	22.96	23.29	24.50
		1	14	22.67	23.10	23.30	24.50
		8	0	21.89	22.33	22.24	23.50
		8	4	21.78	22.23	22.33	23.50
		8	7	21.74	22.22	22.32	23.50
		15	0	21.80	22.25	22.22	23.50
	64QAM	1	0	22.66	23.16	23.14	23.50
		1	7	22.80	23.03	23.23	23.50
		1	14	22.73	23.02	23.13	23.50
		8	0	21.76	22.33	22.35	22.50
		8	4	21.67	22.35	22.36	22.50
		8	7	21.71	22.18	22.29	22.50
		15	0	21.68	22.11	22.27	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	23.21	23.21	23.21	24.50
		1	13	23.23	23.14	23.13	24.50
		1	24	23.16	23.08	23.11	24.50
		12	0	23.30	23.32	23.27	24.50
		12	6	23.25	23.28	23.33	24.50
		12	13	23.24	23.18	23.24	24.50
		25	0	23.27	23.21	23.20	24.50

	16QAM	1	0	22.76	23.10	23.19	24.50
		1	13	22.75	22.99	23.31	24.50
		1	24	22.70	23.14	23.33	24.50
		12	0	21.92	22.35	22.27	23.50
		12	6	21.81	22.28	22.37	23.50
		12	13	21.76	22.26	22.35	23.50
		25	0	21.83	22.30	22.26	23.50
	64QAM	1	0	22.71	23.18	23.16	23.50
		1	13	22.82	23.06	23.25	23.50
		1	24	22.72	23.03	23.12	23.50
		12	0	21.77	22.31	22.34	22.50
		12	6	21.69	22.38	22.37	22.50
		12	13	21.73	22.22	22.32	22.50
		25	0	21.71	22.16	22.31	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	23.17	**23.13**	**23.16**	24.50
		1	25	**23.20**	23.09	23.08	24.50
		1	49	23.11	23.02	23.04	24.50
		25	0	**23.25**	**23.23**	23.20	24.50
		25	13	23.20	23.19	**23.26**	24.50
		25	25	23.18	23.10	23.16	24.50
		50	0	**23.22**	23.12	23.11	24.50
	16QAM	1	0	22.73	23.04	23.12	24.50
		1	25	22.69	22.94	23.25	24.50
		1	49	22.65	23.07	23.28	24.50
		25	0	21.86	22.29	22.21	23.50
		25	13	21.75	22.21	22.30	23.50
		25	25	21.71	22.17	22.28	23.50
		50	0	21.78	22.21	22.19	23.50
	64QAM	1	0	22.64	23.12	23.09	23.50
		1	25	22.76	23.01	23.19	23.50
		1	49	22.67	22.96	23.07	23.50
		25	0	21.71	22.25	22.28	22.50
		25	13	21.63	22.31	22.30	22.50
		25	25	21.68	22.13	22.25	22.50
		50	0	21.66	22.07	22.24	22.50

LTE FDD Band 7 D1&D2				**Conducted Power(dBm)**			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	24.27	23.94	23.92	25.50

		1	13	24.30	23.92	23.98	25.50
		1	24	24.35	24.00	24.06	25.50
		12	0	23.34	23.06	23.03	24.50
		12	6	23.22	23.02	23.07	24.50
		12	13	23.40	22.93	23.00	24.50
		25	0	23.43	22.94	23.02	24.50
	16QAM	1	0	23.56	23.04	22.95	24.50
		1	13	23.54	22.92	22.95	24.50
		1	24	23.49	23.02	22.99	24.50
		12	0	22.35	22.15	22.08	23.50
		12	6	22.32	22.11	22.15	23.50
		12	13	22.23	22.08	22.09	23.50
		25	0	22.33	22.13	22.09	23.50
	64QAM	1	0	23.24	22.83	22.97	23.50
		1	13	23.27	22.92	23.02	23.50
		1	24	23.29	22.98	23.05	23.50
		12	0	22.15	22.06	22.11	22.50
		12	6	22.25	22.15	22.12	22.50
		12	13	22.36	22.11	22.10	22.50
		25	0	22.49	22.12	22.13	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	24.25	23.89	23.89	25.50
		1	25	24.29	23.92	23.96	25.50
		1	49	24.31	23.94	24.01	25.50
		25	0	23.32	23.02	23.00	24.50
		25	13	23.20	22.98	23.02	24.50
		25	25	23.37	22.92	22.97	24.50
		50	0	23.45	22.91	22.99	24.50
	16QAM	1	0	23.50	23.01	22.92	24.50
		1	25	23.52	22.91	22.93	24.50
		1	49	23.46	22.98	22.95	24.50
		25	0	22.33	22.14	22.06	23.50
		25	13	22.28	22.05	22.10	23.50
		25	25	22.21	22.04	22.06	23.50
		50	0	22.31	22.09	22.04	23.50
	64QAM	1	0	23.18	22.80	22.94	23.50
		1	25	23.25	22.91	23.00	23.50
		1	49	23.30	22.97	23.05	23.50
		25	0	22.15	22.09	22.13	22.50
		25	13	22.22	22.11	22.10	22.50
		25	25	22.34	22.07	22.07	22.50
		50	0	22.47	22.08	22.08	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	24.26	23.93	23.91	25.50
		1	38	24.31	23.93	23.99	25.50
		1	74	24.34	23.99	24.05	25.50
		36	0	23.34	23.06	23.03	24.50
		36	18	23.23	23.03	23.06	24.50
		36	39	23.40	22.95	23.01	24.50
		75	0	23.47	22.95	23.04	24.50
	16QAM	1	0	23.55	23.03	22.94	24.50
		1	38	23.54	22.94	22.95	24.50
		1	74	23.49	23.02	22.98	24.50
		36	0	22.36	22.16	22.09	23.50
		36	18	22.31	22.10	22.14	23.50
		36	39	22.23	22.08	22.09	23.50
		75	0	22.34	22.14	22.08	23.50
	64QAM	1	0	23.23	22.82	22.96	23.50
		1	38	23.27	22.94	23.02	23.50
		1	74	23.29	22.98	23.04	23.50
		36	0	22.16	22.07	22.12	22.50
		36	18	22.24	22.14	22.11	22.50
		36	39	22.36	22.11	22.10	22.50
		75	0	22.50	22.13	22.12	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	24.22	23.85	23.86	25.50
		1	50	24.28	23.88	23.94	25.50
		1	99	**24.29**	**23.93**	**23.98**	25.50
		50	0	23.29	**22.97**	22.96	24.50
		50	25	23.18	22.94	**22.99**	24.50
		50	50	**23.34**	22.87	22.93	24.50
		100	0	**23.42**	22.86	22.95	24.50
	16QAM	1	0	23.45	22.97	22.87	24.50
		1	50	23.48	22.89	22.89	24.50
		1	99	23.44	22.95	22.93	24.50
		50	0	22.30	22.10	22.03	23.50
		50	25	22.25	22.03	22.07	23.50
		50	50	22.18	21.99	22.02	23.50
		100	0	22.29	22.05	22.01	23.50
	64QAM	1	0	23.16	22.76	22.89	23.50
		1	50	23.21	22.89	22.96	23.50
		1	99	23.24	22.91	22.99	23.50
		50	0	22.10	22.01	22.06	22.50

		50	25	22.18	22.07	22.04	22.50
		50	50	22.31	22.02	22.03	22.50
		100	0	22.45	22.04	22.05	22.50

LTE FDD Band 7 D3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	19.40	19.42	19.35	21.00
		1	13	19.32	19.27	19.36	21.00
		1	24	19.42	19.26	19.47	21.00
		12	0	19.39	19.36	19.43	21.00
		12	6	19.41	19.19	19.50	21.00
		12	13	19.51	19.23	19.47	21.00
		25	0	19.42	19.17	19.39	21.00
	16QAM	1	0	19.53	19.41	19.50	21.00
		1	13	19.58	19.43	19.49	21.00
		1	24	19.62	19.45	19.43	21.00
		12	0	19.60	19.34	19.57	21.00
		12	6	19.68	19.32	19.52	21.00
		12	13	19.67	19.40	19.58	21.00
		25	0	19.72	19.31	19.57	21.00
	64QAM	1	0	19.72	19.42	19.53	21.00
		1	13	19.68	19.49	19.48	21.00
		1	24	19.72	19.56	19.53	21.00
		12	0	19.74	19.32	19.42	21.00
		12	6	19.70	19.42	19.51	21.00
		12	13	19.78	19.41	19.49	21.00
		25	0	19.81	19.37	19.53	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	19.38	19.39	19.33	21.00
		1	25	19.31	19.27	19.35	21.00
		1	49	19.40	19.23	19.45	21.00
		25	0	19.37	19.35	19.41	21.00
		25	13	19.41	19.18	19.48	21.00
		25	25	19.49	19.21	19.47	21.00
		50	0	19.40	19.17	19.38	21.00
	16QAM	1	0	19.49	19.35	19.47	21.00
		1	25	19.57	19.44	19.44	21.00
		1	49	19.60	19.41	19.41	21.00
		25	0	19.56	19.34	19.55	21.00
		25	13	19.64	19.26	19.49	21.00

		25	25	19.66	19.39	19.53	21.00
		50	0	19.69	19.29	19.52	21.00
		1	0	19.69	19.37	19.51	21.00
		1	25	19.67	19.49	19.45	21.00
		1	49	19.69	19.51	19.50	21.00
	64QAM	25	0	19.74	19.32	19.38	21.00
		25	13	19.65	19.38	19.46	21.00
		25	25	19.76	19.37	19.48	21.00
		50	0	19.81	19.36	19.49	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	19.38	19.37	19.32	21.00
		1	38	19.31	19.27	19.34	21.00
		1	74	19.38	19.20	19.42	21.00
		36	0	19.37	19.32	19.40	21.00
		36	18	19.39	19.15	19.45	21.00
		36	39	19.48	19.22	19.44	21.00
		75	0	19.43	19.14	19.36	21.00
	16QAM	1	0	19.47	19.38	19.47	21.00
		1	38	19.56	19.42	19.47	21.00
		1	74	19.59	19.41	19.39	21.00
		36	0	19.58	19.33	19.55	21.00
		36	18	19.64	19.26	19.47	21.00
		36	39	19.65	19.36	19.55	21.00
		75	0	19.70	19.27	19.52	21.00
	64QAM	1	0	19.66	19.39	19.50	21.00
		1	38	19.66	19.48	19.46	21.00
		1	74	19.69	19.52	19.49	21.00
		36	0	19.72	19.31	19.40	21.00
		36	18	19.66	19.36	19.46	21.00
		36	39	19.76	19.37	19.46	21.00
		75	0	19.79	19.33	19.48	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	19.35	**19.33**	19.29	21.00
		1	50	19.30	19.23	19.32	21.00
		1	99	**19.36**	19.19	**19.39**	21.00
		50	0	19.34	**19.27**	19.36	21.00
		50	25	19.37	19.11	**19.42**	21.00
		50	50	**19.45**	19.17	19.40	21.00
		100	0	**19.40**	19.09	19.32	21.00
	16QAM	1	0	19.45	19.34	19.42	21.00
		1	50	19.52	19.40	19.43	21.00

		1	99	19.57	19.38	19.37	21.00
		50	0	19.55	19.29	19.52	21.00
		50	25	19.61	19.24	19.44	21.00
		50	50	19.62	19.31	19.51	21.00
		100	0	19.68	19.23	19.49	21.00
	64QAM	1	0	19.64	19.35	19.45	21.00
		1	50	19.62	19.46	19.42	21.00
		1	99	19.67	19.49	19.47	21.00
		50	0	19.69	19.27	19.37	21.00
		50	25	19.63	19.34	19.43	21.00
		50	50	19.73	19.32	19.42	21.00
		100	0	19.77	19.29	19.45	21.00

LTE TDD Band 38 D1&D2				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	23.85	23.77	23.88	25.50
		1	13	23.80	23.74	23.90	25.50
		1	24	23.79	23.87	23.95	25.50
		12	0	22.88	22.94	22.85	24.50
		12	6	22.79	22.77	22.98	24.50
		12	13	22.84	22.86	22.91	24.50
		25	0	22.78	22.83	22.90	24.50
	16QAM	1	0	22.82	22.74	22.88	24.50
		1	13	22.80	23.03	23.05	24.50
		1	24	22.86	23.20	23.00	24.50
		12	0	22.03	21.99	21.92	23.50
		12	6	22.08	21.95	22.08	23.50
		12	13	22.15	21.87	22.02	23.50
		25	0	22.10	21.79	22.04	23.50
	64QAM	1	0	22.56	22.69	22.92	23.50
		1	13	22.91	22.77	22.98	23.50
		1	24	22.80	23.00	22.95	23.50
		12	0	21.79	21.84	22.04	22.50
		12	6	21.89	21.90	21.95	22.50
		12	13	21.88	21.97	22.00	22.50
		25	0	21.92	21.90	22.09	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	23.86	23.74	23.89	25.50
		1	25	23.81	23.78	23.91	25.50
		1	49	23.78	23.86	23.94	25.50

		25	0	22.89	22.95	22.86	24.50
		25	13	22.79	22.77	22.98	24.50
		25	25	22.83	22.87	22.92	24.50
		50	0	22.80	22.81	22.89	24.50
		1	0	22.79	22.75	22.88	24.50
		1	25	22.81	23.04	23.06	24.50
		1	49	22.86	23.18	23.00	24.50
	16QAM	25	0	22.03	22.02	21.93	23.50
		25	13	22.07	21.94	22.07	23.50
		25	25	22.16	21.88	22.03	23.50
		50	0	22.10	21.79	22.04	23.50
		1	0	22.53	22.66	22.92	23.50
		1	25	22.92	22.74	22.99	23.50
		1	49	22.80	23.01	22.99	23.50
	64QAM	25	0	21.81	21.91	22.05	22.50
		25	13	21.89	21.91	21.97	22.50
		25	25	21.89	21.98	22.01	22.50
		50	0	21.92	21.90	22.09	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	23.87	23.78	23.91	25.50
		1	38	23.83	23.79	23.94	25.50
		1	74	23.81	23.91	23.98	25.50
		36	0	22.91	22.99	22.89	24.50
		36	18	22.82	22.82	23.02	24.50
		36	39	22.86	22.90	22.96	24.50
		75	0	22.82	22.85	22.94	24.50
	16QAM	1	0	22.84	22.77	22.90	24.50
		1	38	22.83	23.07	23.08	24.50
		1	74	22.89	23.22	23.03	24.50
		36	0	22.06	22.04	21.96	23.50
		36	18	22.10	21.99	22.11	23.50
		36	39	22.18	21.92	22.06	23.50
		75	0	22.13	21.84	22.08	23.50
	64QAM	1	0	22.58	22.68	22.94	23.50
		1	38	22.94	22.77	23.01	23.50
		1	74	22.79	23.02	22.98	23.50
		36	0	21.82	21.89	22.04	22.50
		36	18	21.91	21.94	21.98	22.50
		36	39	21.91	22.02	22.04	22.50
		75	0	21.95	21.95	22.13	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	

20MHz	QPSK	1	0	**23.83**	23.70	23.86	25.50
		1	50	23.80	23.74	23.89	25.50
		1	99	23.76	**23.85**	**23.91**	25.50
		50	0	**22.86**	**22.90**	22.82	24.50
		50	25	22.77	22.73	**22.95**	24.50
		50	50	22.80	22.82	22.88	24.50
		100	0	22.77	22.76	**22.85**	24.50
	16QAM	1	0	22.88	22.71	22.83	24.50
		1	50	22.77	23.02	23.02	24.50
		1	99	22.84	23.15	22.98	24.50
		50	0	22.00	21.98	21.90	23.50
		50	25	22.04	21.92	22.04	23.50
		50	50	22.13	21.83	21.99	23.50
		100	0	22.08	21.75	22.01	23.50
	64QAM	1	0	22.51	22.62	22.87	23.50
		1	50	22.88	22.72	22.95	23.50
		1	99	22.74	22.95	22.93	23.50
		50	0	21.76	21.83	21.98	22.50
		50	25	21.85	21.87	21.91	22.50
		50	50	21.86	21.93	21.97	22.50
		100	0	21.90	21.86	22.06	22.50

LTE TDD Band 38 D3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	21.39	21.38	21.33	23.00
		1	13	21.43	21.47	21.50	23.00
		1	24	21.55	21.67	21.50	23.00
		12	0	21.52	21.51	21.34	23.00
		12	6	21.48	21.37	21.47	23.00
		12	13	21.48	21.43	21.46	23.00
		25	0	21.56	21.45	21.41	23.00
	16QAM	1	0	21.60	21.42	21.50	23.00
		1	13	21.59	21.45	21.66	23.00
		1	24	21.66	21.67	21.67	23.00
		12	0	21.50	21.46	21.39	23.00
		12	6	21.58	21.53	21.52	23.00
		12	13	21.60	21.50	21.44	23.00
		25	0	21.56	21.44	21.67	23.00
	64QAM	1	0	21.43	21.34	21.31	23.00
		1	13	21.41	21.38	21.56	23.00
		1	24	21.59	21.52	21.59	23.00

		12	0	21.39	21.51	21.45	22.50
		12	6	21.57	21.50	21.49	22.50
		12	13	21.61	21.48	21.53	22.50
		25	0	21.60	21.48	21.59	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	21.38	21.34	21.31	23.00
		1	25	21.41	21.46	21.47	23.00
		1	49	21.52	21.62	21.46	23.00
		25	0	21.50	21.47	21.31	23.00
		25	13	21.45	21.32	21.43	23.00
		25	25	21.45	21.40	21.42	23.00
		50	0	21.54	21.41	21.36	23.00
	16QAM	1	0	21.55	21.40	21.48	23.00
		1	25	21.57	21.42	21.64	23.00
		1	49	21.63	21.63	21.64	23.00
		25	0	21.47	21.44	21.36	23.00
		25	13	21.55	21.48	21.48	23.00
		25	25	21.58	21.46	21.41	23.00
		50	0	21.53	21.39	21.63	23.00
	64QAM	1	0	21.38	21.32	21.29	23.00
		1	25	21.39	21.35	21.54	23.00
		1	49	21.60	21.51	21.60	23.00
		25	0	21.38	21.53	21.46	22.50
		25	13	21.55	21.47	21.48	22.50
		25	25	21.59	21.44	21.50	22.50
		50	0	21.57	21.43	21.55	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	21.37	21.37	21.30	23.00
		1	38	21.40	21.42	21.46	23.00
		1	74	21.53	21.63	21.47	23.00
		36	0	21.49	21.46	21.30	23.00
		36	18	21.45	21.32	21.43	23.00
		36	39	21.46	21.39	21.41	23.00
		75	0	21.52	21.43	21.37	23.00
	16QAM	1	0	21.58	21.39	21.48	23.00
		1	38	21.56	21.41	21.63	23.00
		1	74	21.63	21.65	21.64	23.00
		36	0	21.47	21.41	21.35	23.00
		36	18	21.56	21.49	21.49	23.00
		36	39	21.57	21.45	21.40	23.00
		75	0	21.53	21.39	21.63	23.00

	64QAM	1	0	21.41	21.35	21.29	23.00
		1	38	21.38	21.38	21.53	23.00
		1	74	21.60	21.50	21.56	23.00
		36	0	21.36	21.46	21.45	22.50
		36	18	21.55	21.46	21.46	22.50
		36	39	21.58	21.43	21.49	22.50
		75	0	21.57	21.43	21.55	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	21.35	21.30	21.28	23.00
		1	50	21.40	21.42	**21.45**	23.00
		1	99	**21.50**	**21.61**	21.43	23.00
		50	0	**21.47**	**21.42**	21.27	23.00
		50	25	21.43	21.28	**21.40**	23.00
		50	50	21.42	21.35	21.38	23.00
		100	0	**21.51**	21.36	21.32	23.00
	16QAM	1	0	21.24	21.36	21.43	23.00
		1	50	21.53	21.40	21.60	23.00
		1	99	21.61	21.60	21.62	23.00
		50	0	21.44	21.40	21.33	23.00
		50	25	21.52	21.46	21.45	23.00
		50	50	21.55	21.41	21.37	23.00
		100	0	21.51	21.35	21.60	23.00
	64QAM	1	0	21.36	21.28	21.24	23.00
		1	50	21.35	21.33	21.50	23.00
		1	99	21.54	21.45	21.54	23.00
		50	0	21.33	21.45	21.39	22.50
		50	25	21.51	21.43	21.42	22.50
		50	50	21.56	21.39	21.46	22.50
		100	0	21.55	21.39	21.52	22.50

LTE TDD Band 41 D1&D2				**Conducted Power(dBm)**				Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				
				40065/2537.5	40385/2569.5	40705/2601.5	41215/2652.5	
5MHz	QPSK	1	0	23.95	24.01	24.11	24.39	25.50
		1	13	24.02	24.12	24.27	24.45	25.50
		1	24	24.11	24.13	24.39	24.59	25.50
		12	0	22.94	23.11	23.10	23.66	24.50
		12	6	23.07	23.13	23.24	23.66	24.50
		12	13	23.04	23.10	23.35	23.71	24.50
		25	0	23.03	23.17	23.35	23.63	24.50
	16QAM	1	0	23.15	23.23	23.13	23.18	24.50

		1	13	23.13	23.23	23.15	23.20	24.50
		1	24	22.98	23.11	23.01	23.03	24.50
		12	0	22.08	22.19	22.11	22.15	23.50
		12	6	22.13	22.24	22.15	22.17	23.50
		12	13	22.17	22.34	22.23	22.27	23.50
		25	0	22.00	22.15	22.05	22.07	23.50
	64QAM	1	0	22.97	23.12	23.01	23.03	23.50
		1	13	23.01	23.15	23.03	23.08	23.50
		1	24	23.06	23.22	23.08	23.18	23.50
		12	0	21.93	22.10	22.04	22.10	22.50
		12	6	22.08	22.22	22.12	22.18	22.50
		12	13	22.10	22.27	22.16	22.20	22.50
		25	0	21.99	22.14	22.04	22.06	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/2540	40390/2570	40690/2600	41190/2650	
		1	0	23.96	23.98	24.12	24.41	25.50
		1	25	24.03	24.16	24.28	24.46	25.50
		1	49	24.10	24.12	24.38	24.63	25.50
	QPSK	25	0	22.95	23.12	23.11	23.68	24.50
		25	13	23.07	23.13	23.24	23.68	24.50
		25	25	23.03	23.11	23.36	23.74	24.50
		50	0	23.05	23.15	23.34	23.61	24.50
		1	0	23.12	23.24	23.13	23.24	24.50
		1	25	23.14	23.24	23.16	23.22	24.50
		1	49	22.98	23.09	23.01	23.06	24.50
10MHz	16QAM	25	0	22.08	22.22	22.12	22.17	23.50
		25	13	22.12	22.23	22.14	22.21	23.50
		25	25	22.18	22.35	22.24	22.29	23.50
		50	0	22.00	22.15	22.05	22.09	23.50
		1	0	22.94	23.09	23.01	23.09	23.50
		1	25	23.02	23.12	23.04	23.10	23.50
		1	49	23.06	23.23	23.12	23.17	23.50
	64QAM	25	0	21.95	22.17	22.05	22.10	22.50
		25	13	22.08	22.23	22.14	22.21	22.50
		25	25	22.11	22.28	22.17	22.22	22.50
		50	0	21.99	22.14	22.04	22.08	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40115/2542.5	40395/2570.5	40685/2599.5	41165/2647.5	
		1	0	23.97	24.02	24.14	24.38	25.50
		1	38	24.05	24.17	24.31	24.44	25.50
15MHz	QPSK	1	74	24.13	24.17	24.42	24.60	25.50
		36	0	22.97	23.16	23.14	23.65	24.50
		36	18	23.10	23.18	23.28	23.66	24.50

		36	39	23.06	23.14	23.40	23.72	24.50
		75	0	23.07	23.19	23.39	23.61	24.50
		1	0	23.17	23.26	23.15	23.21	24.50
		1	38	23.16	23.27	23.18	23.19	24.50
		1	74	23.01	23.13	23.04	23.03	24.50
	16QAM	36	0	22.11	22.24	22.15	22.15	23.50
		36	18	22.15	22.28	22.18	22.18	23.50
		36	39	22.20	22.39	22.27	22.26	23.50
		75	0	22.03	22.20	22.09	22.07	23.50
		1	0	22.99	23.11	23.03	23.06	23.50
		1	38	23.04	23.15	23.06	23.07	23.50
		1	74	23.05	23.24	23.11	23.18	23.50
	64QAM	36	0	21.96	22.15	22.04	22.08	22.50
		36	18	22.10	22.26	22.15	22.18	22.50
		36	39	22.13	22.32	22.20	22.19	22.50
		75	0	22.02	22.19	22.08	22.06	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz) 40140/2545	40400/2571	40670/2598	41140/2645	Tune-up Limit
20MHz	QPSK	1	0	23.93	23.94	24.09	24.36	25.50
		1	50	24.02	**24.12**	24.26	24.44	25.50
		1	99	**24.08**	24.11	**24.35**	**24.57**	25.50
		50	0	22.92	23.07	23.07	23.63	24.50
		50	25	**23.05**	**23.09**	23.21	23.64	24.50
		50	50	23.00	23.06	**23.32**	**23.68**	24.50
		100	0	23.02	23.10	23.30	**23.60**	24.50
	16QAM	1	0	23.04	23.20	23.08	23.28	24.50
		1	50	23.10	23.22	23.12	23.31	24.50
		1	99	22.96	23.06	22.99	23.16	24.50
		50	0	22.05	22.18	22.09	22.27	23.50
		50	25	22.09	22.21	22.11	22.29	23.50
		50	50	22.15	22.30	22.20	22.39	23.50
		100	0	21.98	22.11	22.02	22.20	23.50
	64QAM	1	0	22.92	23.05	22.96	23.16	23.50
		1	50	22.98	23.10	23.00	23.19	23.50
		1	99	23.00	23.17	23.06	23.27	23.50
		50	0	21.90	22.09	21.98	22.20	22.50
		50	25	22.04	22.19	22.08	22.29	22.50
		50	50	22.08	22.23	22.13	22.32	22.50
		100	0	21.97	22.10	22.01	22.19	22.50

LTE TDD Band 41 D3				**Conducted Power(dBm)**	Tune-up Limit
Bandwidth	Modulati	RB	RB	Channel/Frequency (MHz)	

	on	size	offset	40065/2537.5	40385/2569.5	40705/2601.5	41215/2652.5	
5MHz	QPSK	1	0	21.40	21.57	21.61	21.92	23.00
		1	13	21.28	21.26	21.77	21.81	23.00
		1	24	21.48	21.48	21.76	21.96	23.00
		12	0	21.43	21.45	21.73	21.91	23.00
		12	6	21.45	21.54	21.89	22.10	23.00
		12	13	21.41	21.59	21.92	21.90	23.00
		25	0	21.33	21.53	21.78	22.10	23.00
	16QAM	1	0	21.45	21.27	21.50	21.49	23.00
		1	13	21.43	21.36	21.50	21.47	23.00
		1	24	21.66	21.66	21.77	21.72	23.00
		12	0	21.41	21.38	21.48	21.48	23.00
		12	6	21.55	21.53	21.66	21.61	23.00
		12	13	21.66	21.66	21.78	21.74	23.00
		25	0	21.46	21.47	21.60	21.54	23.00
	64QAM	1	0	21.27	21.21	21.38	21.33	23.00
		1	13	21.38	21.31	21.49	21.42	23.00
		1	24	21.54	21.50	21.65	21.59	23.00
		12	0	21.47	21.40	21.52	21.54	22.50
		12	6	21.49	21.44	21.58	21.54	22.50
		12	13	21.56	21.56	21.68	21.64	22.50
		25	0	21.55	21.56	21.69	21.63	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/2540	40390/2570	40690/2600	41190/2650	
10MHz	QPSK	1	0	21.37	21.55	21.57	21.89	23.00
		1	25	21.26	21.22	21.74	21.79	23.00
		1	49	21.45	21.43	21.72	21.93	23.00
		25	0	21.40	21.40	21.69	21.88	23.00
		25	13	21.43	21.50	21.84	22.08	23.00
		25	25	21.39	21.57	21.88	21.88	23.00
		50	0	21.33	21.52	21.76	22.10	23.00
	16QAM	1	0	21.42	21.23	21.47	21.46	23.00
		1	25	21.40	21.34	21.47	21.44	23.00
		1	49	21.63	21.64	21.73	21.69	23.00
		25	0	21.39	21.34	21.45	21.46	23.00
		25	13	21.52	21.48	21.62	21.58	23.00
		25	25	21.63	21.61	21.74	21.71	23.00
		50	0	21.44	21.43	21.55	21.52	23.00
	64QAM	1	0	21.24	21.21	21.35	21.30	23.00
		1	25	21.35	21.33	21.46	21.39	23.00
		1	49	21.55	21.48	21.61	21.60	23.00
		25	0	21.45	21.36	21.53	21.52	22.50
		25	13	21.46	21.39	21.54	21.51	22.50

		25	25	21.53	21.51	21.64	21.61	22.50
		50	0	21.53	21.52	21.64	21.61	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40115/2542.5	40395/2570.5	40685/2599.5	41165/2647.5	
15MHz	QPSK	1	0	21.39	21.56	21.60	21.90	23.00
		1	38	21.29	21.27	21.78	21.80	23.00
		1	74	21.47	21.47	21.75	21.92	23.00
		36	0	21.43	21.45	21.73	21.89	23.00
		36	18	21.46	21.55	21.88	22.08	23.00
		36	39	21.41	21.61	21.93	21.87	23.00
		75	0	21.37	21.54	21.80	22.12	23.00
	16QAM	1	0	21.44	21.26	21.49	21.43	23.00
		1	38	21.43	21.38	21.50	21.45	23.00
		1	74	21.66	21.66	21.76	21.69	23.00
		36	0	21.42	21.39	21.49	21.46	23.00
		36	18	21.54	21.52	21.65	21.57	23.00
		36	39	21.66	21.66	21.78	21.72	23.00
		75	0	21.47	21.48	21.59	21.52	23.00
	64QAM	1	0	21.26	21.20	21.37	21.27	23.00
		1	38	21.38	21.33	21.49	21.40	23.00
		1	74	21.54	21.50	21.64	21.60	23.00
		36	0	21.48	21.41	21.53	21.54	22.50
		36	18	21.48	21.43	21.57	21.51	22.50
		36	39	21.56	21.56	21.68	21.62	22.50
		75	0	21.56	21.57	21.68	21.61	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	21.35	**21.48**	21.55	21.87	23.00
		1	50	21.26	21.22	**21.73**	21.79	23.00
		1	99	**21.42**	21.41	21.68	**21.90**	23.00
		50	0	21.38	21.36	21.66	21.86	23.00
		50	25	**21.41**	21.46	21.81	**22.06**	23.00
		50	50	21.35	**21.53**	**21.85**	21.84	23.00
		100	0	21.32	21.45	21.71	**22.09**	23.00
	16QAM	1	0	21.25	21.20	21.42	21.51	23.00
		1	50	21.37	21.33	21.44	21.61	23.00
		1	99	21.61	21.59	21.71	21.87	23.00
		50	0	21.36	21.33	21.43	21.63	23.00
		50	25	21.48	21.45	21.58	21.74	23.00
		50	50	21.61	21.57	21.71	21.89	23.00
		100	0	21.42	21.39	21.52	21.70	23.00
	64QAM	1	0	21.19	21.14	21.30	21.45	23.00
		1	50	21.32	21.28	21.43	21.56	23.00

		1	99	21.49	21.43	21.59	21.74	23.00
		50	0	21.42	21.35	21.47	21.69	22.50
		50	25	21.42	21.36	21.50	21.67	22.50
		50	50	21.51	21.47	21.61	21.79	22.50
		100	0	21.51	21.48	21.61	21.79	22.50

Second - Antenna

LTE FDD Band 2 D1&D3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	15.23	15.28	15.09	16.00
		1	2	15.21	15.28	15.15	16.00
		1	5	15.14	15.14	15.16	16.00
		3	0	15.33	15.38	15.21	16.00
		3	2	15.25	15.39	15.26	16.00
		3	3	15.27	15.28	15.23	16.00
		6	0	15.25	15.38	15.31	16.00
	16QAM	1	0	15.53	15.44	15.49	16.00
		1	2	15.52	15.45	15.50	16.00
		1	5	15.34	15.32	15.31	16.00
		3	0	15.48	15.39	15.42	16.00
		3	2	15.43	15.39	15.41	16.00
		3	3	15.40	15.39	15.38	16.00
		6	0	15.42	15.41	15.42	16.00
	64QAM	1	0	15.45	15.39	15.37	16.00
		1	2	15.44	15.28	15.36	16.00
		1	5	15.23	15.21	15.20	16.00
		3	0	15.43	15.34	15.37	16.00
		3	2	15.46	15.39	15.42	16.00
		3	3	15.37	15.36	15.35	16.00
		6	0	15.46	15.48	15.48	16.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	15.19	15.20	15.04	16.00
		1	7	15.18	15.23	15.10	16.00
		1	14	15.09	15.08	15.09	16.00
		8	0	15.28	15.29	15.14	16.00
		8	4	15.20	15.30	15.19	16.00
		8	7	15.21	15.20	15.15	16.00
		15	0	15.20	15.29	15.22	16.00
	16QAM	1	0	15.48	15.38	15.42	16.00
		1	7	15.46	15.40	15.44	16.00
		1	14	15.29	15.25	15.26	16.00
		8	0	15.42	15.33	15.36	16.00
		8	4	15.37	15.32	15.34	16.00
		8	7	15.35	15.30	15.31	16.00
		15	0	15.37	15.32	15.35	16.00
	64QAM	1	0	15.38	15.33	15.30	16.00

		1	7	15.38	15.23	15.30	16.00
		1	14	15.18	15.14	15.15	16.00
		8	0	15.37	15.28	15.31	16.00
		8	4	15.40	15.32	15.35	16.00
		8	7	15.32	15.27	15.28	16.00
		15	0	15.41	15.39	15.41	16.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	15.16	15.18	15.00	16.00
		1	13	15.16	15.19	15.07	16.00
		1	24	15.06	15.03	15.05	16.00
		12	0	15.25	15.24	15.10	16.00
		12	6	15.18	15.26	15.14	16.00
		12	13	15.19	15.18	15.11	16.00
		25	0	15.20	15.28	15.20	16.00
	16QAM	1	0	15.45	15.34	15.39	16.00
		1	13	15.43	15.38	15.41	16.00
		1	24	15.26	15.23	15.22	16.00
		12	0	15.40	15.29	15.33	16.00
		12	6	15.34	15.27	15.30	16.00
		12	13	15.32	15.25	15.27	16.00
		25	0	15.35	15.28	15.30	16.00
	64QAM	1	0	15.35	15.33	15.27	16.00
		1	13	15.35	15.25	15.27	16.00
		1	24	15.19	15.12	15.11	16.00
		12	0	15.35	15.24	15.32	16.00
		12	6	15.37	15.27	15.31	16.00
		12	13	15.29	15.22	15.24	16.00
		25	0	15.39	15.35	15.36	16.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	15.18	15.19	15.03	16.00
		1	25	15.19	15.24	15.11	16.00
		1	49	15.08	15.07	15.08	16.00
		25	0	15.28	15.29	15.14	16.00
		25	13	15.21	15.31	15.18	16.00
		25	25	15.21	15.22	15.16	16.00
		50	0	15.24	15.30	15.24	16.00
	16QAM	1	0	15.47	15.37	15.41	16.00
		1	25	15.46	15.42	15.44	16.00
		1	49	15.29	15.25	15.25	16.00
		25	0	15.43	15.34	15.37	16.00
		25	13	15.36	15.31	15.33	16.00

		25	25	15.35	15.30	15.31	16.00
		50	0	15.38	15.33	15.34	16.00
		1	0	15.37	15.32	15.29	16.00
		1	25	15.38	15.25	15.30	16.00
		1	49	15.18	15.14	15.14	16.00
	64QAM	25	0	15.38	15.29	15.32	16.00
		25	13	15.39	15.31	15.34	16.00
		25	25	15.32	15.27	15.28	16.00
		50	0	15.42	15.40	15.40	16.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	15.17	15.15	15.01	16.00
		1	38	15.17	15.23	15.08	16.00
		1	74	15.05	15.02	15.04	16.00
		36	0	15.26	15.25	15.11	16.00
		36	18	15.18	15.26	15.14	16.00
		36	39	15.18	15.19	15.12	16.00
		75	0	15.22	15.26	15.19	16.00
	16QAM	1	0	15.42	15.35	15.39	16.00
		1	38	15.44	15.39	15.42	16.00
		1	74	15.26	15.21	15.22	16.00
		36	0	15.40	15.32	15.34	16.00
		36	18	15.33	15.26	15.29	16.00
		36	39	15.33	15.26	15.28	16.00
		75	0	15.35	15.28	15.30	16.00
	64QAM	1	0	15.32	15.30	15.27	16.00
		1	38	15.36	15.22	15.28	16.00
		1	74	15.19	15.13	15.15	16.00
		36	0	15.37	15.31	15.33	16.00
		36	18	15.37	15.28	15.33	16.00
		36	39	15.30	15.23	15.25	16.00
		75	0	15.39	15.35	15.36	16.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	15.14	15.11	14.98	16.00
		1	50	**15.16**	**15.19**	**15.06**	16.00
		1	99	15.03	15.01	15.01	16.00
		50	0	**15.23**	15.20	15.07	16.00
		50	25	15.16	**15.22**	**15.11**	16.00
		50	50	15.15	15.14	15.08	16.00
		100	0	15.19	**15.21**	15.15	16.00
	16QAM	1	0	15.40	15.31	15.34	16.00
		1	50	15.40	15.37	15.38	16.00

		1	99	15.24	15.18	15.20	16.00
		50	0	15.37	15.28	15.31	16.00
		50	25	15.30	15.24	15.26	16.00
		50	50	15.30	15.21	15.24	16.00
		100	0	15.33	15.24	15.27	16.00
	64QAM	1	0	15.30	15.26	15.22	16.00
		1	50	15.32	15.20	15.24	16.00
		1	99	15.13	15.07	15.09	16.00
		50	0	15.32	15.23	15.26	16.00
		50	25	15.33	15.24	15.27	16.00
		50	50	15.27	15.18	15.21	16.00
		100	0	15.37	15.31	15.33	16.00

LTE FDD Band 2				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	24.39	24.31	24.41	25.50
		1	2	24.29	24.25	24.20	25.50
		1	5	24.13	24.06	24.23	25.50
		3	0	24.31	24.33	24.16	25.50
		3	2	24.26	24.28	24.31	25.50
		3	3	24.33	24.20	24.17	25.50
		6	0	23.40	23.31	23.38	24.50
	16QAM	1	0	23.42	23.50	23.61	24.50
		1	2	23.40	23.37	23.39	24.50
		1	5	23.37	23.32	23.39	24.50
		3	0	23.48	23.41	23.51	24.50
		3	2	23.46	23.40	23.50	24.50
		3	3	23.28	23.24	23.31	24.50
		6	0	22.41	22.39	22.52	23.50
	64QAM	1	0	23.46	23.33	23.49	23.50
		1	2	23.43	23.37	23.45	23.50
		1	5	23.20	23.20	23.25	23.50
		3	0	23.34	23.26	23.34	23.50
		3	2	23.31	23.24	23.34	23.50
		3	3	23.24	23.21	23.27	23.50
		6	0	22.31	22.29	22.39	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	24.41	24.35	24.44	25.50
		1	7	24.27	24.28	24.24	25.50
		1	14	24.16	24.11	24.27	25.50
		8	0	23.41	23.45	23.29	24.50

		8	4	23.38	23.38	23.43	24.50
		8	7	23.43	23.31	23.27	24.50
		15	0	23.40	23.35	23.41	24.50
	16QAM	1	0	23.45	23.52	23.64	24.50
		1	7	23.43	23.37	23.43	24.50
		1	14	23.39	23.36	23.42	24.50
		8	0	22.59	22.54	22.63	23.50
		8	4	22.57	22.53	22.62	23.50
		8	7	22.38	22.36	22.44	23.50
		15	0	22.44	22.43	22.55	23.50
	64QAM	1	0	23.49	23.35	23.35	23.50
		1	7	23.46	23.37	23.47	23.50
		1	14	23.22	23.19	23.28	23.50
		8	0	22.45	22.39	22.46	22.50
		8	4	22.42	22.37	22.46	22.50
		8	7	22.34	22.33	22.40	22.50
		15	0	22.34	22.33	22.42	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	24.38	24.33	24.40	25.50
		1	13	24.25	24.24	24.21	25.50
		1	24	24.13	24.06	24.23	25.50
		12	0	23.38	23.40	23.25	24.50
		12	6	23.36	23.34	23.38	24.50
		12	13	23.41	23.29	23.23	24.50
		25	0	23.40	23.34	23.39	24.50
	16QAM	1	0	23.42	23.48	23.61	24.50
		1	13	23.40	23.35	23.40	24.50
		1	24	23.36	23.34	23.38	24.50
		12	0	22.57	22.50	22.60	23.50
		12	6	22.54	22.48	22.58	23.50
		12	13	22.35	22.31	22.40	23.50
		25	0	22.42	22.39	22.50	23.50
	64QAM	1	0	23.46	23.35	23.49	23.50
		1	13	23.43	23.39	23.44	23.50
		1	24	23.23	23.17	23.24	23.50
		12	0	22.43	22.35	22.47	22.50
		12	6	22.39	22.32	22.42	22.50
		12	13	22.31	22.28	22.36	22.50
		25	0	22.32	22.29	22.37	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	24.40	24.34	24.43	25.50

		1	25	24.28	24.29	24.25	25.50
		1	49	24.15	24.10	24.26	25.50
		25	0	23.41	23.45	23.29	24.50
		25	13	23.39	23.39	23.42	24.50
		25	25	23.43	23.33	23.28	24.50
		50	0	23.44	23.36	23.43	24.50
	16QAM	1	0	23.44	23.51	23.63	24.50
		1	25	23.43	23.39	23.43	24.50
		1	49	23.39	23.36	23.41	24.50
		25	0	22.60	22.55	22.64	23.50
		25	13	22.56	22.52	22.61	23.50
		25	25	22.38	22.36	22.44	23.50
		50	0	22.45	22.44	22.54	23.50
	64QAM	1	0	23.48	23.34	23.42	23.50
		1	25	23.46	23.39	23.47	23.50
		1	49	23.22	23.19	23.27	23.50
		25	0	22.46	22.40	22.47	22.50
		25	13	22.41	22.36	22.45	22.50
		25	25	22.34	22.33	22.40	22.50
		50	0	22.35	22.34	22.41	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	24.39	24.30	24.41	25.50
		1	38	24.26	24.28	24.22	25.50
		1	74	24.12	24.05	24.22	25.50
		36	0	23.39	23.41	23.26	24.50
		36	18	23.36	23.34	23.38	24.50
		36	39	23.40	23.30	23.24	24.50
		75	0	23.42	23.32	23.38	24.50
	16QAM	1	0	23.39	23.49	23.61	24.50
		1	38	23.41	23.36	23.41	24.50
		1	74	23.36	23.32	23.38	24.50
		36	0	22.57	22.53	22.61	23.50
		36	18	22.53	22.47	22.57	23.50
		36	39	22.36	22.32	22.41	23.50
		75	0	22.42	22.39	22.50	23.50
	64QAM	1	0	23.43	23.32	23.49	23.50
		1	38	23.44	23.36	23.45	23.50
		1	74	23.23	23.18	23.28	23.50
		36	0	22.45	22.42	22.48	22.50
		36	18	22.39	22.33	22.44	22.50
		36	39	22.32	22.29	22.37	22.50
		75	0	22.32	22.29	22.37	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	**24.36**	**24.26**	**24.48**	25.50
		1	50	24.25	24.24	24.20	25.50
		1	99	24.10	24.04	24.19	25.50
		50	0	23.36	**23.36**	23.22	24.50
		50	25	23.34	23.30	**23.35**	24.50
		50	50	**23.37**	23.25	23.20	24.50
		100	0	**23.39**	23.27	23.34	24.50
	16QAM	1	0	23.49	23.45	23.56	24.50
		1	50	23.37	23.34	23.37	24.50
		1	99	23.34	23.29	23.36	24.50
		50	0	22.54	22.49	22.58	23.50
		50	25	22.50	22.45	22.54	23.50
		50	50	22.33	22.27	22.37	23.50
		100	0	22.40	22.35	22.47	23.50
	64QAM	1	0	23.41	23.28	23.44	23.50
		1	50	23.40	23.34	23.41	23.50
		1	99	23.17	23.12	23.22	23.50
		50	0	22.40	22.34	22.41	22.50
		50	25	22.35	22.29	22.38	22.50
		50	50	22.29	22.24	22.33	22.50
		100	0	22.30	22.25	22.34	22.50

LTE FDD Band 4 D1&D3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	15.80	15.80	15.70	17.00
		1	2	15.72	15.73	15.68	17.00
		1	5	15.62	15.54	15.48	17.00
		3	0	15.69	15.73	15.69	17.00
		3	2	15.76	15.69	15.62	17.00
		3	3	15.74	15.59	15.56	17.00
		6	0	15.76	15.68	15.65	17.00
	16QAM	1	0	16.01	15.95	16.07	17.00
		1	2	15.70	15.66	15.71	17.00
		1	5	15.80	15.76	15.84	17.00
		3	0	15.83	15.78	15.91	17.00
		3	2	15.89	15.84	15.93	17.00
		3	3	15.82	15.78	15.87	17.00
		6	0	15.75	15.72	15.85	17.00
	64QAM	1	0	16.04	15.86	16.12	17.00

		1	2	16.04	15.94	16.11	17.00
		1	5	15.72	15.68	15.76	17.00
		3	0	15.87	15.82	15.95	17.00
		3	2	15.99	15.92	16.05	17.00
		3	3	15.75	15.71	15.80	17.00
		6	0	15.82	15.78	15.87	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	15.79	15.82	15.69	17.00
		1	7	15.70	15.71	15.69	17.00
		1	14	15.62	15.54	15.48	17.00
		8	0	15.70	15.75	15.72	17.00
		8	4	15.77	15.73	15.63	17.00
		8	7	15.76	15.62	15.56	17.00
		15	0	15.76	15.71	15.66	17.00
	16QAM	1	0	16.01	15.93	16.07	17.00
		1	7	15.70	15.66	15.72	17.00
		1	14	15.79	15.78	15.83	17.00
		8	0	15.86	15.78	15.91	17.00
		8	4	15.91	15.86	15.95	17.00
		8	7	15.83	15.79	15.90	17.00
		15	0	15.76	15.72	15.83	17.00
	64QAM	1	0	16.04	15.84	16.12	17.00
		1	7	16.04	15.94	16.12	17.00
		1	14	15.71	15.70	15.75	17.00
		8	0	15.90	15.82	15.95	17.00
		8	4	16.01	15.94	16.07	17.00
		8	7	15.76	15.72	15.83	17.00
		15	0	15.82	15.80	15.87	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	15.82	15.84	15.73	17.00
		1	13	15.72	15.75	15.72	17.00
		1	24	15.65	15.59	15.52	17.00
		12	0	15.73	15.80	15.76	17.00
		12	6	15.79	15.77	15.68	17.00
		12	13	15.78	15.64	15.60	17.00
		25	0	15.78	15.72	15.68	17.00
	16QAM	1	0	16.04	15.97	16.10	17.00
		1	13	15.73	15.68	15.75	17.00
		1	24	15.82	15.80	15.87	17.00
		12	0	15.88	15.82	15.94	17.00
		12	6	15.94	15.91	15.99	17.00

		12	13	15.86	15.84	15.94	17.00
		25	0	15.78	15.76	15.88	17.00
	64QAM	1	0	16.07	15.88	16.15	17.00
		1	13	16.07	15.96	16.15	17.00
		1	24	15.74	15.72	15.79	17.00
		12	0	15.92	15.86	15.98	17.00
		12	6	16.04	15.99	16.11	17.00
		12	13	15.79	15.77	15.87	17.00
		25	0	15.84	15.84	15.92	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	15.80	15.79	15.70	17.00
		1	25	15.71	15.75	15.70	17.00
		1	49	15.61	15.53	15.47	17.00
		25	0	15.71	15.76	15.73	17.00
		25	13	15.77	15.73	15.63	17.00
		25	25	15.75	15.63	15.57	17.00
		50	0	15.79	15.69	15.65	17.00
	16QAM	1	0	15.98	15.94	16.07	17.00
		1	25	15.71	15.67	15.73	17.00
		1	49	15.79	15.76	15.83	17.00
		25	0	15.86	15.81	15.92	17.00
		25	13	15.90	15.85	15.94	17.00
		25	25	15.84	15.80	15.91	17.00
		50	0	15.76	15.72	15.83	17.00
	64QAM	1	0	16.01	15.85	16.12	17.00
		1	25	16.05	15.95	16.13	17.00
		1	49	15.71	15.68	15.75	17.00
		25	0	15.90	15.85	15.96	17.00
		25	13	16.00	15.93	16.06	17.00
		25	25	15.77	15.73	15.84	17.00
		50	0	15.82	15.80	15.87	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	15.80	15.81	15.71	17.00
		1	38	15.71	15.75	15.71	17.00
		1	74	15.63	15.56	15.50	17.00
		36	0	15.71	15.79	15.74	17.00
		36	18	15.79	15.76	15.66	17.00
		36	39	15.76	15.62	15.60	17.00
		75	0	15.76	15.72	15.67	17.00
	16QAM	1	0	16.00	15.91	16.07	17.00
		1	38	15.72	15.69	15.70	17.00

		1	74	15.80	15.76	15.85	17.00
		36	0	15.84	15.82	15.92	17.00
		36	18	15.90	15.85	15.96	17.00
		36	39	15.85	15.83	15.89	17.00
		75	0	15.75	15.74	15.83	17.00
	64QAM	1	0	16.04	15.83	16.13	17.00
		1	38	16.06	15.96	16.12	17.00
		1	74	15.71	15.67	15.76	17.00
		36	0	15.92	15.86	15.94	17.00
		36	18	15.99	15.95	16.06	17.00
		36	39	15.77	15.73	15.86	17.00
		75	0	15.84	15.83	15.88	17.00

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	**15.77**	**15.75**	15.67	17.00
		1	50	15.70	15.71	**15.68**	17.00
		1	99	15.59	15.52	15.44	17.00
		50	0	15.68	**15.71**	**15.69**	17.00
		50	25	**15.75**	15.69	15.60	17.00
		50	50	15.72	15.58	15.53	17.00
		100	0	**15.76**	15.64	15.61	17.00
	16QAM	1	0	15.96	15.90	16.02	17.00
		1	50	15.67	15.65	15.69	17.00
		1	99	15.77	15.73	15.81	17.00
		50	0	15.83	15.77	15.89	17.00
		50	25	15.87	15.83	15.91	17.00
		50	50	15.81	15.75	15.87	17.00
		100	0	15.74	15.68	15.80	17.00
	64QAM	1	0	15.99	15.81	16.07	17.00
		1	50	16.01	15.93	16.09	17.00
		1	99	15.69	15.65	15.73	17.00
		50	0	15.87	15.81	15.93	17.00
		50	25	15.97	15.91	16.03	17.00
		50	50	15.74	15.68	15.80	17.00
		100	0	15.80	15.76	15.84	17.00

LTE FDD Band 4				**Conducted Power(dBm)**			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	24.42	24.22	24.20	25.50
		1	2	24.36	24.13	24.25	25.50
		1	5	24.23	24.02	24.16	25.50
		3	0	24.41	24.25	24.13	25.50

		3	2	24.29	24.18	24.09	25.50
		3	3	24.26	24.16	24.09	25.50
		6	0	23.36	23.19	23.14	24.50
	16QAM	1	0	23.51	23.47	23.55	24.50
		1	2	23.49	23.40	23.45	24.50
		1	5	23.64	23.48	23.58	24.50
		3	0	23.43	23.22	23.33	24.50
		3	2	23.51	23.34	23.45	24.50
		3	3	23.45	23.26	23.35	24.50
		6	0	22.43	22.27	22.38	23.50
	64QAM	1	0	23.28	23.36	23.39	23.50
		1	2	23.32	23.24	23.37	23.50
		1	5	23.42	23.31	23.36	23.50
		3	0	23.24	23.16	23.29	23.50
		3	2	23.27	23.14	23.27	23.50
		3	3	23.25	23.08	23.15	23.50
		6	0	22.36	22.29	22.40	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	24.44	24.26	24.23	25.50
		1	7	24.34	24.16	24.29	25.50
		1	14	24.26	24.07	24.20	25.50
		8	0	23.51	23.37	23.26	24.50
		8	4	23.41	23.28	23.21	24.50
		8	7	23.36	23.27	23.19	24.50
		15	0	23.36	23.23	23.17	24.50
	16QAM	1	0	23.54	23.49	23.58	24.50
		1	7	23.52	23.40	23.49	24.50
		1	14	23.66	23.52	23.61	24.50
		8	0	22.54	22.35	22.45	23.50
		8	4	22.62	22.47	22.57	23.50
		8	7	22.55	22.38	22.48	23.50
		15	0	22.46	22.31	22.41	23.50
	64QAM	1	0	23.31	23.38	23.42	23.50
		1	7	23.35	23.24	23.39	23.50
		1	14	23.44	23.30	23.39	23.50
		8	0	22.35	22.29	22.41	22.50
		8	4	22.38	22.27	22.39	22.50
		8	7	22.35	22.20	22.28	22.50
		15	0	22.39	22.33	22.43	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	24.41	24.24	24.19	25.50

		1	13	24.32	24.12	24.26	25.50
		1	24	24.23	24.02	24.16	25.50
		12	0	23.48	23.32	23.22	24.50
		12	6	23.39	23.24	23.16	24.50
		12	13	23.34	23.25	23.15	24.50
		25	0	23.36	23.22	23.15	24.50
	16QAM	1	0	23.51	23.45	23.55	24.50
		1	13	23.49	23.38	23.46	24.50
		1	24	23.63	23.50	23.57	24.50
		12	0	22.52	22.31	22.42	23.50
		12	6	22.59	22.42	22.53	23.50
		12	13	22.52	22.33	22.44	23.50
		25	0	22.44	22.27	22.36	23.50
	64QAM	1	0	23.28	23.38	23.39	23.50
		1	13	23.32	23.26	23.36	23.50
		1	24	23.45	23.28	23.35	23.50
		12	0	22.33	22.25	22.42	22.50
		12	6	22.35	22.22	22.35	22.50
		12	13	22.32	22.15	22.24	22.50
		25	0	22.37	22.29	22.38	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	24.43	24.25	24.22	25.50
		1	25	24.35	24.17	24.30	25.50
		1	49	24.25	24.06	24.19	25.50
		25	0	23.51	23.37	23.26	24.50
		25	13	23.42	23.29	23.20	24.50
		25	25	23.36	23.29	23.20	24.50
		50	0	23.40	23.24	23.19	24.50
	16QAM	1	0	23.53	23.48	23.57	24.50
		1	25	23.52	23.42	23.49	24.50
		1	49	23.66	23.52	23.60	24.50
		25	0	22.55	22.36	22.46	23.50
		25	13	22.61	22.46	22.56	23.50
		25	25	22.55	22.38	22.48	23.50
		50	0	22.47	22.32	22.40	23.50
	64QAM	1	0	23.30	23.37	23.41	23.50
		1	25	23.35	23.26	23.39	23.50
		1	49	23.44	23.30	23.38	23.50
		25	0	22.36	22.30	22.42	22.50
		25	13	22.37	22.26	22.38	22.50
		25	25	22.35	22.20	22.28	22.50
		50	0	22.40	22.34	22.42	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	24.42	24.21	24.20	25.50
		1	38	24.33	24.16	24.27	25.50
		1	74	24.22	24.01	24.15	25.50
		36	0	23.49	23.33	23.23	24.50
		36	18	23.39	23.24	23.16	24.50
		36	39	23.33	23.26	23.16	24.50
		75	0	23.38	23.20	23.14	24.50
	16QAM	1	0	23.48	23.46	23.55	24.50
		1	38	23.50	23.39	23.47	24.50
		1	74	23.63	23.48	23.57	24.50
		36	0	22.52	22.34	22.43	23.50
		36	18	22.58	22.41	22.52	23.50
		36	39	22.53	22.34	22.45	23.50
		75	0	22.44	22.27	22.36	23.50
	64QAM	1	0	23.25	23.35	23.39	23.50
		1	38	23.33	23.23	23.37	23.50
		1	74	23.45	23.29	23.39	23.50
		36	0	22.35	22.32	22.43	22.50
		36	18	22.35	22.23	22.37	22.50
		36	39	22.33	22.16	22.25	22.50
		75	0	22.37	22.29	22.38	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	**24.39**	**24.17**	24.17	25.50
		1	50	24.32	24.12	**24.25**	25.50
		1	99	24.20	24.00	24.12	25.50
		50	0	**23.46**	**23.28**	**23.19**	24.50
		50	25	23.37	23.20	23.13	24.50
		50	50	23.30	23.21	23.12	24.50
		100	0	**23.35**	23.15	23.10	24.50
	16QAM	1	0	23.59	23.42	23.50	24.50
		1	50	23.46	23.37	23.43	24.50
		1	99	23.61	23.45	23.55	24.50
		50	0	22.49	22.30	22.40	23.50
		50	25	22.55	22.39	22.49	23.50
		50	50	22.50	22.29	22.41	23.50
		100	0	22.42	22.23	22.33	23.50
	64QAM	1	0	23.23	23.31	23.34	23.50
		1	50	23.29	23.21	23.33	23.50
		1	99	23.39	23.23	23.33	23.50
		50	0	22.30	22.24	22.36	22.50

		50	25	22.31	22.19	22.31	22.50
		50	50	22.30	22.11	22.21	22.50
		100	0	22.35	22.25	22.35	22.50

LTE FDD Band 5 D1				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	21.90	21.98	21.87	23.00
		1	2	21.89	21.87	21.86	23.00
		1	5	21.72	21.78	21.87	23.00
		3	0	22.88	22.87	22.80	23.00
		3	2	22.89	22.89	22.89	23.00
		3	3	22.87	22.77	22.88	23.00
		6	0	21.91	21.99	21.84	23.00
	16QAM	1	0	22.06	22.11	22.09	23.00
		1	2	22.04	22.00	22.05	23.00
		1	5	22.32	22.30	22.35	23.00
		3	0	22.94	22.89	22.96	23.00
		3	2	22.92	22.88	22.95	23.00
		3	3	22.86	22.85	22.87	23.00
		6	0	21.89	21.90	21.96	23.00
	64QAM	1	0	22.40	22.38	22.45	23.00
		1	2	22.05	22.01	22.08	23.00
		1	5	21.96	21.95	21.95	23.00
		3	0	22.92	22.85	22.92	23.00
		3	2	22.94	22.89	22.96	23.00
		3	3	22.84	22.83	22.85	23.00
		6	0	22.00	22.01	22.07	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	21.90	21.97	21.87	23.00
		1	7	21.86	21.90	21.88	23.00
		1	14	21.71	21.77	21.86	23.00
		8	0	21.96	21.95	21.90	23.00
		8	4	21.99	21.95	21.96	23.00
		8	7	21.94	21.87	21.95	23.00
		15	0	21.93	22.00	21.84	23.00
	16QAM	1	0	22.03	22.10	22.09	23.00
		1	7	22.05	21.99	22.07	23.00
		1	14	22.31	22.30	22.34	23.00
		8	0	22.03	22.01	22.06	23.00
		8	4	21.99	21.95	22.02	23.00

		8	7	21.94	21.93	21.97	23.00
		15	0	21.90	21.90	21.94	23.00
		1	0	22.37	22.37	22.45	23.00
		1	7	22.06	22.00	22.08	23.00
		1	14	21.99	21.93	21.98	23.00
	64QAM	8	0	22.03	22.01	22.06	22.50
		8	4	22.02	21.98	22.06	22.50
		8	7	21.92	21.91	21.95	22.50
		15	0	22.01	22.01	22.05	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20425/826.5	20525/836.5	20625/846.5	
		1	0	21.91	22.01	21.89	23.00
		1	13	21.88	21.91	21.91	23.00
		1	24	21.74	21.82	21.90	23.00
	QPSK	12	0	21.98	21.99	21.93	23.00
		12	6	22.02	22.00	22.00	23.00
		12	13	21.97	21.90	21.99	23.00
		25	0	21.95	22.04	21.89	23.00
		1	0	22.08	22.12	22.11	23.00
		1	13	22.07	22.02	22.09	23.00
		1	24	22.34	22.34	22.37	23.00
5MHz	16QAM	12	0	22.06	22.03	22.09	23.00
		12	6	22.02	22.00	22.06	23.00
		12	13	21.96	21.97	22.00	23.00
		25	0	21.93	21.95	21.98	23.00
		1	0	22.42	22.39	22.47	23.00
		1	13	22.08	22.03	22.10	23.00
		1	24	21.98	21.94	21.97	23.00
	64QAM	12	0	22.04	21.99	22.05	22.50
		12	6	22.04	22.01	22.07	22.50
		12	13	21.94	21.95	21.98	22.50
		25	0	22.04	22.06	22.09	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
		1	0	**21.87**	**21.93**	21.84	23.00
		1	25	21.85	21.86	**21.86**	23.00
		1	49	21.69	21.76	21.83	23.00
	QPSK	25	0	21.93	21.90	21.86	23.00
10MHz		25	13	**21.97**	**21.91**	**21.93**	23.00
		25	25	21.91	21.82	21.91	23.00
		50	0	21.90	**21.95**	21.80	23.00
	16QAM	1	0	21.99	22.06	22.04	23.00
		1	25	22.01	21.97	22.03	23.00

		1	49	22.29	22.27	22.32	23.00
		25	0	22.00	21.97	22.03	23.00
		25	13	21.96	21.93	21.99	23.00
		25	25	21.91	21.88	21.93	23.00
		50	0	21.88	21.86	21.91	23.00
	64QAM	1	0	22.35	22.33	22.40	23.00
		1	25	22.02	21.98	22.04	23.00
		1	49	21.93	21.87	21.92	23.00
		25	0	21.98	21.93	21.99	22.50
		25	13	21.98	21.94	22.00	22.50
		25	25	21.89	21.86	21.91	22.50
		50	0	21.99	21.97	22.02	22.50

LTE FDD Band 5 D2				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	24.48	24.34	24.33	25.50
		1	2	24.33	24.41	24.37	25.50
		1	5	24.24	24.19	24.21	25.50
		3	0	24.42	24.37	24.30	25.50
		3	2	24.34	24.39	24.28	25.50
		3	3	24.42	24.28	24.37	25.50
		6	0	23.39	23.47	23.27	24.50
	16QAM	1	0	23.59	23.61	23.67	24.50
		1	2	23.57	23.55	23.59	24.50
		1	5	23.41	23.38	23.45	24.50
		3	0	23.40	23.34	23.41	24.50
		3	2	23.44	23.41	23.49	24.50
		3	3	23.39	23.36	23.42	24.50
		6	0	22.57	22.56	22.66	23.50
	64QAM	1	0	23.32	23.28	23.34	23.50
		1	2	23.22	23.20	23.26	23.50
		1	5	23.15	23.14	23.16	23.50
		3	0	23.29	23.19	23.26	23.50
		3	2	23.17	23.12	23.20	23.50
		3	3	23.18	23.15	23.21	23.50
		6	0	22.27	22.26	22.36	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	24.50	24.38	24.36	25.50
		1	7	24.31	24.44	24.41	25.50
		1	14	24.27	24.24	24.25	25.50

		8	0	23.52	23.49	23.43	24.50
		8	4	23.46	23.49	23.40	24.50
		8	7	23.52	23.39	23.47	24.50
		15	0	23.39	23.51	23.30	24.50
	16QAM	1	0	23.62	23.63	23.70	24.50
		1	7	23.60	23.55	23.63	24.50
		1	14	23.43	23.42	23.48	24.50
		8	0	22.51	22.47	22.53	23.50
		8	4	22.55	22.54	22.61	23.50
		8	7	22.49	22.48	22.55	23.50
		15	0	22.60	22.60	22.69	23.50
	64QAM	1	0	23.35	23.30	23.37	23.50
		1	7	23.25	23.20	23.28	23.50
		1	14	23.17	23.13	23.19	23.50
		8	0	22.40	22.32	22.38	22.50
		8	4	22.28	22.25	22.32	22.50
		8	7	22.28	22.27	22.34	22.50
		15	0	22.30	22.30	22.39	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	24.48	24.33	24.33	25.50
		1	13	24.30	24.44	24.39	25.50
		1	24	24.23	24.18	24.20	25.50
		12	0	23.50	23.45	23.40	24.50
		12	6	23.44	23.45	23.35	24.50
		12	13	23.49	23.38	23.44	24.50
		25	0	23.41	23.48	23.27	24.50
	16QAM	1	0	23.56	23.60	23.67	24.50
		1	13	23.58	23.54	23.61	24.50
		1	24	23.40	23.38	23.44	24.50
		12	0	22.49	22.46	22.51	23.50
		12	6	22.51	22.48	22.56	23.50
		12	13	22.47	22.44	22.52	23.50
		25	0	22.58	22.56	22.64	23.50
	64QAM	1	0	23.29	23.27	23.34	23.50
		1	13	23.23	23.19	23.26	23.50
		1	24	23.18	23.12	23.19	23.50
		12	0	22.40	22.35	22.40	22.50
		12	6	22.25	22.21	22.30	22.50
		12	13	22.26	22.23	22.31	22.50
		25	0	22.28	22.26	22.34	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	

10MHz	QPSK	1	0	**24.45**	24.29	24.30	25.50
		1	25	24.29	**24.40**	**24.37**	25.50
		1	49	24.21	24.17	24.17	25.50
		25	0	**23.47**	23.40	23.36	24.50
		25	13	23.42	**23.41**	23.32	24.50
		25	25	23.46	23.33	**23.40**	24.50
		50	0	23.38	**23.43**	23.23	24.50
	16QAM	1	0	23.60	23.56	23.62	24.50
		1	25	23.54	23.52	23.57	24.50
		1	49	23.38	23.35	23.42	24.50
		25	0	22.46	22.42	22.48	23.50
		25	13	22.48	22.46	22.53	23.50
		25	25	22.44	22.39	22.48	23.50
		50	0	22.56	22.52	22.61	23.50
	64QAM	1	0	23.27	23.23	23.29	23.50
		1	25	23.19	23.17	23.22	23.50
		1	49	23.12	23.06	23.13	23.50
		25	0	22.35	22.27	22.33	22.50
		25	13	22.21	22.17	22.24	22.50
		25	25	22.23	22.18	22.27	22.50
		50	0	22.26	22.22	22.31	22.50

LTE FDD Band 5 D3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20407/824.7	20525/836.5	20643/848.3	
1.4MHz	QPSK	1	0	23.44	23.39	23.29	24.00
		1	2	23.43	23.48	23.19	24.00
		1	5	23.37	23.15	23.15	24.00
		3	0	23.62	23.54	23.53	24.00
		3	2	23.58	23.57	23.51	24.00
		3	3	23.55	23.43	23.45	24.00
		6	0	23.31	23.41	23.28	24.00
	16QAM	1	0	23.74	23.55	23.61	24.00
		1	2	23.72	23.70	23.74	24.00
		1	5	23.64	23.61	23.68	24.00
		3	0	23.34	23.28	23.35	24.00
		3	2	23.48	23.45	23.53	24.00
		3	3	23.46	23.43	23.49	24.00
		6	0	22.44	22.43	22.53	23.50
	64QAM	1	0	23.25	23.21	23.27	23.50
		1	2	23.33	23.31	23.37	23.50
		1	5	23.36	23.35	23.37	23.50

		3	0	23.23	23.13	23.20	23.50
		3	2	23.23	23.18	23.26	23.50
		3	3	23.16	23.13	23.19	23.50
		6	0	22.26	22.25	22.35	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	23.45	23.42	23.31	24.00
		1	7	23.42	23.52	23.24	24.00
		1	14	23.39	23.19	23.18	24.00
		8	0	23.52	23.46	23.46	24.00
		8	4	23.51	23.48	23.42	24.00
		8	7	23.45	23.36	23.36	24.00
		15	0	23.35	23.46	23.33	24.00
	16QAM	1	0	23.76	23.56	23.63	24.00
		1	7	23.75	23.72	23.78	24.00
		1	14	23.66	23.65	23.70	24.00
		8	0	22.46	22.42	22.48	23.50
		8	4	22.58	22.57	22.64	23.50
		8	7	22.56	22.55	22.62	23.50
		15	0	22.48	22.48	22.55	23.50
	64QAM	1	0	23.27	23.22	23.29	23.50
		1	7	23.36	23.33	23.39	23.50
		1	14	23.38	23.34	23.39	23.50
		8	0	22.35	22.27	22.33	22.50
		8	4	22.33	22.30	22.37	22.50
		8	7	22.26	22.25	22.32	22.50
		15	0	22.30	22.30	22.37	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	23.44	23.38	23.29	24.00
		1	13	23.40	23.51	23.21	24.00
		1	24	23.36	23.14	23.14	24.00
		12	0	23.50	23.42	23.43	24.00
		12	6	23.48	23.43	23.38	24.00
		12	13	23.42	23.33	23.32	24.00
		25	0	23.33	23.42	23.28	24.00
	16QAM	1	0	23.71	23.54	23.61	24.00
		1	13	23.73	23.69	23.76	24.00
		1	24	23.63	23.61	23.67	24.00
		12	0	22.43	22.40	22.45	23.50
		12	6	22.55	22.52	22.60	23.50
		12	13	22.54	22.51	22.59	23.50
		25	0	22.45	22.43	22.51	23.50

	64QAM	1	0	23.22	23.20	23.27	23.50
		1	13	23.34	23.30	23.37	23.50
		1	24	23.39	23.33	23.40	23.50
		12	0	22.34	22.29	22.34	22.50
		12	6	22.31	22.27	22.36	22.50
		12	13	22.24	22.21	22.29	22.50
		25	0	22.27	22.25	22.33	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	**23.41**	23.34	**23.26**	24.00
		1	25	23.39	**23.47**	23.19	24.00
		1	49	23.34	23.13	23.11	24.00
		25	0	**23.47**	23.37	**23.39**	24.00
		25	13	23.46	**23.39**	23.35	24.00
		25	25	23.39	23.28	23.28	24.00
		50	0	23.30	**23.37**	23.24	24.00
	16QAM	1	0	23.54	23.50	23.56	24.00
		1	25	23.69	23.67	23.72	24.00
		1	49	23.61	23.58	23.65	24.00
		25	0	22.40	22.36	22.42	23.50
		25	13	22.52	22.50	22.57	23.50
		25	25	22.51	22.46	22.55	23.50
		50	0	22.43	22.39	22.48	23.50
	64QAM	1	0	23.20	23.16	23.22	23.50
		1	25	23.30	23.28	23.33	23.50
		1	49	23.33	23.27	23.34	23.50
		25	0	22.29	22.21	22.27	22.50
		25	13	22.27	22.23	22.30	22.50
		25	25	22.21	22.16	22.25	22.50
		50	0	22.25	22.21	22.30	22.50

LTE FDD Band 7 D1&D3				**Conducted Power(dBm)**			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	19.83	19.78	19.74	21.00
		1	13	19.80	19.66	19.79	21.00
		1	24	19.89	19.73	19.78	21.00
		12	0	19.99	19.92	19.74	21.00
		12	6	19.91	19.85	19.76	21.00
		12	13	20.06	19.89	19.86	21.00
		25	0	20.13	19.85	19.81	21.00
	16QAM	1	0	20.06	20.04	20.11	21.00

		1	13	20.31	20.27	20.34	21.00
		1	24	20.05	20.03	20.09	21.00
		12	0	19.89	19.86	19.91	21.00
		12	6	19.91	19.88	19.96	21.00
		12	13	20.04	20.01	20.09	21.00
		25	0	19.99	19.97	20.05	21.00
	64QAM	1	0	20.02	20.00	20.07	21.00
		1	13	19.98	19.94	20.01	21.00
		1	24	19.95	19.90	19.96	21.00
		12	0	20.00	19.93	19.98	21.00
		12	6	19.98	19.93	20.01	21.00
		12	13	19.97	19.94	20.02	21.00
		25	0	19.94	19.92	20.00	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	19.82	19.81	19.73	21.00
		1	25	19.79	19.62	19.78	21.00
		1	49	19.90	19.74	19.79	21.00
		25	0	19.98	19.91	19.73	21.00
		25	13	19.91	19.85	19.76	21.00
		25	25	20.07	19.88	19.85	21.00
		50	0	20.10	19.87	19.82	21.00
	16QAM	1	0	20.09	20.03	20.11	21.00
		1	25	20.30	20.26	20.33	21.00
		1	49	20.05	20.05	20.09	21.00
		25	0	19.89	19.83	19.90	21.00
		25	13	19.92	19.89	19.97	21.00
		25	25	20.03	20.00	20.08	21.00
		50	0	19.99	19.97	20.05	21.00
	64QAM	1	0	20.05	19.99	20.07	21.00
		1	25	19.97	19.93	20.00	21.00
		1	49	19.95	19.92	19.96	21.00
		25	0	20.00	19.90	19.97	21.00
		25	13	19.99	19.94	20.02	21.00
		25	25	19.96	19.93	20.01	21.00
		50	0	19.94	19.92	20.00	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	19.85	19.83	19.77	21.00
		1	38	19.81	19.66	19.81	21.00
		1	74	19.93	19.79	19.83	21.00
		36	0	20.01	19.96	19.77	21.00
		36	18	19.93	19.89	19.81	21.00

		36	39	20.09	19.90	19.89	21.00
		75	0	20.12	19.88	19.84	21.00
	16QAM	1	0	20.12	20.07	20.14	21.00
		1	38	20.33	20.28	20.36	21.00
		1	74	20.08	20.07	20.13	21.00
		36	0	19.91	19.87	19.93	21.00
		36	18	19.95	19.94	20.01	21.00
		36	39	20.06	20.05	20.12	21.00
		75	0	20.01	20.01	20.10	21.00
	64QAM	1	0	20.08	20.03	20.10	21.00
		1	38	20.00	19.95	20.03	21.00
		1	74	19.98	19.94	20.00	21.00
		36	0	20.02	19.94	20.00	21.00
		36	18	20.02	19.99	20.06	21.00
		36	39	19.99	19.98	20.05	21.00
		75	0	19.96	19.96	20.05	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	19.80	**19.74**	19.71	21.00
		1	50	19.79	19.62	**19.77**	21.00
		1	99	**19.87**	19.72	19.75	21.00
		50	0	19.96	**19.87**	19.70	21.00
		50	25	19.89	19.81	19.73	21.00
		50	50	**20.03**	19.84	**19.82**	21.00
		100	0	**20.10**	19.80	19.77	21.00
	16QAM	1	0	20.04	20.00	20.06	21.00
		1	50	20.27	20.25	20.30	21.00
		1	99	20.03	20.00	20.07	21.00
		50	0	19.86	19.82	19.88	21.00
		50	25	19.88	19.86	19.93	21.00
		50	50	20.01	19.96	20.05	21.00
		100	0	19.97	19.93	20.02	21.00
	64QAM	1	0	20.00	19.96	20.02	21.00
		1	50	19.94	19.92	19.97	21.00
		1	99	19.93	19.87	19.94	21.00
		50	0	19.97	19.89	19.95	21.00
		50	25	19.95	19.91	19.98	21.00
		50	50	19.94	19.89	19.98	21.00
		100	0	19.92	19.88	19.97	21.00

LTE FDD Band 7 D2				**Conducted Power(dBm)**	Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)	

				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	24.47	24.30	24.36	25.50
		1	13	24.45	24.31	24.34	25.50
		1	24	24.39	24.35	23.96	25.50
		12	0	23.63	23.37	23.40	24.50
		12	6	23.65	22.69	23.48	24.50
		12	13	23.79	23.42	23.50	24.50
		25	0	23.74	23.40	23.46	24.50
	16QAM	1	0	23.46	23.31	23.49	24.50
		1	13	23.45	23.40	23.47	24.50
		1	24	23.53	23.53	23.56	24.50
		12	0	22.41	22.38	22.44	23.50
		12	6	22.55	22.53	22.59	23.50
		12	13	22.51	22.52	22.55	23.50
		25	0	22.43	22.45	22.48	23.50
	64QAM	1	0	23.36	23.33	23.41	23.50
		1	13	23.39	23.34	23.41	23.50
		1	24	23.32	23.28	23.31	23.50
		12	0	22.32	22.27	22.33	22.50
		12	6	22.32	22.29	22.35	22.50
		12	13	22.40	22.41	22.44	22.50
		25	0	22.38	22.40	22.43	22.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	24.45	24.29	24.33	25.50
		1	25	24.42	24.26	24.30	25.50
		1	49	24.37	24.31	23.93	25.50
		25	0	23.60	23.32	23.36	24.50
		25	13	23.62	22.64	23.44	24.50
		25	25	23.77	23.38	23.45	24.50
		50	0	23.70	23.38	23.42	24.50
	16QAM	1	0	23.44	23.28	23.47	24.50
		1	25	23.42	23.36	23.44	24.50
		1	49	23.50	23.51	23.53	24.50
		25	0	22.38	22.33	22.40	23.50
		25	13	22.53	22.49	22.56	23.50
		25	25	22.48	22.47	22.51	23.50
		50	0	22.40	22.40	22.44	23.50
	64QAM	1	0	23.34	23.34	23.39	23.50
		1	25	23.36	23.34	23.38	23.50
		1	49	23.33	23.26	23.28	23.50
		25	0	22.29	22.22	22.33	22.50
		25	13	22.30	22.25	22.32	22.50

		25	25	22.37	22.36	22.40	22.50
		50	0	22.35	22.35	22.39	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	24.46	24.26	24.34	25.50
		1	38	24.43	24.30	24.31	25.50
		1	74	24.36	24.30	23.92	25.50
		36	0	23.61	23.33	23.37	24.50
		36	18	23.62	22.64	23.44	24.50
		36	39	23.76	23.39	23.46	24.50
		75	0	23.72	23.36	23.41	24.50
	16QAM	1	0	23.41	23.29	23.47	24.50
		1	38	23.43	23.37	23.45	24.50
		1	74	23.50	23.49	23.53	24.50
		36	0	22.38	22.36	22.41	23.50
		36	18	22.52	22.48	22.55	23.50
		36	39	22.49	22.48	22.52	23.50
		75	0	22.40	22.40	22.44	23.50
	64QAM	1	0	23.31	23.31	23.39	23.50
		1	38	23.37	23.31	23.39	23.50
		1	74	23.33	23.27	23.32	23.50
		36	0	22.31	22.29	22.34	22.50
		36	18	22.30	22.26	22.34	22.50
		36	39	22.38	22.37	22.41	22.50
		75	0	22.35	22.35	22.39	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	**24.43**	24.22	**24.31**	25.50
		1	50	24.42	24.26	24.29	25.50
		1	99	24.34	**24.29**	23.89	25.50
		50	0	23.58	23.28	23.33	24.50
		50	25	23.60	22.60	23.41	24.50
		50	50	**23.73**	**23.34**	**23.42**	24.50
		100	0	**23.69**	23.31	23.37	24.50
	16QAM	1	0	23.37	23.25	23.42	24.50
		1	50	23.39	23.35	23.41	24.50
		1	99	23.48	23.46	23.51	24.50
		50	0	22.35	22.32	22.38	23.50
		50	25	22.49	22.46	22.52	23.50
		50	50	22.46	22.43	22.48	23.50
		100	0	22.38	22.36	22.41	23.50
	64QAM	1	0	23.29	23.27	23.34	23.50
		1	50	23.33	23.29	23.35	23.50

		1	99	23.27	23.21	23.26	23.50
		50	0	22.26	22.21	22.27	22.50
		50	25	22.26	22.22	22.28	22.50
		50	50	22.35	22.32	22.37	22.50
		100	0	22.33	22.31	22.36	22.50

LTE TDD Band 38 D1&D3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	20.04	20.03	20.17	21.00
		1	13	20.02	20.15	20.32	21.00
		1	24	20.14	20.41	20.45	21.00
		12	0	20.09	20.15	20.26	21.00
		12	6	20.22	20.26	20.32	21.00
		12	13	20.16	20.29	20.44	21.00
		25	0	20.20	20.25	20.47	21.00
	16QAM	1	0	20.22	20.22	20.27	21.00
		1	13	20.30	20.24	20.31	21.00
		1	24	20.47	20.46	20.48	21.00
		12	0	20.38	20.36	20.36	21.00
		12	6	20.38	20.34	20.38	21.00
		12	13	20.29	20.28	20.31	21.00
		25	0	20.48	20.48	20.48	21.00
	64QAM	1	0	20.31	20.31	20.37	21.00
		1	13	20.08	20.02	20.09	21.00
		1	24	20.28	20.27	20.28	21.00
		12	0	20.38	20.36	20.40	21.00
		12	6	20.36	20.32	20.35	21.00
		12	13	20.33	20.32	20.34	21.00
		25	0	20.29	20.29	20.32	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	20.05	20.06	20.16	21.00
		1	25	20.01	20.11	20.31	21.00
		1	49	20.15	20.42	20.46	21.00
		25	0	20.08	20.14	20.25	21.00
		25	13	20.22	20.26	20.32	21.00
		25	25	20.17	20.28	20.43	21.00
		50	0	20.17	20.27	20.48	21.00
	16QAM	1	0	20.25	20.21	20.27	21.00
		1	25	20.29	20.23	20.30	21.00
		1	49	20.47	20.48	20.48	21.00

		25	0	20.38	20.33	20.35	21.00
		25	13	20.39	20.35	20.39	21.00
		25	25	20.28	20.27	20.30	21.00
		50	0	20.48	20.48	20.48	21.00
		1	0	20.34	20.30	20.37	21.00
		1	25	20.07	20.01	20.08	21.00
		1	49	20.28	20.29	20.28	21.00
	64QAM	25	0	20.38	20.33	20.39	21.00
		25	13	20.37	20.33	20.36	21.00
		25	25	20.32	20.31	20.33	21.00
		50	0	20.29	20.29	20.32	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
		1	0	20.07	20.08	20.20	21.00
		1	38	20.03	20.15	20.34	21.00
		1	74	20.18	20.47	20.50	21.00
	QPSK	36	0	20.11	20.19	20.29	21.00
		36	18	20.24	20.30	20.37	21.00
		36	39	20.19	20.30	20.47	21.00
		75	0	20.19	20.28	20.50	21.00
		1	0	20.28	20.25	20.30	21.00
		1	38	20.32	20.25	20.33	21.00
		1	74	20.50	20.50	20.52	21.00
15MHz	16QAM	36	0	20.40	20.37	20.38	21.00
		36	18	20.42	20.40	20.43	21.00
		36	39	20.31	20.32	20.34	21.00
		75	0	20.50	20.52	20.53	21.00
		1	0	20.37	20.34	20.40	21.00
		1	38	20.10	20.03	20.11	21.00
		1	74	20.31	20.31	20.32	21.00
	64QAM	36	0	20.40	20.37	20.42	21.00
		36	18	20.40	20.38	20.40	21.00
		36	39	20.35	20.36	20.37	21.00
		75	0	20.31	20.33	20.37	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
		1	0	20.01	20.24	20.27	21.00
		1	50	20.09	20.26	**20.54**	21.00
		1	99	**20.26**	**20.32**	20.38	21.00
20MHz	QPSK	50	0	20.21	**20.59**	**20.66**	21.00
		50	25	**20.33**	20.36	20.57	21.00
		50	50	20.29	20.46	20.50	21.00
		100	0	20.32	20.33	**20.56**	21.00

	16QAM	1	0	20.20	20.18	20.22	21.00
		1	50	20.26	20.22	20.27	21.00
		1	99	20.45	20.43	20.46	21.00
		50	0	20.35	20.32	20.33	21.00
		50	25	20.35	20.32	20.35	21.00
		50	50	20.26	20.23	20.27	21.00
		100	0	20.46	20.44	20.45	21.00
	64QAM	1	0	20.29	20.27	20.32	21.00
		1	50	20.04	20.00	20.05	21.00
		1	99	20.26	20.24	20.26	21.00
		50	0	20.35	20.32	20.37	21.00
		50	25	20.33	20.30	20.32	21.00
		50	50	20.30	20.27	20.30	21.00
		100	0	20.27	20.25	20.29	21.00

LTE TDD Band 38 D2				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	24.22	24.76	24.79	25.50
		1	13	24.64	24.80	24.88	25.50
		1	24	24.75	25.04	24.99	25.50
		12	0	23.56	23.84	23.81	24.50
		12	6	23.65	23.75	23.90	24.50
		12	13	23.78	23.85	24.07	24.50
		25	0	23.62	23.74	23.98	24.50
	16QAM	1	0	23.93	23.79	23.85	24.50
		1	13	23.91	23.85	23.92	24.50
		1	24	24.19	24.20	24.20	24.50
		12	0	22.86	22.81	22.83	23.50
		12	6	22.90	22.86	22.90	23.50
		12	13	22.87	22.86	22.89	23.50
		25	0	22.94	22.94	22.94	23.50
	64QAM	1	0	23.29	23.29	23.32	24.00
		1	13	23.47	23.45	23.48	24.00
		1	24	23.79	23.76	23.75	24.00
		12	0	22.90	22.85	22.95	23.00
		12	6	22.93	22.89	22.92	23.00
		12	13	22.72	22.71	22.73	23.00
		25	0	22.97	22.97	23.00	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	24.24	24.77	24.82	25.50

		1	25	24.67	24.85	24.92	25.50
		1	49	24.77	25.08	25.02	25.50
		25	0	23.59	23.89	23.85	24.50
		25	13	23.68	23.80	23.94	24.50
		25	25	23.80	23.89	24.12	24.50
		50	0	23.66	23.76	24.02	24.50
	16QAM	1	0	23.95	23.82	23.87	24.50
		1	25	23.94	23.89	23.95	24.50
		1	49	24.22	24.22	24.23	24.50
		25	0	22.89	22.86	22.87	23.50
		25	13	22.92	22.90	22.93	23.50
		25	25	22.90	22.91	22.93	23.50
		50	0	22.97	22.99	22.98	23.50
	64QAM	1	0	23.31	23.28	23.34	24.00
		1	25	23.50	23.45	23.42	24.00
		1	49	23.78	23.78	23.78	24.00
		25	0	22.93	22.90	22.95	23.00
		25	13	22.95	22.93	22.95	23.00
		25	25	22.75	22.76	22.77	23.00
		50	0	22.81	22.98	22.89	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	24.23	24.73	24.80	25.50
		1	38	24.65	24.84	24.89	25.50
		1	74	24.74	25.03	24.98	25.50
		36	0	23.57	23.85	23.82	24.50
		36	18	23.65	23.75	23.90	24.50
		36	39	23.77	23.86	24.08	24.50
		75	0	23.64	23.72	23.97	24.50
	16QAM	1	0	23.90	23.80	23.85	24.50
		1	38	23.92	23.86	23.93	24.50
		1	74	24.19	24.18	24.20	24.50
		36	0	22.86	22.84	22.84	23.50
		36	18	22.89	22.85	22.89	23.50
		36	39	22.88	22.87	22.90	23.50
		75	0	22.94	22.94	22.94	23.50
	64QAM	1	0	23.26	23.26	23.32	24.00
		1	38	23.48	23.42	23.49	24.00
		1	74	23.79	23.77	23.79	24.00
		36	0	22.92	22.92	22.96	23.00
		36	18	22.93	22.90	22.94	23.00
		36	39	22.73	22.72	22.74	23.00
		75	0	22.97	22.97	23.00	23.00

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	24.20	24.69	24.77	25.50
		1	50	24.64	24.80	24.87	25.50
		1	99	**24.72**	**25.02**	**24.95**	25.50
		50	0	23.54	23.80	23.78	24.50
		50	25	23.63	23.71	23.87	24.50
		50	50	**23.74**	**23.81**	**24.04**	24.50
		100	0	23.61	23.67	**23.93**	24.50
	16QAM	1	0	23.78	23.76	23.80	24.50
		1	50	23.88	23.84	23.89	24.50
		1	99	24.17	24.15	24.18	24.50
		50	0	22.83	22.80	22.81	23.50
		50	25	22.86	22.83	22.86	23.50
		50	50	22.85	22.82	22.86	23.50
		100	0	22.92	22.90	22.91	23.50
	64QAM	1	0	23.24	23.22	23.27	24.00
		1	50	23.44	23.40	23.45	24.00
		1	99	23.73	23.71	23.73	24.00
		50	0	22.87	22.84	22.89	23.00
		50	25	22.89	22.86	22.88	23.00
		50	50	22.70	22.67	22.70	23.00
		100	0	22.95	22.93	22.97	23.00

LTE TDD Band 41 D1&D3				Conducted Power(dBm)				Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				
				40065/2537.5	40385/2569.5	40705/2601.5	41215/2652.5	
5MHz	QPSK	1	0	19.59	19.71	20.11	20.56	21.00
		1	13	19.63	19.99	20.23	20.74	21.00
		1	24	19.76	20.03	20.46	20.90	21.00
		12	0	19.74	19.98	20.15	20.80	21.00
		12	6	19.72	19.98	20.38	20.81	21.00
		12	13	19.93	20.06	20.40	20.84	21.00
		25	0	19.75	20.02	20.37	20.78	21.00
	16QAM	1	0	20.08	20.03	20.23	20.40	21.00
		1	13	20.06	19.97	20.17	20.38	21.00
		1	24	20.06	20.03	20.22	20.38	21.00
		12	0	20.08	20.03	20.19	20.42	21.00
		12	6	20.21	20.15	20.35	20.54	21.00
		12	13	20.18	20.17	20.34	20.53	21.00
		25	0	20.04	20.04	20.22	20.39	21.00
	64QAM	1	0	19.95	19.86	20.12	20.31	21.00

		1	13	20.14	20.05	20.29	20.46	21.00
		1	24	20.20	20.17	20.36	20.59	21.00
		12	0	20.04	19.99	20.15	20.46	21.00
		12	6	20.16	20.10	20.30	20.51	21.00
		12	13	20.15	20.14	20.31	20.50	21.00
		25	0	20.16	20.16	20.34	20.51	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/2540	40390/2570	40690/2600	41190/2650	
10MHz	QPSK	1	0	19.56	19.69	20.07	20.58	21.00
		1	25	19.61	19.95	20.20	20.77	21.00
		1	49	19.73	19.98	20.42	20.92	21.00
		25	0	19.71	19.93	20.11	20.83	21.00
		25	13	19.70	19.94	20.33	20.84	21.00
		25	25	19.91	20.04	20.36	20.86	21.00
		50	0	19.75	20.01	20.35	20.82	21.00
	16QAM	1	0	20.05	19.99	20.20	20.42	21.00
		1	25	20.03	19.95	20.14	20.41	21.00
		1	49	20.03	20.01	20.18	20.41	21.00
		25	0	20.06	19.99	20.16	20.45	21.00
		25	13	20.18	20.10	20.31	20.56	21.00
		25	25	20.15	20.12	20.30	20.56	21.00
		50	0	20.02	20.00	20.17	20.42	21.00
	64QAM	1	0	19.92	19.86	20.09	20.33	21.00
		1	25	20.11	20.07	20.26	20.49	21.00
		1	49	20.21	20.15	20.32	20.58	21.00
		25	0	20.02	19.95	20.16	20.49	21.00
		25	13	20.13	20.05	20.26	20.53	21.00
		25	25	20.12	20.09	20.27	20.53	21.00
		50	0	20.14	20.12	20.29	20.54	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40115/2542.5	40395/2570.5	40685/2599.5	41165/2647.5	
15MHz	QPSK	1	0	19.58	19.70	20.10	20.57	21.00
		1	38	19.64	20.00	20.24	20.75	21.00
		1	74	19.75	20.02	20.45	20.89	21.00
		36	0	19.74	19.98	20.15	20.81	21.00
		36	18	19.73	19.99	20.37	20.81	21.00
		36	39	19.93	20.08	20.41	20.83	21.00
		75	0	19.79	20.03	20.39	20.80	21.00
	16QAM	1	0	20.07	20.02	20.22	20.37	21.00
		1	38	20.06	19.99	20.17	20.39	21.00
		1	74	20.06	20.03	20.21	20.38	21.00
		36	0	20.09	20.04	20.20	20.42	21.00
		36	18	20.20	20.14	20.34	20.53	21.00

		36	39	20.18	20.17	20.34	20.54	21.00
		75	0	20.05	20.05	20.21	20.39	21.00
		1	0	19.94	19.85	20.11	20.28	21.00
		1	38	20.14	20.07	20.29	20.47	21.00
		1	74	20.20	20.17	20.35	20.59	21.00
	64QAM	36	0	20.05	20.00	20.16	20.48	21.00
		36	18	20.15	20.09	20.29	20.51	21.00
		36	39	20.15	20.14	20.31	20.51	21.00
		75	0	20.17	20.17	20.33	20.51	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz) 40140/2545	40400/2571	40670/2598	41140/2645	Tune-up Limit
20MHz	QPSK	1	0	19.80	19.84	20.11	19.77	21.00
		1	50	19.88	20.09	20.36	19.81	21.00
		1	99	**19.99**	**20.17**	**20.51**	**20.14**	21.00
		50	0	19.87	20.01	20.29	19.86	21.00
		50	25	19.99	20.19	20.36	**20.05**	21.00
		50	50	**20.03**	**20.26**	**20.37**	19.89	21.00
		100	0	19.91	20.02	**20.35**	19.97	21.00
	16QAM	1	0	20.38	20.40	20.35	20.20	21.00
		1	50	20.36	20.39	20.37	20.33	21.00
		1	99	20.34	20.37	20.34	20.32	21.00
		50	0	20.05	20.08	20.05	20.02	21.00
		50	25	20.19	20.21	20.18	20.15	21.00
		50	50	20.11	20.14	20.12	20.09	21.00
		100	0	20.17	20.20	20.17	20.15	21.00
	64QAM	1	0	20.01	20.03	19.98	19.96	21.00
		1	50	20.07	20.10	20.08	20.04	21.00
		1	99	20.11	20.10	20.11	20.05	21.00
		50	0	19.98	20.01	20.00	19.95	21.00
		50	25	20.02	20.04	20.02	19.98	21.00
		50	50	19.93	19.96	19.94	19.91	21.00
		100	0	20.09	20.12	20.09	20.07	21.00

LTE TDD Band 41 D2				**Conducted Power(dBm)**				Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz) 40065/2537.5	40385/2569.5	40705/2601.5	41215/2652.5	
5MHz	QPSK	1	0	23.91	24.07	24.53	24.94	25.50
		1	13	23.91	24.28	24.64	25.24	25.50
		1	24	24.03	24.40	24.92	25.25	25.50
		12	0	23.20	23.36	23.73	24.19	24.50
		12	6	23.09	23.43	23.80	24.33	24.50
		12	13	23.19	23.42	23.91	24.25	24.50

		25	0	23.09	23.36	23.87	24.18	24.50
	16QAM	1	0	23.69	23.89	24.17	24.40	24.50
		1	13	23.67	23.78	24.11	24.38	24.50
		1	24	23.67	23.89	24.13	24.42	24.50
		12	0	22.52	22.69	22.96	23.25	23.50
		12	6	22.67	22.85	23.12	23.38	23.50
		12	13	22.48	22.74	22.96	23.20	23.50
		25	0	22.60	22.86	23.10	23.34	23.50
	64QAM	1	0	23.66	23.51	23.56	23.67	24.00
		1	13	23.80	23.61	23.64	23.78	24.00
		1	24	23.70	23.59	23.53	23.71	24.00
		12	0	22.85	22.71	22.76	22.84	23.00
		12	6	22.87	22.68	22.73	22.84	23.00
		12	13	22.85	22.85	22.83	22.81	23.00
		25	0	22.76	22.84	22.83	22.79	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/2540	40390/2570	40690/2600	41190/2650	
10MHz	QPSK	1	0	23.90	24.06	24.52	24.97	25.50
		1	25	23.92	24.29	24.65	25.26	25.50
		1	49	24.02	24.39	24.91	25.28	25.50
		25	0	23.20	23.36	23.73	24.22	24.50
		25	13	23.10	23.44	23.79	24.35	24.50
		25	25	23.19	23.44	23.92	24.27	24.50
		50	0	23.13	23.37	23.89	24.18	24.50
	16QAM	1	0	23.68	23.88	24.16	24.43	24.50
		1	25	23.67	23.80	24.11	24.41	24.50
		1	49	23.67	23.89	24.12	24.45	24.50
		25	0	22.53	22.70	22.97	23.27	23.50
		25	13	22.66	22.84	23.11	23.41	23.50
		25	25	22.48	22.74	22.96	23.23	23.50
		50	0	22.61	22.87	23.09	23.36	23.50
	64QAM	1	0	23.67	23.52	23.57	23.69	24.00
		1	25	23.80	23.59	23.64	23.81	24.00
		1	49	23.70	23.59	23.54	23.70	24.00
		25	0	22.84	22.70	22.75	22.87	23.00
		25	13	22.88	22.69	22.74	22.86	23.00
		25	25	22.85	22.85	22.83	22.84	23.00
		50	0	22.75	22.83	22.84	22.82	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40115/2542.5	40395/2570.5	40685/2599.5	41165/2647.5	
15MHz	QPSK	1	0	23.89	24.02	24.50	24.96	25.50
		1	38	23.90	24.28	24.62	25.27	25.50
		1	74	23.99	24.34	24.87	25.27	25.50

		36	0	23.18	23.32	23.70	24.22	24.50
		36	18	23.07	23.39	23.75	24.36	24.50
		36	39	23.16	23.41	23.88	24.27	24.50
		75	0	23.11	23.33	23.84	24.22	24.50
	16QAM	1	0	23.63	23.86	24.14	24.42	24.50
		1	38	23.65	23.77	24.09	24.41	24.50
		1	74	23.64	23.85	24.09	24.45	24.50
		36	0	22.50	22.68	22.94	23.28	23.50
		36	18	22.63	22.79	23.07	23.40	23.50
		36	39	22.46	22.70	22.93	23.23	23.50
		75	0	22.58	22.82	23.05	23.37	23.50
	64QAM	1	0	23.64	23.52	23.54	23.64	24.00
		1	38	23.77	23.61	23.61	23.79	24.00
		1	74	23.71	23.57	23.50	23.71	24.00
		36	0	22.82	22.66	22.76	22.86	23.00
		36	18	22.85	22.64	22.70	22.84	23.00
		36	39	22.82	22.80	22.79	22.82	23.00
		75	0	22.73	22.79	22.79	22.79	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz) 40140/2545	40400/2571	40670/2598	41140/2645	Tune-up Limit
20MHz	QPSK	1	0	23.73	23.98	24.47	25.21	25.50
		1	50	24.18	24.24	24.60	25.12	25.50
		1	99	**24.24**	**24.33**	**24.84**	**25.30**	25.50
		50	0	22.81	23.27	23.66	24.35	24.50
		50	25	23.04	23.35	23.72	24.21	24.50
		50	50	**23.25**	**23.36**	**23.84**	**24.47**	24.50
		100	0	22.99	23.28	23.80	**24.41**	24.50
	16QAM	1	0	23.82	23.82	24.09	23.84	24.50
		1	50	23.79	23.75	24.05	23.80	24.50
		1	99	23.91	23.82	24.07	23.92	24.50
		50	0	22.89	22.64	22.91	22.87	23.50
		50	25	22.92	22.77	23.04	22.92	23.50
		50	50	22.97	22.65	22.89	22.98	23.50
		100	0	22.82	22.78	23.02	22.81	23.50
	64QAM	1	0	23.59	23.45	23.49	23.62	24.00
		1	50	23.74	23.56	23.58	23.75	24.00
		1	99	23.65	23.52	23.48	23.65	24.00
		50	0	22.79	22.65	22.70	22.81	23.00
		50	25	22.81	22.61	22.66	22.80	23.00
		50	50	22.80	22.76	22.76	22.79	23.00
		100	0	22.71	22.75	22.76	22.77	23.00

9.2.1 LTE CA

Main- Antenna

CA Combanation	Test Scenario	Modulation	PCC						SCC					output power	
			PCC Band	PCC Bandwidth (MHz)	PCC UL RB size	PCC UL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC UL Channel	SCC UL RB size	SCC UL RB offset	conducted power (dbm)	Tune up (dbm)
CA_7C	D1&D2	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	24.07	25.50
CA_7C	D1&D2	QPSK	7	20	1	0	21100	3100	7	20	21298	1	99	23.98	25.50
CA_7C	D1&D2	QPSK	7	20	1	99	21100	3100	7	20	20902	1	0	23.94	25.50
CA_7C	D1&D2	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	23.91	25.50
CA_7C	D3	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	19.41	21.00
CA_7C	D3	QPSK	7	20	1	0	21100	3100	7	20	21298	1	99	19.35	21.00
CA_7C	D3	QPSK	7	20	1	99	21100	3100	7	20	20902	1	0	19.32	21.00
CA_7C	D3	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	19.47	21.00
CA_38C	D1&D2	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	23.58	25.50
CA_38C	D1&D2	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	23.66	25.50
CA_38C	D3	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	21.32	23.00
CA_38C	D3	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	21.21	23.00

Second – Antenna

CA Combanation	Test Scenario	Modulation	PCC						SCC					output power	
			PCC Band	PCC Bandwidth (MHz)	PCC UL RB size	PCC UL RB offset	PCC UL Channel	PCC DL Channel	SCC Band	SCC Bandwidth (MHz)	SCC UL Channel	SCC UL RB size	SCC UL RB offset	conducted power (dbm)	Tune up (dbm)
CA_7C	D1 & D3	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	19.91	21.00
CA_7C	D1 & D3	QPSK	7	20	1	0	21100	3100	7	20	21298	1	99	19.84	21.00
CA_7C	D1 & D3	QPSK	7	20	1	99	21100	3100	7	20	20902	1	0	19.86	21.00
CA_7C	D1 & D3	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	19.79	21.00
CA_7C	D2	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	24.41	25.50
CA_7C	D2	QPSK	7	20	1	0	21100	3100	7	20	21298	1	99	24.30	25.50
CA_7C	D2	QPSK	7	20	1	99	21100	3100	7	20	20902	1	0	24.27	25.50
CA_7C	D2	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	24.35	25.50
CA_38C	D1 & D3	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	20.43	21.00
CA_38C	D1 & D3	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	20.66	21.00
CA_38C	D2	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	24.78	25.50
CA_38C	D2	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	24.92	25.50

9.4 WLAN Mode

Wi-Fi 2.4G Receiver off (Full Power) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	19.00	17.86
	6/2437	19.00	**17.93**
	11/2462	18.50	17.72
802.11g (6M)	1/2412	18.50	17.27
	6/2437	18.50	17.70
	11/2462	16.50	15.39
802.11n-HT20 (MCS0)	1/2412	13.50	11.60
	6/2437	13.50	12.04
	11/2462	13.50	11.72
Wi-Fi 2.4G Receiver On Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	18	16.81
	6/2437	18	17.12
	11/2462	18	16.95
802.11g (6M)	1/2412	18	16.71
	6/2437	18	16.96
	11/2462	16.5	15.39
802.11n-HT20 (MCS0)	1/2412	13.5	11.60
	6/2437	13.5	12.04
	11/2462	13.5	11.72
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 5G (U-NII-1) Receiver off (Full Power) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	17.5	16.58
	40/5200	17.5	16.59
	48/5240	17.5	**16.61**
802.11n-HT20 (MCS0)	36/5180	15.5	14.10
	40/5200	15.5	14.19
	48/5240	15.5	14.41
802.11n-HT40	38/5190	15.5	14.21

(MCS0)	46/5230	15.5	14.64
802.11ac-VHT20 (MCS0)	36/5180	13.5	12.29
	40/5200	13.5	12.32
	48/5240	13.5	12.54
802.11ac-VHT40 (MCS0)	38/5190	13.5	12.46
	46/5230	13.5	12.63
802.11ac-VHT80 (MCS0)	42/5210	13.5	12.45
Wi-Fi 5G (U-NII-1) Receiver On	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Mode		Tune-up	Meas.
802.11a (6M)	36/5180	11.50	10.61
	40/5200	11.50	10.69
	48/5240	11.50	**10.78**
802.11n-HT20 (MCS0)	36/5180	11.50	10.32
	40/5200	11.50	10.34
	48/5240	11.50	10.41
802.11n-HT40 (MCS0)	38/5190	11.50	10.21
	46/5230	11.50	10.36
802.11ac-VHT20 (MCS0)	36/5180	11.50	10.29
	40/5200	11.50	10.32
	48/5240	11.50	10.34
802.11ac-VHT40 (MCS0)	38/5190	11.50	10.46
	46/5230	11.50	10.33
802.11ac-VHT80 (MCS0)	42/5210	11.50	10.21
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2A) Receiver off (Full Power)	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Mode		Tune-up	Meas.
802.11a (6M)	52/5260	17.5	16.29
	60/5300	17.5	16.39
	64/5320	17.5	**16.51**
802.11n-HT20 (MCS0)	52/5260	15.5	14.38
	60/5300	15.5	14.44
	64/5320	15.5	14.89
802.11n-HT40 (MCS0)	54/5270	15.5	14.56
	62/5310	15.5	14.94

802.11ac-HT20 (MCS0)	52/5260	13.5	12.57
	60/5300	13.5	12.84
	64/5320	13.5	12.97
802.11ac-HT40 (MCS0)	54/5270	13.5	12.73
	62/5310	13.5	13.07
802.11ac-HT80 (MCS0)	58/5290	13.5	12.91
Wi-Fi 5G (U-NII-2A) Receiver On Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	11.50	10.75
	60/5300	11.50	10.81
	64/5320	11.50	**10.94**
802.11n-HT20 (MCS0)	52/5260	11.50	10.38
	60/5300	11.50	10.29
	64/5320	11.50	10.36
802.11n-HT40 (MCS0)	54/5270	11.50	10.21
	62/5310	11.50	10.57
802.11ac-HT20 (MCS0)	52/5260	11.50	10.33
	60/5300	11.50	10.07
	64/5320	11.50	10.63
802.11ac-HT40 (MCS0)	54/5270	11.50	10.54
	62/5310	11.50	10.67
802.11ac-HT80 (MCS0)	58/5290	11.50	10.69
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2C) Receiver off (Full Power) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	17.5	16.52
	120/5600	17.5	**16.77**
	140/5700	17.5	16.32
	144/5720	17.5	16.33
802.11n-HT20 (MCS0)	100/5500	15.5	14.11
	120/5600	15.5	14.09
	140/5700	15.5	13.91
	144/5720	15.5	13.95
802.11n-HT40	102/5510	15.5	14.16

(MCS0)	118/5590	15.5	14.21
	134/5670	15.5	13.84
	142/5710	15.5	14.17
802.11ac-HT20 (MCS0)	100/5500	13.5	12.19
	120/5600	13.5	12.32
	140/5700	13.5	11.78
	144/5720	13.5	11.83
802.11ac-HT40 (MCS0)	102/5510	13.5	12.23
	118/5590	13.5	12.44
	134/5670	13.5	11.89
	142/5710	13.5	12.38
802.11ac-HT80 (MCS0)	106/5530	13.5	12.25
	122/5610	13.5	11.80
	138/5690	13.5	11.59
Wi-Fi 5G (U-NII-2C) Receiver On	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Mode		Tune-up	Meas.
802.11a (6M)	100/5500	11.50	11.08
	120/5600	11.50	**11.26**
	140/5700	11.50	11.17
	144/5720	11.50	11.19
802.11n-HT20 (MCS0)	100/5500	11.50	10.43
	120/5600	11.50	10.51
	140/5700	11.50	10.67
	144/5720	11.50	10.65
802.11n-HT40 (MCS0)	102/5510	11.50	10.77
	118/5590	11.50	10.34
	134/5670	11.50	10.44
	142/5710	11.50	10.38
802.11ac-HT20 (MCS0)	100/5500	11.50	10.76
	120/5600	11.50	10.64
	140/5700	11.50	10.53
	144/5720	11.50	10.47
802.11ac-HT40 (MCS0)	102/5510	11.50	10.64
	118/5590	11.50	10.58
	134/5670	11.50	10.46
	142/5710	11.50	10.53
802.11ac-HT80 (MCS0)	106/5530	11.50	10.76
	122/5610	11.50	10.78
	138/5690	11.50	10.67

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

Wi-Fi 5G (U-NII-3) Receiver off (Full Power) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	15.5	14.12
	157/5785	15.5	**14.23**
	165/5825	15.5	14.15
802.11n-HT20 (MCS0)	149/5745	15.5	13.88
	157/5785	15.5	14.03
	165/5825	15.5	13.59
802.11n-HT40 (MCS0)	151/5755	15.5	13.97
	159/5795	15.5	13.91
802.11ac-HT20 (MCS0)	149/5745	13.5	12.17
	157/5785	13.5	12.23
	165/5825	13.5	11.83
802.11ac-HT40 (MCS0)	151/5755	13.5	12.21
	159/5795	13.5	12.01
802.11ac-HT80 (MCS0)	155/5775	13.5	12.23
Wi-Fi 5G (U-NII-3) Receiver On Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	11.50	10.54
	157/5785	11.50	**10.76**
	165/5825	11.50	10.61
802.11n-HT20 (MCS0)	149/5745	11.50	10.15
	157/5785	11.50	10.08
	165/5825	11.50	10.03
802.11n-HT40 (MCS0)	151/5755	11.50	10.24
	159/5795	11.50	10.13
802.11ac-HT20 (MCS0)	149/5745	11.50	10.23
	157/5785	11.50	10.34
	165/5825	11.50	10.03
802.11ac-HT40 (MCS0)	151/5755	11.50	10.16
	159/5795	11.50	10.33
802.11ac-HT80 (MCS0)	155/5775	11.50	10.24

Note. Initial test configuration is 802.11a mode, since the highest maximum output power.

9.5 Bluetooth Mode

BT	Conducted Power(dBm)			Tune-up Limit (dBm)
	Channel/Frequency(MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	9.87	9.86	9.96	11.00
π/4DQPSK	4.79	4.82	5.12	6.00
8DPSK	4.69	4.77	4.84	6.00
BLE	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK	-2.51	-3.10	-2.95	-1.50

10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations refer to *Antenna Locations.*

Overall (Length x Width): 160.46mm x74.53mm Overall Diagonal: 166.82 mm /Display Diagonal: 166mm						
Distance of the Antenna to the EUT surface/edge						
Antenna	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Main-Antenna	＜25mm	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm
Second-Antenna	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm	＞25mm
BT/Wi-Fi Antenna	＜25mm	＜25mm	＞25mm	＜25mm	＜25mm	＞25mm
Hotspot mode, Positions for SAR tests						
Mode	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Main-Antenna	Yes	Yes	Yes	Yes	N/A	Yes
Second-Antenna	Yes	Yes	Yes	N/A	Yes	N/A
BT/Wi-Fi Antenna	Yes	Yes	N/A	Yes	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 166.82mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, product specific 10-g SAR must be tested as a phablet to determine SAR compliance. For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, product specific 10-g SAR is no required.

3. Per FCC KDB 447498 D01, for each exposure position, testing of other requised channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

a) ≤0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100MHz

b) ≤0.6 W/kg or 1.5 W/kg, for1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.

c) ≤ 0.4 W/kg or 1.0 Wkg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz.

4.When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

5. 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.

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 product specific 10-g 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)	MAXPower (dBm)	Frequency (MHz)	Ratio	Evaluation
Head	5	11.00	2480	3.97	Yes
Body-worn	15	11.00	2480	1.32	No
Hotspot	10	11.00	2480	1.98	No
Product Specific 10-g SAR	5	11.00	2480	3.97	No

10.3 Measured SAR Results

Table 10: GSM 850 (Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	GSM	190/836.6	33.50	32.96	0.105	0.010	1.13	0.119	/
Left Tilt	0	N/A	D1	GSM	190/836.6	33.50	32.96	0.092	0.022	1.13	0.104	/
Right Cheek	0	N/A	D1	GSM	190/836.6	33.50	32.96	0.139	0.057	1.13	0.157	18
Right Tilt	0	N/A	D1	GSM	190/836.6	33.50	32.96	0.070	0.028	1.13	0.079	/
Right Cheek Battery 2	0	NA	D1	GSM	190/836.6	33.50	32.96	0.119	0.040	1.13	0.135	/
Right Cheek SIM 2	0	NA	D1	GSM	190/836.6	33.50	32.96	0.127	0.030	1.13	0.144	/
Body-worn SAR												
Back Side	15	N/A	D3	GSM	190/836.6	33.50	32.96	0.236	0.103	1.13	0.267	19
Front Side	15	N/A	D2	GSM	190/836.6	33.50	32.96	0.207	0.115	1.13	0.234	/
Right Cheek Battery 2	15	N/A	D3	GSM	190/836.6	33.50	32.96	0.206	0.010	1.13	0.233	/
Right Cheek SIM 2	15	N/A	D3	GSM	190/836.6	33.50	32.96	0.218	0.010	1.13	0.247	/
Hotspot SAR												
Back Side	10	on	D3	4Txslots	190/836.6	27.50	26.82	0.201	-0.100	1.17	0.235	20
Front Side	10	on	D3	4Txslots	190/836.6	27.50	26.82	0.182	0.106	1.17	0.213	/
Left Edge	10	N/A	D3	4Txslots	190/836.6	27.50	26.82	0.026	0.015	1.17	0.030	/
Right Edge	10	N/A	D3	4Txslots	190/836.6	27.50	26.82	0.082	0.026	1.17	0.096	/
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	10	on	D3	4Txslots	190/836.6	27.50	26.82	0.181	0.041	1.17	0.212	/
Back Side Battery 2	10	on	D3	4Txslots	190/836.6	27.50	26.82	0.197	0.110	1.17	0.230	/
Back Side SIM 2	10	on	D3	4Txslots	190/836.6	27.50	26.82	0.193	0.010	1.17	0.226	/

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

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

Table 11: GSM 1900(Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	GSM	661/1880	28.00	27.69	0.060	-0.110	1.07	0.065	/
Left Tilt	0	N/A	D1	GSM	661/1880	28.00	27.69	0.046	0.000	1.07	0.049	/
Right Cheek	0	N/A	D1	GSM	661/1880	28.00	27.69	0.071	0.060	1.07	0.077	21
Right Tilt	0	N/A	D1	GSM	661/1880	28.00	27.69	0.033	0.010	1.07	0.035	/
Right Cheek Battery 2	0	NA	D1	GSM	661/1880	28.00	27.69	0.069	0.020	1.07	0.074	/
Right Cheek SIM 2	0	NA	D1	GSM	661/1880	28.00	27.69	0.068	0.110	1.07	0.073	/
Body-worn SAR												
Back Side	15	N/A	D3	GSM	661/1880	29.00	28.16	0.204	0.108	1.21	0.248	22
Front Side	15	off	D2	GSM	661/1880	30.50	29.56	0.177	0.056	1.24	0.220	/
Back Side Battery 2	15	N/A	D3	GSM	661/1880	29.00	28.16	0.195	0.030	1.21	0.237	/
Back Side SIM 2	15	N/A	D3	GSM	661/1880	29.00	28.16	0.198	0.010	1.21	0.240	/
Hotspot SAR												
Back Side	10	on	D3	1Txslot	661/1880	29.00	28.18	0.350	0.031	1.21	0.423	/
Front Side	10	on	D3	1Txslot	661/1880	29.00	28.18	0.237	0.055	1.21	0.286	/
Left Edge	10	N/A	D2	1Txslot	661/1880	30.50	29.69	0.150	0.036	1.21	0.181	/
Right Edge	10	N/A	D2	1Txslot	661/1880	30.50	29.69	0.162	0.024	1.21	0.195	/
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	10	on	D3	1Txslot	661/1880	29.00	28.18	0.545	0.070	1.21	0.658	23
Bottom Edge Battery 2	10	on	D3	1Txslot	661/1880	29.00	28.18	0.503	0.120	1.21	0.608	/
Bottom Edge SIM 2	10	on	D3	1Txslot	661/1880	29.00	28.18	0.469	0.110	1.21	0.566	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)												
Back Side	19	off	D2	1Txslot	661/1880	30.50	29.69	0.153	0.113	1.21	0.184	/
Bottom Edge	19	off	D2	1Txslot	661/1880	30.50	29.69	0.310	0.140	1.21	0.374	/

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

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

MAX Adjusted SAR											
Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR_{1g} (mW/g)	Scaling Factor	Full power Report SAR_{1g} (mW/g)	0mm SAR
Back Side	10	on	D3	1Txslots	661/1880	29.00	30.50	0.423	0.71	0.299	No
Front Side	10	on	D3	1Txslots	661/1880	29.00	30.50	0.286	0.71	0.203	No
Left Edge	10	N/A	D2	1Txslots	661/1880	29.00	30.50	0.181	0.71	0.128	No
Right Edge	10	N/A	D2	1Txslots	661/1880	29.00	30.50	0.195	0.71	0.138	No
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	10	on	D3	1Txslots	661/1880	29.00	30.50	0.658	0.71	0.466	No
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.											

Table 12: UMTS Band II (Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Channel Type	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	RMC 12.2K	9400/1880	24.00	23.68	0.150	0.135	1.08	0.161	/
Left Tilt	0	N/A	D1	RMC 12.2K	9400/1880	24.00	23.68	0.103	0.146	1.08	0.111	/
Right Cheek	0	N/A	D1	RMC 12.2K	9400/1880	24.00	23.68	0.162	0.157	1.08	0.174	24
Right Tilt	0	N/A	D1	RMC 12.2K	9400/1880	24.00	23.68	0.138	0.116	1.08	0.149	/
Right Cheek Battery 2	0	NA	D1	RMC 12.2K	9400/1880	24.00	23.68	0.156	0.032	1.08	0.168	/
Right Cheek SIM 2	0	NA	D1	RMC 12.2K	9400/1880	24.00	23.68	0.155	0.021	1.08	0.167	/
Body-worn SAR												
Back Side	15	on	D3	RMC 12.2K	9400/1880	24.00	23.68	0.189	0.030	1.08	0.203	/
Front Side	15	off	D2	RMC 12.2K	9400/1880	24.00	23.68	0.318	0.016	1.08	0.342	25
Front Side Battery 2	15	off	D2	RMC 12.2K	9400/1880	24.00	23.68	0.308	0.152	1.08	0.332	/
Front Side SIM 2	15	off	D2	RMC 12.2K	9400/1880	24.00	23.68	0.299	0.010	1.08	0.322	/
Hotspot SAR												
Back Side	10	on	D3	RMC 12.2K	9400/1880	20.00	19.67	0.372	0.025	1.08	0.401	/
Front Side	10	on	D3	RMC 12.2K	9400/1880	20.00	19.67	0.224	0.033	1.08	0.242	/
Left Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	23.68	0.299	0.116	1.08	0.322	/
Right Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	23.68	0.028	0.142	1.08	0.030	/
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	10	on	D3	RMC 12.2K	9400/1880	20.00	19.67	0.628	0.133	1.08	0.678	26
Bottom Edge Battery 2	10	on	D3	RMC 12.2K	9400/1880	20.00	19.67	0.610	0.020	1.08	0.658	/
Bottom Edge SIM 2	10	on	D3	RMC 12.2K	9400/1880	20.00	19.67	0.611	0.130	1.08	0.659	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)												
Back Side	19	off	D2	RMC 12.2K	9400/1880	24.00	23.68	0.286	0.109	1.08	0.308	/
Bottom Edge	19	off	D2	RMC 12.2K	9400/1880	24.00	23.68	0.569	0.105	1.08	0.613	/
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**Channel Type**	**Channel/ Frequency (MHz)**	**Tune-up (dBm)**	**Measured power (dBm)**	**Limit of SAR 4 W/kg (mW/g)**				**Plot No.**
								Measured SAR_{10g}	**Power Drift (dB)**	**Scaling Factor**	**Report SAR_{10g}**	
Product Specific 10-g SAR												
Bottom Edge	0	on	D3	RMC 12.2K	9400/1880	20.00	19.67	1.710	0.029	1.08	1.845	27

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

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.

MAX Adjusted SAR											
Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR_{1g} (mW/g)	Scaling Factor	Full power Report SAR_{1g} (mW/g)	0mm SAR
Back Side	10	on	D3	RMC 12.2K	9400/1880	24.00	20.00	0.401	2.51	1.008	NO
Front Side	10	on	D3	RMC 12.2K	9400/1880	24.00	20.00	0.242	2.51	0.607	NO
Left Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	24.00	0.322	1.00	0.322	NO
Right Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	24.00	0.030	1.00	0.030	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	RMC 12.2K	9400/1880	24.00	20.00	0.678	2.51	1.702	YES
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.											

Table 13: UMTS Band IV (Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Channel Type	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	RMC 12.2K	1413/1732.6	24.00	23.06	0.058	0.023	1.24	0.072	/
Left Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	24.00	23.06	0.057	0.117	1.24	0.071	/
Right Cheek	0	N/A	D1	RMC 12.2K	1413/1732.6	24.00	23.06	0.076	0.102	1.24	0.094	28
Right Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	24.00	23.06	0.059	0.135	1.24	0.073	/
Right Cheek Battery 2	0	NA	D1	RMC 12.2K	1413/1732.6	24.00	23.06	0.068	0.102	1.24	0.084	/
Right Cheek SIM 2	0	NA	D1	RMC 12.2K	1413/1732.6	24.00	23.06	0.065	0.113	1.24	0.081	/
Body-worn SAR												
Back Side	15	on	D3	RMC 12.2K	1413/1732.6	19.00	18.03	0.021	0.022	1.25	0.027	/
Front Side	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.06	0.272	0.016	1.24	0.338	29
Front Side Battery 2	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.06	0.264	0.106	1.24	0.328	/
Front Side SIM 2	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.06	0.256	0.065	1.24	0.318	/
Hotspot SAR												
Back Side	10	on	D3	RMC 12.2K	1413/1732.6	19.00	18.03	0.289	0.041	1.25	0.361	/
Front Side	10	on	D3	RMC 12.2K	1413/1732.6	19.00	18.03	0.156	0.022	1.25	0.195	/
Left Edge	10	N/A	D2	RMC 12.2K	1413/1732.6	24.00	23.06	0.096	0.011	1.24	0.119	/
Right Edge	10	N/A	D2	RMC 12.2K	1413/1732.6	24.00	23.06	0.000	0.103	1.24	0.000	/
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	10	on	D3	RMC 12.2K	1413/1732.6	19.00	18.03	0.420	0.042	1.25	0.525	30
Bottom Edge Battery 2	10	on	D3	RMC 12.2K	1413/1732.6	19.00	18.03	0.403	0.012	1.25	0.504	/
Bottom Edge SIM 2	10	on	D3	RMC 12.2K	1413/1732.6	19.00	18.03	0.395	0.116	1.25	0.494	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)												
Back Side	19	off	D2	RMC 12.2K	1413/1732.6	24.00	23.06	0.290	0.026	1.24	0.360	/
Bottom Edge	19	off	D2	RMC 12.2K	1413/1732.6	24.00	23.06	0.406	0.103	1.24	0.504	/

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

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.

MAX Adjusted SAR											
Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR_{1g} (mW/g)	Scaling Factor	Full power Report SAR_{1g} (mW/g)	0mm SAR
Back Side	10	on	D3	RMC 12.2K	9400/1880	24.00	19.00	0.361	3.16	1.143	NO
Front Side	10	on	D3	RMC 12.2K	9400/1880	24.00	19.00	0.195	3.16	0.617	NO
Left Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	20.00	0.119	2.51	0.299	NO
Right Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	20.00	0.000	2.51	0.000	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	RMC 12.2K	9400/1880	24.00	19.00	0.525	3.16	1.661	YES
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.											

Table 14: UMTS Band V (Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Channel Type	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	RMC 12.2K	4183/836.6	24.00	23.62	0.167	0.163	1.09	0.182	/
Left Tilt	0	N/A	D1	RMC 12.2K	4183/836.7	24.00	23.62	0.066	0.146	1.09	0.072	/
Right Cheek	0	N/A	D1	RMC 12.2K	4183/836.8	24.00	23.62	0.174	0.152	1.09	0.190	31
Right Tilt	0	N/A	D1	RMC 12.2K	4183/836.9	24.00	23.62	0.104	0.116	1.09	0.114	/
Right Cheek Battery 2	0	NA	D1	RMC 12.2K	4183/836.9	24.00	23.62	0.160	0.030	1.09	0.175	/
Right Cheek SIM 2	0	NA	D1	RMC 12.2K	4183/836.9	24.00	23.62	0.164	0.052	1.09	0.179	/
Body-worn SAR												
Back Side	15	on	D3	RMC 12.2K	4183/836.6	24.00	23.62	0.222	0.112	1.09	0.242	32
Front Side	15	off	D2	RMC 12.2K	4183/836.6	24.00	23.62	0.188	0.109	1.09	0.205	/
Back Side Battery 2	15	on	D3	RMC 12.2K	4183/836.9	24.00	23.62	0.160	0.030	1.09	0.175	/
Back Side SIM 2	15	on	D3	RMC 12.2K	4183/836.9	24.00	23.62	0.164	0.052	1.09	0.179	/
Hotspot SAR												
Back Side	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.62	0.252	0.113	1.09	0.275	33
Front Side	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.62	0.179	0.105	1.09	0.195	/
Left Edge	10	N/A	D2	RMC 12.2K	4183/836.6	24.00	23.62	0.000	0.114	1.09	0.000	/
Right Edge	10	N/A	D2	RMC 12.2K	4183/836.6	24.00	23.62	0.058	0.060	1.09	0.063	/
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	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.62	0.216	0.032	1.09	0.236	/
Back Side Battery 2	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.62	0.203	0.105	1.09	0.222	/
Back Side SIM 2	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.62	0.213	0.131	1.09	0.232	/

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

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.

Table 15: LTE Band 2 (20MHz, Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	50	19100/1900	25.50	24.19	0.138	0.032	1.35	0.187	/
Left Tilt	0	N/A	D1	1	50	19100/1900	25.50	24.19	0.137	0.114	1.35	0.185	/
Right Cheek	0	N/A	D1	1	50	19100/1900	25.50	24.19	0.295	0.023	1.35	0.399	34
Right Tilt	0	N/A	D1	1	50	19100/1900	25.50	24.19	0.193	0.030	1.35	0.261	/
Left Cheek	0	N/A	D1	50%	25	19100/1900	24.50	23.25	0.121	0.105	1.33	0.161	/
Left Tilt	0	N/A	D1	50%	25	19100/1900	24.50	23.25	0.120	0.116	1.33	0.160	/
Right Cheek	0	N/A	D1	50%	25	19100/1900	24.50	23.25	0.237	0.028	1.33	0.316	/
Right Tilt	0	N/A	D1	50%	25	19100/1900	24.50	23.25	0.153	0.020	1.33	0.204	/
Right Cheek Battery 2	0	NA	D1	1	50	19100/1900	25.50	24.19	0.281	0.031	1.35	0.380	/
Right Cheek SIM 2	0	NA	D1	1	50	19100/1900	25.50	24.19	0.273	0.021	1.35	0.369	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	50	19100/1900	20.00	18.70	0.167	0.103	1.35	0.225	/
Front Side	15	off	D2	1	50	19100/1900	25.50	24.19	0.390	0.115	1.35	0.527	35
Back Side	15	on	D3	50%	25	19100/1900	20.00	18.72	0.168	0.121	1.34	0.226	/
Front Side	15	off	D2	50%	25	19100/1900	24.50	23.25	0.159	0.010	1.33	0.212	/
Front Side Battery 2	15	off	D2	1	50	19100/1900	25.50	24.19	0.378	0.120	1.35	0.511	/
Front Side SIM 2	15	off	D2	1	50	19100/1900	25.50	24.19	0.381	0.010	1.35	0.515	/
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	50	19100/1900	20.00	18.70	0.269	0.113	1.35	0.363	/
Front Side	10	on	D3	1	50	19100/1900	20.00	18.70	0.203	0.102	1.35	0.274	/
Left Edge	10	N/A	D2	1	50	19100/1900	25.50	24.19	0.261	0.066	1.35	0.353	/
Right Edge	10	N/A	D2	1	50	19100/1900	25.50	24.19	0.071	-0.033	1.35	0.096	/
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	N/A
Bottom Edge	10	on	D3	1	50	19100/1900	20.00	18.70	0.556	-0.021	1.35	0.750	36
Back Side	10	on	D3	50%	25	19100/1900	20.00	18.72	0.266	0.010	1.34	0.357	/
Front Side	10	on	D3	50%	25	19100/1900	20.00	18.72	0.202	0.016	1.34	0.271	/
Left Edge	10	N/A	D2	50%	25	19100/1900	24.50	23.25	0.244	0.014	1.33	0.325	/
Right Edge	10	N/A	D2	50%	25	19100/1900	24.50	23.25	0.068	0.035	1.33	0.091	/
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	N/A
Bottom Edge	10	on	D3	50%	25	19100/1900	20.00	18.72	0.528	-0.100	1.34	0.709	/

Bottom Edge Battery 2	10	on	D3	1	50	19100/1900	20.00	18.70	0.467	0.000	1.35	0.630	/
Bottom Edge SIM 2	10	on	D3	1	50	19100/1900	20.00	18.70	0.483	0.060	1.35	0.652	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	50	19100/1900	25.50	24.19	0.319	-0.080	1.35	0.431	/
Bottom Edge	19	off	D2	1	50	19100/1900	25.50	24.19	0.735	0.100	1.35	0.994	/
Test Position	**Dist. (mm)**	**Senso r**	**Power Reduction**	**RB alloc ation**	**RB offset**	**Channel/ Frequency (MHz)**	**Tune-up (dBm)**	**Measured power (dBm)**	**Limit of SAR 4 W/kg (mW/g)**				**Plot No.**
									Measured SAR_{10g}	**Power Drift (dB)**	**Scaling Factor**	**Report SAR_{10g}**	
Product Specific 10-g SAR													
Back Side	0	on	D3	1	50	19100/1900	20.00	18.70	0.976	0.064	1.35	1.317	/
Bottom Edge	0	on	D3	1	50	19100/1900	20.00	18.70	1.500	-0.024	1.35	2.023	37

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Senso r**	**Power Reductio n**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	50	19100/1900	25.50	20.00	0.363	3.55	1.288	YES
Front Side	10	on	D3	1	50	19100/1900	25.50	20.00	0.274	3.55	0.972	NO
Left Edge	10	N/A	D2	1	50	19100/1900	25.50	25.00	0.353	1.12	0.396	NO
Right Edge	10	N/A	D2	1	50	19100/1900	25.50	25.00	0.096	1.12	0.108	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	1	50	19100/1900	25.50	20.00	0.750	3.55	2.661	YES
Back Side	10	on	D3	50%	25	19100/1900	24.50	20.00	0.357	2.82	1.007	NO
Front Side	10	on	D3	50%	25	19100/1900	24.50	20.00	0.271	2.82	0.764	NO
Left Edge	10	N/A	D2	50%	25	19100/1900	24.50	24.50	0.325	1.00	0.325	NO
Right Edge	10	N/A	D2	50%	25	19100/1900	24.50	24.50	0.091	1.00	0.091	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	50%	25	19100/1900	24.50	24.50	0.709	1.00	0.709	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 16: LTE Band 4 (20MHz, Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	99	20050/1720	25.50	24.18	0.064	0.021	1.36	0.087	/
Left Tilt	0	N/A	D1	1	99	20050/1720	25.50	24.18	0.071	0.023	1.36	0.096	/
Right Cheek	0	N/A	D1	1	99	20050/1720	25.50	24.18	0.122	-0.170	1.36	0.165	38
Right Tilt	0	N/A	D1	1	99	20050/1720	25.50	24.18	0.062	0.023	1.36	0.083	/
Left Cheek	0	N/A	D1	50%	0	20050/1720	24.50	23.38	0.042	0.164	1.29	0.054	/
Left Tilt	0	N/A	D1	50%	0	20050/1720	24.50	23.38	0.052	0.115	1.29	0.067	/
Right Cheek	0	N/A	D1	50%	0	20050/1720	24.50	23.38	0.094	0.058	1.29	0.121	/
Right Tilt	0	N/A	D1	50%	0	20050/1720	24.50	23.38	0.052	0.120	1.29	0.067	/
Right Cheek Battery 2	0	NA	D1	1	99	20050/1720	25.50	24.18	0.121	0.010	1.36	0.164	/
Right Cheek SIM 2	0	NA	D1	1	99	20050/1720	25.50	24.18	0.109	0.010	1.36	0.148	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	0	20050/1720	19.00	17.63	0.135	0.012	1.37	0.185	/
Front Side	15	off	D2	1	99	20050/1720	25.50	24.18	0.387	0.130	1.36	0.524	39
Back Side	15	on	D3	50%	25	20050/1720	19.00	17.73	0.133	0.023	1.34	0.178	/
Front Side	15	off	D2	50%	0	20050/1720	24.50	23.38	0.335	0.010	1.29	0.434	/
Front Side Battery 2	15	off	D2	1	99	20050/1720	25.50	24.18	0.357	0.113	1.36	0.484	/
Front Side SIM 2	15	off	D2	1	99	20050/1720	25.50	24.18	0.364	0.030	1.36	0.493	/
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	0	20050/1720	19.00	17.63	0.250	-0.116	1.37	0.343	/
Front Side	10	on	D3	1	0	20050/1720	19.00	17.63	0.137	0.105	1.37	0.188	/
Left Edge	10	N/A	D2	1	99	20050/1720	25.50	24.18	0.100	0.062	1.36	0.136	/
Right Edge	10	N/A	D2	1	99	20050/1720	25.50	24.18	0.066	0.031	1.36	0.089	/
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	N/A
Bottom Edge	10	on	D3	1	0	20050/1720	19.00	17.63	0.362	-0.116	1.37	0.496	/
Back Side	10	on	D3	50%	25	20050/1720	19.00	17.73	0.252	-0.021	1.34	0.338	/
Front Side	10	on	D3	50%	25	20050/1720	19.00	17.73	0.136	0.010	1.34	0.182	/
Left Edge	10	N/A	D2	50%	0	20050/1720	24.50	23.38	0.074	0.033	1.29	0.096	/
Right Edge	10	N/A	D2	50%	0	20050/1720	24.50	23.38	0.050	-0.174	1.29	0.065	/
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	N/A
Bottom Edge	10	on	D3	50%	25	20050/1720	19.00	17.73	0.377	-0.113	1.34	0.505	40
Bottom Edge	15	on	D3	1	99	20050/1720	25.50	24.18	0.365	0.110	1.36	0.495	/

Battery 2													
Bottom Edge SIM 2	15	on	D3	1	99	20050/1720	25.50	24.18	0.367	0.125	1.36	0.497	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	99	20050/1720	25.50	24.18	0.393	0.022	1.36	0.533	/
Bottom Edge	19	off	D2	1	99	20050/1720	25.50	24.18	0.527	0.094	1.36	0.714	/
Test Position	**Dist. (mm)**	**Senso r**	**Power Reduction**	**RB alloc ation**	**RB offset**	**Channel/ Frequency (MHz)**	**Tune-up (dBm)**	**Measured power (dBm)**	**Limit of SAR 4 W/kg (mW/g)**				**Plot No.**
									Measured SAR_{10g}	**Power Drift (dB)**	**Scaling Factor**	**Report SAR_{10g}**	
Product Specific 10-g SAR													
Back Side	0	on	D3	1	0	20050/1720	19.00	17.63	0.580	0.032	1.37	0.795	/
Bottom Edge	0	on	D3	1	0	20050/1720	19.00	17.63	1.110	0.055	1.37	1.522	/
Bottom Edge	0	on	D3	50%	25	20050/1720	19.00	17.73	1.150	0.190	1.34	1.541	41

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Senso r**	**Power Reductio n**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	0	20050/1720	25.50	19.00	0.343	4.47	1.531	YES
Front Side	10	on	D3	1	0	20050/1720	25.50	19.00	0.188	4.47	0.839	NO
Left Edge	10	N/A	D2	1	99	20050/1720	25.50	25.50	0.136	1.00	0.136	NO
Right Edge	10	N/A	D2	1	99	20050/1720	25.50	25.50	0.089	1.00	0.089	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	1	0	20050/1720	25.50	19.00	0.496	4.47	2.217	YES
Back Side	10	on	D3	50%	25	20050/1720	24.50	19.00	0.338	3.55	1.198	NO
Front Side	10	on	D3	50%	25	20050/1720	24.50	19.00	0.182	3.55	0.646	NO
Left Edge	10	N/A	D2	50%	0	20050/1720	24.50	24.50	0.096	1.00	0.096	NO
Right Edge	10	N/A	D2	50%	0	20050/1720	24.50	24.50	0.065	1.00	0.065	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	50%	25	20050/1720	24.50	19.00	0.505	3.55	1.792	YES

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 17: LTE Band 5 (10MHz, Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	0	20525/836.5	25.50	24.08	0.179	0.024	1.39	0.248	/
Left Tilt	0	N/A	D1	1	0	20525/836.5	25.50	24.08	0.100	0.015	1.39	0.139	/
Right Cheek	0	N/A	D1	1	0	20525/836.5	25.50	24.08	0.201	0.116	1.39	0.279	42
Right Tilt	0	N/A	D1	1	0	20525/836.5	25.50	24.08	0.109	0.031	1.39	0.151	/
Left Cheek	0	N/A	D1	50%	0	20525/836.5	24.50	23.20	0.096	0.086	1.35	0.130	/
Left Tilt	0	N/A	D1	50%	0	20525/836.5	24.50	23.20	0.169	0.025	1.35	0.228	/
Right Cheek	0	N/A	D1	50%	0	20525/836.5	24.50	23.20	0.186	0.114	1.35	0.251	/
Right Tilt	0	N/A	D1	50%	0	20525/836.5	24.50	23.20	0.101	0.116	1.35	0.136	/
Right Cheek Battery 2	0	NA	D1	1	0	20525/836.5	25.50	24.08	0.187	0.124	1.39	0.259	/
Right Cheek SIM 2	0	NA	D1	1	0	20525/836.5	25.50	24.08	0.177	0.022	1.39	0.245	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	25	20450/829	24.50	23.20	0.245	0.034	1.35	0.330	/
Front Side	15	off	D2	1	0	20525/836.5	25.50	24.08	0.227	0.105	1.39	0.315	/
Back Side	15	on	D3	50%	13	20600/844	24.50	23.26	0.249	0.010	1.33	0.331	43
Front Side	15	off	D2	50%	0	20525/836.5	24.50	23.20	0.231	0.030	1.35	0.312	/
Back Side Battery 2	15	on	D3	50%	13	20600/844	24.50	23.26	0.235	0.120	1.33	0.313	/
Back Side SIM 2	15	on	D3	50%	13	20600/844	24.50	23.26	0.220	0.035	1.33	0.293	/
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	25	20450/829	24.50	23.20	0.248	0.112	1.35	0.335	/
Front Side	10	on	D3	1	25	20450/829	24.50	23.20	0.191	0.134	1.35	0.258	/
Left Edge	10	N/A	D2	1	0	20525/836.5	25.50	24.08	0.101	0.106	1.39	0.140	/
Right Edge	10	N/A	D2	1	0	20525/836.5	25.50	24.08	0.133	0.045	1.39	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	N/A
Bottom Edge	10	on	D3	1	25	20450/829	24.50	23.20	0.217	0.132	1.35	0.293	/
Back Side	10	on	D3	50%	13	20600/844	24.50	23.26	0.291	0.020	1.33	0.387	44
Front Side	10	on	D3	50%	13	20600/844	24.50	23.26	0.196	0.115	1.33	0.261	/
Left Edge	10	N/A	D2	50%	0	20525/836.5	24.50	23.20	0.053	0.164	1.35	0.071	/
Right Edge	10	N/A	D2	50%	0	20525/836.5	24.50	23.20	0.129	0.034	1.35	0.174	/
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	N/A
Bottom Edge	10	on	D3	50%	13	20600/844	24.50	23.26	0.216	0.027	1.33	0.287	/
Back Side	10	on	D3	50%	13	20600/844	24.50	23.26	0.270	0.022	1.33	0.359	/

Battery 2													
Back Side SIM 2	10	on	D3	50%	13	20600/844	24.50	23.26	0.288	-0.124	1.33	0.383	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	0	20525/836.5	25.50	24.08	0.221	0.070	1.39	0.306	/
Bottom Edge	19	off	D2	1	0	20525/836.5	25.50	24.08	0.081	0.057	1.39	0.112	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	25	20450/829	25.50	24.50	0.335	1.26	0.421	NO
Front Side	10	on	D3	1	25	20450/829	25.50	24.50	0.258	1.26	0.324	NO
Left Edge	10	N/A	D2	1	0	20525/836.5	25.50	25.50	0.140	1.00	0.140	NO
Right Edge	10	N/A	D2	1	0	20525/836.5	25.50	25.50	0.184	1.00	0.184	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	1	25	20450/829	25.50	24.50	0.293	1.26	0.369	NO
Back Side	10	on	D3	50%	13	20600/844	24.50	24.50	0.387	1.00	0.387	NO
Front Side	10	on	D3	50%	13	20600/844	24.50	24.50	0.261	1.00	0.261	NO
Left Edge	10	N/A	D2	50%	0	20525/836.5	24.50	24.50	0.071	1.00	0.071	NO
Right Edge	10	N/A	D2	50%	0	20525/836.5	24.50	24.50	0.174	1.00	0.174	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	50%	13	20600/844	24.50	24.50	0.287	1.00	0.287	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 18: LTE Band 7 (20MHz, Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	99	20850/2510	25.50	24.29	0.207	-0.166	1.32	0.274	45
Left Tilt	0	N/A	D1	1	99	20850/2510	25.50	24.29	0.130	0.020	1.32	0.172	/
Right Cheek	0	N/A	D1	1	99	20850/2510	25.50	24.29	0.147	0.085	1.32	0.194	/
Right Tilt	0	N/A	D1	1	99	20850/2510	25.50	24.29	0.169	0.110	1.32	0.223	/
Left Cheek	0	N/A	D1	50%	50	20850/2510	24.50	23.34	0.170	-0.050	1.31	0.222	/
Left Tilt	0	N/A	D1	50%	50	20850/2510	24.50	23.34	0.144	0.112	1.31	0.188	/
Right Cheek	0	N/A	D1	50%	50	20850/2510	24.50	23.34	0.161	0.169	1.31	0.210	/
Right Tilt	0	N/A	D1	50%	50	20850/2510	24.50	23.34	0.172	0.035	1.31	0.225	/
Left Cheek Battery 2	0	NA	D1	1	99	20850/2510	25.50	24.29	0.199	0.010	1.32	0.263	/
Left Cheek SIM 2	0	NA	D1	1	99	20850/2510	25.50	24.29	0.205	0.033	1.32	0.271	/
Left cheek	0	NA	D1	1	99	20850/2510	25.50	24.07	0.182	-0.041	1.39	0.253	/
				1	0	21048/2529.8							
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	99	21350/2560	21.00	19.39	0.127	0.115	1.45	0.184	/
Front Side	15	off	D2	1	99	20850/2510	25.50	24.29	0.503	0.044	1.32	0.665	46
Back Side	15	on	D3	50%	50	20850/2510	21.00	19.45	0.128	0.058	1.43	0.183	/
Front Side	15	off	D2	50%	50	20850/2510	24.50	23.34	0.416	0.024	1.31	0.543	/
Front Side Battery 2	15	off	D2	1	99	20850/2510	25.50	24.29	0.488	0.017	1.32	0.645	/
Front Side SIM 2	15	off	D2	1	99	20850/2510	25.50	24.29	0.490	0.022	1.32	0.647	/
Front Side	15	off	D2	1	99	20850/2510	25.50	24.07	0.472	0.114	1.39	0.656	/
				1	0	21048/2529.8							
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	99	21350/2560	21.00	19.39	0.252	0.112	1.45	0.365	/
Front Side	10	on	D3	1	99	21350/2560	21.00	19.39	0.258	0.106	1.45	0.374	/
Left Edge	10	N/A	D2	1	99	20850/2510	25.50	24.29	0.203	0.144	1.32	0.268	/
Right Edge	10	N/A	D2	1	99	20850/2510	25.50	24.29	0.092	0.023	1.32	0.122	/
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	N/A
Bottom Edge	10	on	D3	1	99	21350/2560	21.00	19.39	0.339	-0.040	1.45	0.491	/
Back Side	10	on	D3	50%	50	20850/2510	21.00	19.45	0.289	-0.052	1.43	0.413	/
Front Side	10	on	D3	50%	50	20850/2510	21.00	19.45	0.306	-0.011	1.43	0.437	/
Left Edge	10	N/A	D2	50%	50	20850/2510	24.50	23.34	0.456	0.115	1.31	0.596	47

Right Edge	10	N/A	D2	50%	50	20850/2510	24.50	23.34	0.044	0.032	1.31	0.057	/
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	N/A
Bottom Edge	10	on	D3	50%	50	20850/2510	21.00	19.45	0.403	0.068	1.43	0.576	/
Left Edge Battery 2	10	NA	D2	50%	50	20850/2510	24.50	23.34	0.430	0.020	1.31	0.562	/
Left Edge SIM 2	10	NA	D2	50%	50	20850/2510	24.50	23.34	0.450	0.010	1.31	0.588	/
Left Edge	10	off	D2	1	99	20850/2510	25.50	24.07	0.423	0.114	1.39	0.588	/
				1	0	21048/2529.8							
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	99	20850/2510	25.50	24.29	0.250	0.051	1.32	0.330	/
Bottom Edge	19	off	D2	1	99	20850/2510	25.50	24.29	0.591	0.030	1.32	0.781	/

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 4 W/kg (mW/g)				Plot No.
									Measured SAR_{10g}	Power Drift (dB)	Scaling Factor	Report SAR_{10g}	
Product Specific 10-g SAR													
Bottom Edge	0	on	D3	1	99	21350/2560	21.00	19.39	1.120	-0.103	1.45	1.623	/
Bottom Edge	0	on	D3	50%	50	20850/2510	21.00	19.45	1.280	-0.078	1.43	1.829	48

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR_{1g} (mW/g)	Scaling Factor	Full power Report SAR_{1g} (mW/g)	0mm SAR
Back Side	10	on	D3	1	99	21350/2560	25.50	21.00	0.365	2.82	1.029	NO
Front Side	10	on	D3	1	99	21350/2560	25.50	21.00	0.374	2.82	1.053	NO
Left Edge	10	N/A	D2	1	99	20850/2510	25.50	25.50	0.268	1.00	0.268	NO
Right Edge	10	N/A	D2	1	99	20850/2510	25.50	25.50	0.122	1.00	0.122	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	1	99	21350/2560	25.50	21.00	0.491	2.82	1.384	YES
Back Side	10	on	D3	50%	50	20850/2510	24.50	21.00	0.413	2.24	0.924	NO
Front Side	10	on	D3	50%	50	20850/2510	24.50	21.00	0.437	2.24	0.979	NO
Left Edge	10	N/A	D2	50%	50	20850/2510	24.50	24.50	0.596	1.00	0.596	NO
Right Edge	10	N/A	D2	50%	50	20850/2510	24.50	24.50	0.057	1.00	0.057	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	50%	50	20850/2510	24.50	21.00	0.576	2.24	1.289	YES

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 19: LTE Band 38 (20MHz, Main-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	99	38000/2595	25.50	23.91	0.150	0.024	1.44	0.216	/
Left Tilt	0	N/A	D1	1	99	38000/2595	25.50	23.91	0.097	0.143	1.44	0.140	/
Right Cheek	0	N/A	D1	1	99	38000/2595	25.50	23.91	0.074	0.100	1.44	0.107	/
Right Tilt	0	N/A	D1	1	99	38000/2595	25.50	23.91	0.035	0.000	1.44	0.050	/
Left Cheek	0	N/A	D1	50%	0	37850/2580	23.00	21.47	0.156	0.154	1.42	0.222	49
Left Tilt	0	N/A	D1	50%	0	37850/2580	23.00	21.47	0.101	0.116	1.42	0.144	/
Right Cheek	0	N/A	D1	50%	0	37850/2580	23.00	21.47	0.076	0.042	1.42	0.108	/
Right Tilt	0	N/A	D1	50%	0	37850/2580	23.00	21.47	0.039	0.116	1.42	0.056	/
Left Cheek Battery 2	0	NA	D1	50%	0	37850/2580	23.00	21.47	0.144	0.022	1.42	0.205	/
Left Cheek SIM 2	0	NA	D1	50%	0	37850/2580	23.00	21.47	0.155	0.019	1.42	0.220	/
Left cheek	0	NA	D1	1	0	38150/2610	25.50	23.66	0.237	0.100	1.53	0.362	/
				1	99	37952/2590.2							
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	99	38000/2595	23.00	21.61	0.131	0.020	1.38	0.180	/
Front Side	15	off	D2	1	99	38000/2595	25.50	23.91	0.117	0.028	1.44	0.169	/
Back Side	15	on	D3	50%	0	37850/2580	23.00	21.47	0.133	0.019	1.42	0.189	/
Front Side	15	off	D2	50%	0	37850/2580	24.50	22.95	0.155	0.015	1.43	0.221	50
Front Side Battery 2	15	off	D2	50%	0	37850/2580	24.50	22.95	0.133	0.010	1.43	0.190	/
Front Side SIM 2	15	off	D2	50%	0	37850/2580	24.50	22.95	0.148	0.147	1.43	0.211	/
Front Side	15	off	D2	1	0	38150/2610	25.50	23.66	0.151	0.030	1.53	0.231	/
				1	99	37952/2590.2							
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	99	38000/2595	23.00	21.61	0.272	0.030	1.38	0.375	/
Front Side	10	on	D3	1	99	38000/2595	23.00	21.61	0.286	-0.048	1.38	0.394	/
Left Edge	10	N/A	D2	1	99	38150/2610	25.50	23.91	0.048	0.010	1.44	0.069	/
Right Edge	10	N/A	D2	1	99	38150/2610	25.50	23.91	0.113	0.024	1.44	0.163	/
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	N/A
Bottom Edge	10	on	D3	1	99	38000/2595	23.00	21.61	0.331	0.050	1.38	0.456	51
Back Side	10	on	D3	50%	0	37850/2580	23.00	21.47	0.269	0.019	1.42	0.383	/
Front Side	10	on	D3	50%	0	37850/2580	23.00	21.47	0.125	0.035	1.42	0.178	/
Left Edge	10	N/A	D2	50%	25	38150/2610	24.50	22.95	0.275	0.057	1.43	0.393	/

Right Edge	10	N/A	D2	50%	25	38150/2610	24.50	22.95	0.115	0.044	1.43	0.164	/
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	N/A
Bottom Edge	10	on	D3	50%	0	37850/2580	23.00	21.47	0.256	0.020	1.42	0.364	/
Bottom Edge Battery 2	10	on	D3	1	99	38000/2595	23.00	21.61	0.275	0.010	1.38	0.379	/
Bottom Edge SIM 2	10	on	D3	1	99	38000/2595	23.00	21.61	0.330	0.136	1.38	0.454	/
Bottom Edge	10	on	D3	1	99	37850/2580	23.00	21.32	0.305	0.130	1.47	0.449	/
				1	0	38048/2599.8							
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	99	38150/2610	25.50	23.91	0.095	0.013	1.44	0.137	/
Bottom Edge	19	off	D2	1	99	38150/2610	25.50	23.91	0.116	-0.024	1.44	0.167	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	99	38000/2595	25.50	23.00	0.375	1.78	0.666	NO
Front Side	10	on	D3	1	99	38000/2595	25.50	23.00	0.394	1.78	0.700	NO
Left Edge	10	N/A	D2	1	99	38150/2610	25.50	25.50	0.069	1.00	0.069	NO
Right Edge	10	N/A	D2	1	99	38150/2610	25.50	25.50	0.163	1.00	0.163	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	1	99	38000/2595	25.50	25.50	0.456	1.00	0.456	NO
Back Side	10	on	D3	50%	0	37850/2580	24.50	24.50	0.383	1.00	0.383	NO
Front Side	10	on	D3	50%	0	37850/2580	24.50	24.50	0.178	1.00	0.178	NO
Left Edge	10	N/A	D2	50%	25	38150/2610	24.50	24.50	0.393	1.00	0.393	NO
Right Edge	10	N/A	D2	50%	25	38150/2610	24.50	24.50	0.164	1.00	0.164	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	50%	0	37850/2580	24.50	24.50	0.364	1.00	0.364	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

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

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	99	41140/2645	25.50	24.57	0.153	0.065	1.24	0.190	52
Left Tilt	0	N/A	D1	1	99	41140/2645	25.50	24.57	0.116	0.032	1.24	0.144	/
Right Cheek	0	N/A	D1	1	99	41140/2645	25.50	24.57	0.073	0.025	1.24	0.090	/
Right Tilt	0	N/A	D1	1	99	41140/2645	25.50	24.57	0.065	0.021	1.24	0.081	/
Left Cheek	0	N/A	D1	50%	50	41140/2645	24.50	23.68	0.139	0.000	1.21	0.168	/
Left Tilt	0	N/A	D1	50%	50	41140/2645	24.50	23.68	0.103	0.112	1.21	0.124	/
Right Cheek	0	N/A	D1	50%	50	41140/2645	24.50	23.68	0.069	0.020	1.21	0.083	/
Right Tilt	0	N/A	D1	50%	50	41140/2645	24.50	23.68	0.059	0.127	1.21	0.071	/
Left Cheek Battery 2	0	NA	D1	1	99	41140/2645	25.50	24.57	0.148	0.066	1.24	0.183	/
Left Cheek SIM 2	0	NA	D1	1	99	41140/2645	25.50	24.57	0.145	-0.028	1.24	0.180	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	99	41140/2645	23.00	21.90	0.168	-0.108	1.29	0.216	/
Front Side	15	off	D2	1	99	41140/2645	25.50	24.57	0.263	-0.027	1.24	0.326	53
Back Side	15	on	D3	50%	50	41140/2645	23.00	22.06	0.163	-0.100	1.24	0.202	/
Front Side	15	off	D2	50%	50	41140/2645	24.50	23.68	0.207	-0.029	1.21	0.250	/
Front Side Battery 2	15	off	D2	1	99	41140/2645	25.50	24.57	0.251	0.011	1.24	0.311	/
Front Side SIM 2	15	off	D2	1	99	41140/2645	25.50	24.57	0.258	0.140	1.24	0.320	/
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	99	41140/2645	23.00	21.90	0.169	0.010	1.29	0.218	/
Front Side	10	on	D3	1	99	41140/2645	23.00	21.90	0.189	0.035	1.29	0.243	/
Left Edge	10	N/A	D2	1	99	41140/2645	25.50	24.57	0.159	-0.060	1.24	0.197	/
Right Edge	10	N/A	D2	1	99	41140/2645	25.50	24.57	0.048	0.042	1.24	0.059	/
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	N/A
Bottom Edge	10	on	D3	1	99	41140/2645	23.00	21.90	0.426	-0.080	1.29	0.549	54
Back Side	10	on	D3	50%	50	41140/2645	23.00	22.06	0.166	-0.018	1.24	0.206	/
Front Side	10	on	D3	50%	50	41140/2645	23.00	22.06	0.187	0.012	1.24	0.232	/
Left Edge	10	N/A	D2	50%	50	41140/2645	24.50	23.68	0.156	-0.063	1.21	0.188	/
Right Edge	10	N/A	D2	50%	50	41140/2645	24.50	23.68	0.044	0.015	1.21	0.053	/
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	N/A
Bottom Edge	10	on	D3	50%	50	41140/2645	23.00	22.06	0.414	0.016	1.24	0.514	/
Bottom Edge	10	on	D3	1	99	41140/2645	23.00	21.90	0.419	0.022	1.29	0.540	/

Battery 2													
Bottom Edge SIM 2	10	on	D3	1	99	41140/2645	23.00	21.90	0.395	-0.048	1.29	0.509	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	99	41140/2645	25.50	24.57	0.094	0.032	1.24	0.116	/
Bottom Edge	19	off	D2	1	99	41140/2645	25.50	24.57	0.108	0.024	1.24	0.134	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	99	41140/2645	25.50	23.00	0.218	1.78	0.387	NO
Front Side	10	on	D3	1	99	41140/2645	25.50	23.00	0.243	1.78	0.433	NO
Left Edge	10	N/A	D2	1	99	41140/2645	25.50	25.50	0.197	1.00	0.197	NO
Right Edge	10	N/A	D2	1	99	41140/2645	25.50	25.50	0.059	1.00	0.059	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	1	99	41140/2645	25.50	23.00	0.549	1.78	0.976	NO
Back Side	10	on	D3	50%	50	41140/2645	24.50	23.00	0.206	1.41	0.291	NO
Front Side	10	on	D3	50%	50	41140/2645	24.50	23.00	0.232	1.41	0.328	NO
Left Edge	10	N/A	D2	50%	50	41140/2645	24.50	24.50	0.188	1.00	0.188	NO
Right Edge	10	N/A	D2	50%	50	41140/2645	24.50	24.50	0.053	1.00	0.053	NO
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Bottom Edge	10	on	D3	50%	50	41140/2645	24.50	24.50	0.514	1.00	0.514	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 21: GSM 850 (Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	GSM	190/836.6	32.00	31.61	0.454	0.000	1.09	0.497	/
Left Tilt	0	N/A	D1	GSM	190/836.6	32.00	31.61	0.365	-0.050	1.09	0.399	/
Right Cheek	0	N/A	D1	GSM	190/836.6	32.00	31.61	0.709	0.080	1.09	0.776	55
Right Tilt	0	N/A	D1	GSM	190/836.6	32.00	31.61	0.495	-0.100	1.09	0.542	/
Right Cheek Battery 2	0	NA	D1	GSM	190/836.6	32.00	31.61	0.506	0.030	1.09	0.554	/
Right Cheek SIM 2	0	NA	D1	GSM	190/836.6	32.00	31.61	0.573	-0.110	1.09	0.627	/
Body-worn SAR												
Back Side	15	N/A	D3	GSM	190/836.6	33.50	32.45	0.137	0.033	1.27	0.174	56
Front Side	15	N/A	D2	GSM	190/836.6	33.50	32.45	0.109	0.104	1.27	0.139	/
Back Side Battery 2	15	on	D3	GSM	190/836.6	33.50	32.45	0.117	0.010	1.27	0.149	/
Back Side SIM 2	15	on	D3	GSM	190/836.6	33.50	32.45	0.119	0.020	1.27	0.152	/
Hotspot SAR												
Back Side	10	on	D3	4Txslots	190/836.6	27.50	26.38	0.176	0.026	1.29	0.228	57
Front Side	10	on	D3	4Txslots	190/836.6	27.50	26.38	0.159	0.115	1.29	0.206	/
Left Edge	10	N/A	D3	4Txslots	190/836.6	27.50	26.38	0.065	0.039	1.29	0.084	/
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	10	on	D3	4Txslots	190/836.6	27.50	26.38	0.142	0.106	1.29	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	N/A
Back Side Battery 2	10	on	D3	4Txslots	190/836.6	27.50	26.38	0.165	0.030	1.29	0.214	/
Back Side SIM 2	10	on	D3	4Txslots	190/836.6	27.50	26.38	0.162	0.060	1.29	0.210	/

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

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

Table 22: GSM 1900 (Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	GSM	661/1880	22.00	21.60	0.281	0.067	1.10	0.308	/
Left Tilt	0	N/A	D1	GSM	661/1880	22.00	21.60	0.349	0.024	1.10	0.383	/
Right Cheek	0	N/A	D1	GSM	661/1880	22.00	21.60	0.408	0.103	1.10	0.447	/
Right Tilt	0	N/A	D1	GSM	661/1880	22.00	21.60	0.478	0.115	1.10	0.524	58
Right Tilt Battery 2	0	NA	D1	GSM	661/1880	22.00	21.60	0.457	0.112	1.10	0.501	/
Right Tilt SIM 2	0	NA	D1	GSM	661/1880	22.00	21.60	0.461	0.106	1.10	0.505	/
Body-worn SAR												
Back Side	15	N/A	D3	GSM	661/1880	26.50	25.82	0.140	0.160	1.17	0.164	/
Front Side	15	off	D2	GSM	661/1880	30.50	29.67	0.305	0.030	1.21	0.369	59
Front Side Battery 2	15	off	D2	GSM	661/1880	30.50	29.67	0.297	0.013	1.21	0.360	/
Front Side SIM 2	15	off	D2	GSM	661/1880	30.50	29.67	0.289	0.010	1.21	0.350	/
Hotspot SAR												
Back Side	10	on	D3	4Txslots	661/1880	22.00	21.48	0.237	0.034	1.13	0.267	/
Front Side	10	on	D3	4Txslots	661/1880	22.00	21.48	0.208	0.032	1.13	0.234	/
Left Edge	10	N/A	D2	1Txslots	661/1880	30.50	29.63	0.111	0.011	1.22	0.136	/
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	10	on	D3	4Txslots	661/1880	22.00	21.48	0.479	0.026	1.13	0.540	60
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	N/A
Top Edge Battery 2	10	on	D3	4Txslots	661/1880	22.00	21.48	0.457	0.021	1.13	0.515	/
Top Edge SIM 2	10	on	D3	4Txslots	661/1880	22.00	21.48	0.426	0.110	1.13	0.480	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)												
Back Side	19	off	D2	1Txslots	661/1880	30.50	29.63	0.211	0.038	1.22	0.258	/
Front Side	14	off	D2	1Txslots	661/1880	30.50	29.63	0.387	0.080	1.22	0.473	/
Top Edge	19	off	D2	1Txslots	661/1880	30.50	29.63	0.502	0.080	1.22	0.613	/

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

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

MAX Adjusted SAR											
Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR_{1g} (mW/g)	Scaling Factor	Full power Report SAR_{1g} (mW/g)	0mm SAR
Back Side	10	on	D3	4Txslots	661/1880	22.00	24.00	0.267	0.63	0.169	NO
Front Side	10	on	D3	4Txslots	661/1880	22.00	24.00	0.234	0.63	0.148	NO
Left Edge	10	N/A	D2	1Txslots	661/1880	22.00	24.00	0.136	0.63	0.086	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	4Txslots	661/1880	22.00	24.00	0.569	0.63	0.359	NO
Back Side	10	on	D3	4Txslots	661/1880	22.00	24.00	0.267	0.63	0.169	NO
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.											

Table 23: UMTS Band II (Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Channel Type	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	RMC 12.2K	9400/1880	15.00	14.36	0.423	0.040	1.16	0.490	/
Left Tilt	0	N/A	D1	RMC 12.2K	9400/1880	15.00	14.36	0.533	0.045	1.16	0.618	/
Right Cheek	0	N/A	D1	RMC 12.2K	9400/1880	15.00	14.36	0.672	0.023	1.16	0.779	/
Right Tilt	0	NA	D1	RMC 12.2K	9262/1852.4	15.00	14.31	0.723	0.102	1.17	0.847	/
	0	NA	D1	RMC 12.2K	9400/1880	15.00	14.36	0.770	0.114	1.16	0.892	61
	0	NA	D1	RMC 12.2K	9538/1907.6	15.00	14.48	0.678	0.103	1.13	0.764	/
Right Tilt Battery 2	0	NA	D1	RMC 12.2K	9400/1880	15.00	14.36	0.685	0.112	1.16	0.794	/
Right Tilt SIM 2	0	NA	D1	RMC 12.2K	9400/1880	15.00	14.36	0.669	0.154	1.16	0.775	/
Body-worn SAR												
Back Side	15	on	D3	RMC 12.2K	9400/1880	15.00	14.36	0.087	-0.110	1.16	0.101	/
Front Side	15	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.586	-0.020	1.16	0.681	62
Front Side Battery 2	15	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.561	0.010	1.16	0.652	/
Front Side SIM 2	15	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.571	0.123	1.16	0.663	/
Hotspot SAR												
Back Side	10	on	D3	RMC 12.2K	9400/1880	15.00	14.36	0.173	0.025	1.16	0.200	/
Front Side	10	on	D3	RMC 12.2K	9400/1880	15.00	14.36	0.163	0.103	1.16	0.189	/
Left Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	23.35	0.194	0.115	1.16	0.225	63
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	10	on	D3	RMC 12.2K	9400/1880	15.00	14.36	0.028	-0.020	1.16	0.032	/
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
Left Edge Battery 2	10	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.174	0.120	1.16	0.202	/
Left Edge SIM 2	10	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.184	0.030	1.16	0.214	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)												
Back Side	19	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.396	-0.030	1.16	0.460	/
Front Side	14	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.708	0.020	1.16	0.822	/
Top Edge	19	off	D2	RMC 12.2K	9262/1852.4	24.00	23.34	1.000	0.020	1.16	1.164	/
Top Edge	19	off	D2	RMC 12.2K	9400/1880	24.00	23.35	0.756	0.104	1.16	0.878	/
Test Position	Dist. (mm)	Sensor	Power Reduction	Channel Type	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 4 W/kg (mW/g)				Plot No.
								Measured SAR_{10g}	Power Drift (dB)	Scaling Factor	Report SAR_{10g}	

Product Specific 10-g SAR												
Back Side	0	on	D3	RMC 12.2K	9400/1880	15.00	14.36	0.406	0.042	1.16	0.470	/
Front Side	0	on	D3	RMC 12.2K	9400/1880	15.00	14.36	0.460	0.100	1.16	0.533	64

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

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.

MAX Adjusted SAR											
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**Time slot**	**Channel Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	RMC 12.2K	9400/1880	24.00	15.00	0.200	7.94	1.592	YES
Front Side	10	on	D3	RMC 12.2K	9400/1880	24.00	15.00	0.189	7.94	1.500	YES
Left Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	24.00	0.225	1.00	0.225	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	RMC 12.2K	9400/1880	24.00	15.00	0.032	7.94	0.258	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 24: UMTS Band IV (Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Channel Type	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	RMC 12.2K	1413/1732.6	16.00	14.91	0.220	0.118	1.29	0.283	/
Left Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	16.00	14.91	0.269	0.025	1.29	0.346	/
Right Cheek	0	N/A	D1	RMC 12.2K	1413/1732.6	16.00	14.91	0.353	0.146	1.29	0.454	/
Right Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	16.00	14.91	0.410	0.103	1.29	0.527	65
Right Tilt Battery 2	0	NA	D1	RMC 12.2K	1413/1732.6	16.00	14.91	0.398	0.110	1.29	0.512	/
Right Tilt SIM 2	0	NA	D1	RMC 12.2K	1413/1732.6	16.00	14.91	0.365	0.105	1.29	0.469	/
Body-worn SAR												
Back Side	15	on	D3	RMC 12.2K	1413/1732.6	16.00	14.91	0.040	0.105	1.29	0.051	/
Front Side	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.03	0.218	0.126	1.25	0.273	66
Front Side Battery 2	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.03	0.207	0.113	1.25	0.259	/
Front Side SIM 2	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.03	0.200	0.105	1.25	0.250	/
Hotspot SAR												
Back Side	10	on	D3	RMC 12.2K	1413/1732.6	16.00	14.91	0.068	0.084	1.29	0.087	/
Front Side	10	on	D3	RMC 12.2K	1413/1732.6	16.00	14.91	0.072	0.061	1.29	0.093	/
Left Edge	10	N/A	D2	RMC 12.2K	1413/1732.6	24.00	23.03	0.072	0.020	1.25	0.090	/
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	10	on	D3	RMC 12.2K	1413/1732.6	16.00	14.91	0.130	0.051	1.29	0.167	67
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
Top Edge Battery 2	10	on	D3	RMC 12.2K	1413/1732.6	16.00	14.91	0.116	0.034	1.29	0.149	/
Top Edge SIM 2	10	on	D3	RMC 12.2K	1413/1732.6	16.00	14.91	0.123	0.105	1.29	0.158	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)												
Back Side	19	off	D2	RMC 12.2K	1413/1732.6	24.00	23.03	0.120	0.106	1.25	0.150	/
Front Side	14	off	D2	RMC 12.2K	1413/1732.6	24.00	23.03	0.221	0.110	1.25	0.276	/
Top Edge	19	off	D2	RMC 12.2K	1413/1732.6	24.00	23.03	0.219	0.105	1.25	0.274	/

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

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.

MAX Adjusted SAR											
Test Position	Dist. (mm)	Sensor	Power Reduction	Time slot	Channel Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR_{1g} (mW/g)	Scaling Factor	Full power Report SAR_{1g} (mW/g)	0mm SAR
Back Side	10	on	D3	RMC 12.2K	9400/1880	24.00	16.00	0.087	6.31	0.551	NO
Front Side	10	on	D3	RMC 12.2K	9400/1880	24.00	16.00	0.093	6.31	0.584	NO
Left Edge	10	N/A	D2	RMC 12.2K	9400/1880	24.00	24.00	0.090	1.00	0.090	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	RMC 12.2K	9400/1880	24.00	16.00	0.167	6.31	1.054	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.											

Table 25: UMTS Band V (Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	Channel Type	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR												
Left Cheek	0	N/A	D1	RMC 12.2K	4183/836.6	22.50	21.90	0.486	0.034	1.15	0.558	/
Left Tilt	0	N/A	D1	RMC 12.2K	4183/836.6	22.50	21.90	0.423	0.056	1.15	0.486	/
Right Cheek	0	N/A	D1	RMC 12.2K	4183/836.6	22.50	21.90	0.601	-0.100	1.15	0.690	68
Right Tilt	0	N/A	D1	RMC 12.2K	4183/836.6	22.50	21.90	0.541	0.031	1.15	0.621	/
Right Cheek Battery 2	0	NA	D1	RMC 12.2K	4183/836.6	22.50	21.90	0.581	0.120	1.15	0.667	/
Right Cheek SIM 2	0	NA	D1	RMC 12.2K	4183/836.6	22.50	21.90	0.569	0.020	1.15	0.653	/
Body-worn SAR												
Back Side	15	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.145	0.060	1.15	0.166	69
Front Side	15	off	D2	RMC 12.2K	4183/836.6	24.00	23.41	0.102	0.030	1.15	0.117	/
Back Side Battery 2	15	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.131	0.010	1.15	0.150	/
Back Side SIM 2	15	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.141	0.123	1.15	0.162	/
Hotspot SAR												
Back Side	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.171	0.113	1.15	0.196	70
Front Side	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.154	0.015	1.15	0.176	/
Left Edge	10	N/A	D2	RMC 12.2K	4183/836.6	24.00	23.41	0.060	0.120	1.15	0.069	/
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	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.126	0.121	1.15	0.144	/
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	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.163	0.103	1.15	0.187	/
Back Side SIM 2	10	on	D3	RMC 12.2K	4183/836.6	24.00	23.41	0.170	0.151	1.15	0.195	/

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

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.

Table 26: LTE Band 2 (20MHz, Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1&D3	1	50	18900/1880	16.00	15.19	0.302	-0.032	1.21	0.364	/
Left Tilt	0	N/A	D1&D3	1	50	18900/1880	16.00	15.19	0.419	-0.100	1.21	0.505	/
Right Cheek	0	N/A	D1&D3	1	50	18700/1860	16.00	15.16	0.608	0.093	1.21	0.738	/
	0	N/A	D1&D3	1	50	18900/1880	16.00	15.19	0.767	0.031	1.21	0.924	/
	0	N/A	D1&D3	1	50	19100/1900	16.00	15.06	0.716	0.021	1.24	0.889	/
Right Tilt	0	N/A	D1&D3	1	50	18700/1860	16.00	15.16	0.696	-0.070	1.21	0.845	/
	0	N/A	D1&D3	1	50	18900/1880	16.00	15.19	0.697	-0.046	1.21	0.840	/
	0	N/A	D1&D3	1	50	19100/1900	16.00	15.06	0.874	0.052	1.24	1.085	/
Left Cheek	0	N/A	D1&D3	50%	0	18700/1860	16.00	15.23	0.362	0.180	1.19	0.432	/
Left Tilt	0	N/A	D1&D3	50%	0	18700/1860	16.00	15.23	0.462	-0.080	1.19	0.552	/
Right Cheek	0	N/A	D1&D3	50%	0	18700/1860	16.00	15.23	0.804	0.034	1.19	0.960	/
	0	N/A	D1&D3	50%	25	18900/1880	16.00	15.22	0.787	0.041	1.20	0.942	/
	0	N/A	D1&D3	50%	25	19100/1900	16.00	15.11	0.728	0.015	1.23	0.894	/
Right Tilt	0	N/A	D1&D3	50%	0	18700/1860	16.00	15.23	0.711	-0.023	1.19	0.849	/
	0	N/A	D1&D3	50%	25	18900/1880	16.00	15.22	0.906	-0.102	1.20	1.084	71
	0	N/A	D1&D3	50%	25	19100/1900	16.00	15.11	0.883	0.010	1.23	1.084	/
Right Tilt	0	N/A	D1&D3	100%	0	18700/1860	16.00	15.19	0.897	0.110	1.21	1.081	/
	0	N/A	D1&D3	100%	0	18900/1880	16.00	15.21	0.884	0.050	1.20	1.060	/
	0	N/A	D1&D3	100%	0	19100/1900	16.00	15.15	0.883	0.100	1.22	1.074	/
Right Tilt Battery 2	0	NA	D1	1	50	19100/1900	16.00	15.06	0.801	0.100	1.24	0.995	/
Right Tilt SIM 2	0	NA	D1	1	50	19100/1900	16.00	15.06	0.811	0.030	1.24	1.007	/
Right Tilt Repeated	0	NA	D1	50%	25	18900/1880	16.00	15.22	0.889	0.010	1.20	0.489	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	50	18900/1880	16.00	15.19	0.097	0.040	1.21	0.117	/
Front Side	15	off	D2	1	0	18700/1860	25.50	24.36	0.726	0.153	1.30	0.944	/
	15	off	D2	1	0	18900/1880	25.50	24.26	0.763	0.118	1.33	1.015	/
	15	off	D2	1	0	19100/1900	25.50	24.48	0.862	0.062	1.26	1.090	72
Back Side	15	on	D3	50%	0	18700/1860	16.00	15.23	0.089	0.105	1.19	0.106	/
Front Side	15	off	D2	50%	50	18700/1860	24.50	23.37	0.412	0.024	1.30	0.534	/
Front Side Battery 2	15	off	D2	1	0	19100/1900	25.50	24.48	0.793	0.120	1.26	1.003	/
Front Side	15	off	D2	1	0	19100/1900	25.50	24.48	0.785	0.010	1.26	0.993	/

SIM 2													
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	50	18900/1880	16.00	15.19	0.194	0.036	1.21	0.234	/
Front Side	10	on	D3	1	0	18900/1880	16.00	15.19	0.170	0.113	1.21	0.205	/
Left Edge	10	N/A	D2	1	0	19100/1900	25.50	24.48	0.234	0.116	1.26	0.296	/
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	N/A
Top Edge	10	on	D3	1	50	18900/1880	16.00	15.19	0.344	0.151	1.21	0.415	73
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	N/A
Back Side	10	on	D3	50%	0	18700/1860	16.00	15.23	0.171	0.102	1.19	0.204	/
Front Side	10	on	D3	50%	50	18700/1860	16.00	15.23	0.171	0.025	1.19	0.204	/
Left Edge	10	N/A	D2	50%	50	18700/1860	24.50	23.37	0.189	0.102	1.30	0.245	/
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	N/A
Top Edge	10	on	D3	50%	0	18700/1860	16.00	15.23	0.313	-0.030	1.19	0.374	/
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	N/A
Top Edge Battery 2	10	on	D3	1	50	18900/1880	16.00	15.19	0.341	0.120	1.21	0.411	/
Top Edge SIM 2	10	on	D3	1	50	18900/1880	16.00	15.19	0.335	0.110	1.21	0.404	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	0	19100/1900	25.50	24.48	0.571	0.036	1.26	0.722	/
Front Side	14	off	D2	1	0	19100/1900	25.50	24.48	0.617	0.029	1.26	0.780	/
Top Edge	19	off	D2	1	0	19100/1900	25.50	24.48	0.763	0.050	1.26	0.965	/
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Tune-up (dBm)**	**Measured power (dBm)**	**Limit of SAR 4 W/kg (mW/g)**				**Plot No.**
									Measured SAR_{10g}	**Power Drift (dB)**	**Scaling Factor**	**Report SAR_{10g}**	
Product Specific 10-g SAR													
Back Side	0	on	D3	1	50	18900/1880	16.00	15.19	0.571	-0.035	1.21	0.688	/
Front Side	0	on	D3	1	0	18900/1880	16.00	15.19	0.497	0.042	1.21	0.599	/
Top Edge	0	on	D3	1	50	18900/1880	16.00	15.19	0.887	-0.130	1.21	1.069	74
Back Side	0	on	D3	50%	0	18700/1860	16.00	15.23	0.575	0.022	1.19	0.687	/
Front Side	0	on	D3	50%	50	18700/1860	16.00	15.23	0.485	0.029	1.19	0.579	/
Top Edge	0	on	D3	50%	0	18700/1860	16.00	15.23	0.885	-0.023	1.19	1.057	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

Measurement Variability				
Test Position	**Channel/ Frequency(MHz)**	**MAX Measured SAR_{1g} (W/kg)**	**1st Repeated SAR_{1g} (W/kg)**	**Ratio**
Right Tilt	18900/1880	0.906	0.889	1.02
Note: 1) 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). 2) 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.				

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	50	18900/1880	25.50	16.00	0.234	8.91	2.084	YES
Front Side	10	on	D3	1	0	18900/1880	25.50	16.00	0.205	8.91	1.826	YES
Left Edge	10	N/A	D2	1	0	19100/1900	25.50	25.50	0.296	1.00	0.296	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	1	50	18900/1880	25.50	16.00	0.415	8.91	3.695	YES
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Back Side	10	on	D3	50%	0	18700/1860	24.50	16.00	0.204	7.08	1.445	YES
Front Side	10	on	D3	50%	50	18700/1860	24.50	16.00	0.204	7.08	1.445	YES
Left Edge	10	N/A	D2	50%	50	18700/1860	24.50	24.50	0.245	1.00	0.245	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	50%	0	18700/1860	24.50	16.00	0.374	7.08	2.646	YES
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.												

Table 27: LTE Band 4 (20MHz, Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	0	20050/1720	17.00	15.77	0.147	0.090	1.33	0.195	/
Left Tilt	0	N/A	D1	1	0	20050/1720	17.00	15.77	0.190	-0.050	1.33	0.252	/
Right Cheek	0	N/A	D1	1	0	20050/1720	17.00	15.77	0.384	0.010	1.33	0.510	/
Right Tilt	0	N/A	D1	1	0	20050/1720	17.00	15.77	0.376	0.015	1.33	0.499	/
Left Cheek	0	N/A	D1	50%	25	20050/1720	17.00	15.75	0.142	-0.060	1.33	0.189	/
Left Tilt	0	N/A	D1	50%	25	20050/1720	17.00	15.75	0.206	-0.110	1.33	0.275	/
Right Cheek	0	N/A	D1	50%	25	20050/1720	17.00	15.75	0.411	0.016	1.33	0.548	75
Right Tilt	0	N/A	D1	50%	25	20050/1720	17.00	15.75	0.394	0.130	1.33	0.525	/
Right Cheek Battery 2	0	NA	D1	50%	25	20050/1720	17.00	15.75	0.386	0.110	1.33	0.515	/
Right Cheek SIM 2	0	NA	D1	50%	25	20050/1720	17.00	15.75	0.387	0.050	1.33	0.516	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	0	20050/1720	17.00	15.77	0.068	0.000	1.33	0.090	/
Front Side	15	off	D2	1	0	20050/1720	25.50	24.39	0.264	0.100	1.29	0.341	76
Back Side	15	on	D3	50%	25	20050/1720	17.00	15.75	0.052	0.010	1.33	0.069	/
Front Side	15	off	D2	50%	0	20050/1720	24.50	23.46	0.259	0.032	1.27	0.329	/
Front Side Battery 2	15	off	D2	1	0	20050/1720	25.50	24.39	0.257	0.110	1.29	0.332	/
Front Side SIM 2	15	off	D2	1	0	20050/1720	25.50	24.39	0.255	0.123	1.29	0.329	/
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	0	20050/1720	17.00	15.77	0.057	0.033	1.33	0.076	/
Front Side	10	on	D3	1	0	20050/1720	17.00	15.77	0.067	0.024	1.33	0.089	/
Left Edge	10	N/A	D2	1	0	20050/1720	25.50	24.39	0.073	0.011	1.29	0.094	/
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	N/A
Top Edge	10	on	D3	1	0	20050/1720	17.00	15.77	0.103	0.057	1.33	0.137	/
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	N/A
Back Side	10	on	D3	50%	25	20050/1720	17.00	15.75	0.063	-0.135	1.33	0.084	/
Front Side	10	on	D3	50%	25	20050/1720	17.00	15.75	0.073	0.151	1.33	0.097	/
Left Edge	10	N/A	D2	50%	0	20050/1720	24.50	23.46	0.065	0.054	1.27	0.083	/
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	N/A
Top Edge	10	on	D3	50%	25	20050/1720	17.00	15.75	0.120	0.106	1.33	0.160	77
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	N/A
Top Edge	10	on	D3	50%	25	20050/1720	17.00	15.75	0.118	0.020	1.33	0.157	/

Battery 2													
Top Edge SIM 2	10	on	D3	50%	25	20050/1720	17.00	15.75	0.107	0.035	1.33	0.143	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	0	20050/1720	25.50	24.39	0.139	0.021	1.29	0.179	/
Top Edge	19	off	D2	1	0	20050/1720	25.50	24.39	0.259	0.030	1.29	0.334	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	0	20050/1720	25.50	17.00	0.076	7.08	0.536	NO
Front Side	10	on	D3	1	0	20050/1720	25.50	17.00	0.089	7.08	0.630	NO
Left Edge	10	N/A	D2	1	0	20050/1720	25.50	25.50	0.094	1.00	0.094	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	1	0	20050/1720	25.50	17.00	0.137	7.08	0.968	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Back Side	10	on	D3	50%	25	20050/1720	24.50	17.00	0.084	5.62	0.472	NO
Front Side	10	on	D3	50%	25	20050/1720	24.50	17.00	0.097	5.62	0.547	NO
Left Edge	10	N/A	D2	50%	0	20050/1720	24.50	24.50	0.083	1.00	0.083	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	50%	25	20050/1720	24.50	17.00	0.160	5.62	0.900	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 28: LTE Band 5 (10MHz, Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	0	20525/836.5	23.00	21.93	0.529	0.000	1.28	0.677	/
Left Tilt	0	N/A	D1	1	0	20525/836.5	23.00	21.93	0.417	0.014	1.28	0.534	/
Right Cheek	0	N/A	D1	1	0	20450/829	23.00	21.87	0.612	0.025	1.30	0.794	/
	0	N/A	D1	1	0	20525/836.5	23.00	21.93	0.615	0.000	1.28	0.787	78
	0	N/A	D1	1	25	20600/844	23.00	21.86	0.525	-0.040	1.30	0.683	/
Right Tilt	0	N/A	D1	1	0	20525/836.5	23.00	21.93	0.516	0.116	1.28	0.660	/
Left Cheek	0	N/A	D1	50%	13	20450/829	23.00	21.97	0.514	0.143	1.27	0.652	/
Left Tilt	0	N/A	D1	50%	13	20450/829	23.00	21.97	0.420	0.115	1.27	0.532	/
Right Cheek	0	N/A	D1	50%	13	20450/829	23.00	21.97	0.480	-0.060	1.27	0.608	/
Right Tilt	0	N/A	D1	50%	13	20450/829	23.00	21.97	0.508	0.130	1.27	0.644	/
Right Cheek Battery 2	0	NA	D1	1	0	20450/829	23.00	21.87	0.532	0.010	1.30	0.690	/
Right Cheek SIM 2	0	NA	D1	1	0	20450/829	23.00	21.87	0.601	0.022	1.30	0.780	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	25	20525/836.5	24.00	23.47	0.144	0.012	1.13	0.163	/
Front Side	15	off	D2	1	0	20450/829	25.50	24.45	0.152	-0.070	1.27	0.194	79
Back Side	15	on	D3	50%	25	20525/836.5	24.00	23.47	0.146	0.034	1.13	0.165	/
Front Side	15	off	D2	50%	0	20450/829	24.50	23.47	0.139	0.024	1.27	0.176	/
Front Side Battery 2	15	off	D2	1	0	20450/829	25.50	24.45	0.150	0.170	1.27	0.191	/
Front Side SIM 2	15	off	D2	1	0	20450/829	25.50	24.45	0.148	0.139	1.27	0.188	/
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	25	20525/836.5	24.00	23.47	0.161	0.116	1.13	0.182	/
Front Side	10	on	D3	1	25	20525/836.5	24.00	23.47	0.178	0.135	1.13	0.201	80
Left Edge	10	N/A	D2	1	0	20450/829	25.50	24.45	0.083	0.024	1.27	0.106	/
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	N/A
Top Edge	10	on	D3	1	25	20525/836.5	24.00	23.47	0.122	0.187	1.13	0.138	/
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	N/A
Back Side	10	on	D3	50%	25	20525/836.5	24.00	23.47	0.177	0.014	1.13	0.200	/
Front Side	10	on	D3	50%	25	20525/836.5	24.00	23.47	0.175	0.064	1.13	0.198	/
Left Edge	10	N/A	D2	50%	0	20450/829	24.50	23.47	0.063	0.150	1.27	0.080	/
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	N/A
Top Edge	10	on	D3	50%	25	20525/836.5	24.00	23.47	0.153	0.022	1.13	0.173	/

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	N/A
Front Side Battery 2	10	on	D3	1	25	20525/836.5	24.00	23.47	0.166	0.057	1.13	0.188	/
Front Side SIM 2	10	on	D3	1	25	20525/836.5	24.00	23.47	0.169	0.011	1.13	0.191	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	0	20450/829	25.50	24.45	0.177	-0.110	1.27	0.160	/
Top Edge	19	off	D2	1	0	20450/829	25.50	24.45	0.048	-0.106	1.27	0.038	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	25	20525/836.5	25.50	24.00	0.182	1.41	0.257	NO
Front Side	10	on	D3	1	25	20525/836.5	25.50	24.00	0.201	1.41	0.284	NO
Left Edge	10	N/A	D2	1	0	20450/829	25.50	25.50	0.106	1.00	0.106	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	1	25	20525/836.5	25.50	24.00	0.138	1.41	0.195	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Back Side	10	on	D3	50%	25	20525/836.5	25.50	24.00	0.200	1.41	0.282	NO
Front Side	10	on	D3	50%	25	20525/836.5	25.50	24.00	0.198	1.41	0.279	NO
Left Edge	10	N/A	D2	50%	0	20450/829	25.50	25.50	0.080	1.00	0.080	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	50%	25	20525/836.5	25.50	24.00	0.173	1.41	0.244	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 29: LTE Band 7 (20MHz, Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	99	20850/2510	21.00	19.87	0.461	-0.080	1.30	0.598	/
Left Tilt	0	N/A	D1	1	99	20850/2510	21.00	19.87	0.395	-0.190	1.30	0.512	/
Right Cheek	0	N/A	D1	1	99	20850/2510	21.00	19.87	0.545	-0.020	1.30	0.707	/
Right Tilt	0	N/A	D1	1	99	20850/2510	21.00	19.87	0.654	0.099	1.30	0.848	/
	0	N/A	D1	1	0	21100/2535	21.00	19.74	0.616	0.110	1.34	0.823	/
	0	N/A	D1	1	50	21350/2560	21.00	19.77	0.620	0.130	1.33	0.823	/
Left Cheek	0	N/A	D1	50%	50	20850/2510	21.00	20.03	0.431	0.010	1.25	0.539	/
Left Tilt	0	N/A	D1	50%	50	20850/2510	21.00	20.03	0.511	0.153	1.25	0.639	/
Right Cheek	0	N/A	D1	50%	50	20850/2510	21.00	20.03	0.640	0.040	1.25	0.800	/
	0	N/A	D1	50%	0	21100/2535	21.00	19.87	0.633	0.113	1.30	0.821	/
	0	N/A	D1	50%	50	21350/2560	21.00	19.82	0.655	0.024	1.31	0.859	81
Right Tilt	0	N/A	D1	50%	50	20850/2510	21.00	20.03	0.639	-0.110	1.25	0.799	/
Right Cheek Battery 2	0	NA	D1	50%	50	21350/2560	21.00	19.82	0.620	0.010	1.31	0.814	/
Right Cheek SIM 2	0	NA	D1	50%	50	21350/2560	21.00	19.82	0.650	0.010	1.31	0.853	/
Right Cheek	0	NA	D1	1	99	20850/2510	21.00	19.91	0.643	0.070	1.29	0.826	/
				1	0	21048/2529.8							
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	99	20850/2510	21.00	19.87	0.094	0.113	1.30	0.122	/
Front Side	15	off	D2	1	99	20850/2510	21.00	19.87	0.073	0.106	1.30	0.095	/
Back Side	15	on	D3	50%	50	20850/2510	21.00	20.03	0.097	0.024	1.25	0.121	82
Front Side	15	off	D2	50%	50	20850/2510	21.00	20.03	0.073	0.034	1.25	0.091	/
Back Side Battery 2	15	on	D3	1	99	20850/2510	21.00	19.87	0.085	0.125	1.30	0.110	/
Back Side SIM 2	15	on	D3	1	99	20850/2510	21.00	19.87	0.091	0.010	1.30	0.118	/
Back Side	15	on	D3	1	99	20850/2510	21.00	19.91	0.085	0.102	1.29	0.109	/
				1	0	21048/2529.8							
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	99	20850/2510	21.00	19.87	0.193	0.064	1.30	0.250	/
Front Side	10	on	D3	1	99	20850/2510	21.00	19.87	0.155	0.015	1.30	0.201	/
Left Edge	10	N/A	D2	1	0	20850/2510	25.50	24.43	0.061	0.024	1.28	0.078	/
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	N/A
Top Edge	10	on	D3	1	99	20850/2510	21.00	19.87	0.423	0.109	1.30	0.549	/

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	N/A
Back Side	10	on	D3	50%	50	20850/2510	21.00	20.03	0.187	-0.110	1.25	0.234	/
Front Side	10	on	D3	50%	50	20850/2510	21.00	20.03	0.169	-0.010	1.25	0.211	/
Left Edge	10	N/A	D2	50%	50	20850/2510	24.50	23.73	0.062	0.112	1.19	0.074	/
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	N/A
Top Edge	10	on	D3	50%	50	20850/2510	21.00	20.03	0.432	0.043	1.25	0.540	83
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	NA	NA	NA	N/A
Top Edge Battery 2	10	on	D3	1	99	20850/2510	21.00	19.87	0.413	0.033	1.30	0.536	/
Top Edge SIM 2	10	on	D3	1	99	20850/2510	21.00	19.87	0.420	0.018	1.30	0.545	/
Top Edge	10	on	D3	1	99	20850/2510	21.00	19.91	0.412	0.106	1.29	0.530	/
				1	0	21048/2529.8							
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	0	20850/2510	25.50	24.43	0.261	0.081	1.28	0.334	/
Front Side	14	off	D2	1	0	20850/2510	25.50	24.43	0.227	0.112	1.28	0.290	/
Top Edge	19	off	D2	1	0	20850/2510	25.50	24.43	0.294	-0.060	1.28	0.376	/
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Tune-up (dBm)**	**Measured power (dBm)**	**Limit of SAR 1.6 W/kg (mW/g)**				**Plot No.**
									Measured SAR1g	**Power Drift (dB)**	**Scaling Factor**	**Report SAR1g**	
Product Specific 10-g SAR													
Top Edge	0	on	D3	1	99	20850/2510	21.00	19.87	1.150	-0.120	1.30	1.492	84

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR_{1g} (mW/g)	Scaling Factor	Full power Report SAR_{1g} (mW/g)	0mm SAR
Back Side	10	on	D3	1	99	20850/2510	25.50	21.00	0.250	2.82	0.706	NO
Front Side	10	on	D3	1	99	20850/2510	25.50	21.00	0.201	2.82	0.567	NO
Left Edge	10	N/A	D2	1	0	20850/2510	25.50	25.50	0.078	1.00	0.078	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	1	99	20850/2510	25.50	21.00	0.577	2.82	1.627	YES
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Back Side	10	on	D3	50%	50	20850/2510	24.50	21.00	0.234	2.24	0.523	NO
Front Side	10	on	D3	50%	50	20850/2510	24.50	21.00	0.211	2.24	0.473	NO
Left Edge	10	N/A	D2	50%	50	20850/2510	24.50	25.50	0.074	0.79	0.059	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	50%	50	20850/2510	24.50	21.00	0.565	2.24	1.265	YES
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.												

Table 30: LTE Band 38 (20MHz, Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	50	38150/2610	21.00	20.54	0.524	0.024	1.11	0.583	/
Left Tilt	0	N/A	D1	1	50	38150/2610	21.00	20.54	0.612	0.035	1.11	0.680	/
Right Cheek	0	N/A	D1	1	50	38150/2610	21.00	20.54	0.598	0.035	1.11	0.665	/
Right Tilt	0	N/A	D1	1	50	38150/2610	21.00	20.54	0.629	0.023	1.11	0.699	85
Left Cheek	0	N/A	D1	50%	0	38150/2610	21.00	20.66	0.541	0.116	1.08	0.585	/
Left Tilt	0	N/A	D1	50%	0	38150/2610	21.00	20.66	0.531	0.024	1.08	0.574	/
Right Cheek	0	N/A	D1	50%	0	38150/2610	21.00	20.66	0.581	0.115	1.08	0.628	/
Right Tilt	0	N/A	D1	50%	0	38150/2610	21.00	20.66	0.592	0.154	1.08	0.640	/
Right Tilt Battery 2	0	NA	D1	1	50	38150/2610	21.00	20.54	0.611	0.021	1.11	0.679	/
Right Tilt SIM 2	0	NA	D1	1	50	38150/2610	21.00	20.54	0.615	-0.120	1.11	0.684	/
Right Tilt	0	NA	D1	1	0	38150/2610	21.00	20.66	0.579	0.066	1.08	0.626	/
				1	99	37952/2590.2							
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	99	38150/2610	22.00	21.42	0.100	0.017	1.14	0.114	86
Front Side	15	off	D2	1	99	38000/2595	25.00	25.02	0.048	-0.021	1.00	0.048	/
Back Side	15	on	D3	50%	50	38150/2610	22.00	21.40	0.096	0.024	1.15	0.110	/
Front Side	15	off	D2	50%	50	38150/2610	24.50	24.04	0.045	0.090	1.11	0.050	/
Back Side Battery 2	15	on	D3	1	99	38150/2610	22.00	21.42	0.095	0.010	1.14	0.109	/
Back Side SIM 2	15	on	D3	1	99	38150/2610	22.00	21.42	0.098	0.135	1.14	0.112	/
Back Side	15	on	D3	1	0	38150/2610	21.00	20.66	0.091	0.110	1.08	0.099	/
				1	99	37952/2590.2							
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	99	38150/2610	22.00	21.42	0.164	0.010	1.14	0.187	/
Front Side	10	on	D3	1	99	38150/2610	22.00	21.42	0.102	0.028	1.14	0.117	/
Left Edge	10	N/A	D2	1	99	38000/2595	25.00	25.02	0.105	-0.055	1.00	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	N/A	N/A
Top Edge	10	on	D3	1	99	38150/2610	22.00	21.42	0.264	0.030	1.14	0.302	87
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	N/A
Back Side	10	on	D3	50%	50	38150/2610	22.00	21.40	0.147	0.046	1.15	0.169	/
Front Side	10	on	D3	50%	50	38150/2610	22.00	21.40	0.096	0.011	1.15	0.110	/
Left Edge	10	N/A	D2	50%	50	38150/2610	24.50	24.04	0.101	0.024	1.11	0.112	/

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	N/A
Top Edge	10	on	D3	50%	50	38150/2610	22.00	21.40	0.234	0.035	1.15	0.269	/
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	N/A
Top Edge Battery 2	10	on	D3	1	99	38150/2610	22.00	21.42	0.184	0.010	1.14	0.210	/
Top Edge SIM 2	10	on	D3	1	99	38150/2610	22.00	21.42	0.258	0.038	1.14	0.295	/
Top Edge	10	on	D3	1	0	38150/2610	21.00	20.66	0.234	0.103	1.08	0.253	/
				1	99	37952/2590.2							
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	99	38000/2595	25.00	25.02	0.149	-0.010	1.00	0.148	/
Top Edge	19	off	D2	1	99	38000/2595	25.00	25.02	0.134	0.020	1.00	0.133	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	99	38150/2610	25.50	21.00	0.187	2.82	0.528	NO
Front Side	10	on	D3	1	99	38150/2610	25.50	21.00	0.117	2.82	0.329	NO
Left Edge	10	N/A	D2	1	99	38000/2595	25.50	25.50	0.105	1.00	0.105	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	1	99	38150/2610	25.50	21.00	0.302	2.82	0.850	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Back Side	10	on	D3	50%	50	38150/2610	24.50	21.00	0.169	2.24	0.378	NO
Front Side	10	on	D3	50%	50	38150/2610	24.50	21.00	0.110	2.24	0.247	NO
Left Edge	10	N/A	D2	50%	50	38150/2610	24.50	24.50	0.112	1.00	0.112	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	50%	50	38150/2610	24.50	21.00	0.269	2.24	0.601	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 31: LTE Band 41 (20MHz, Second-antenna)

Test Position	Dist. (mm)	Sensor	Power Reduction	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR													
Left Cheek	0	N/A	D1	1	99	40670/2598	21.00	20.51	0.479	0.110	1.12	0.536	/
Left Tilt	0	N/A	D1	1	99	40670/2598	21.00	20.51	0.528	-0.021	1.12	0.591	/
Right Cheek	0	N/A	D1	1	99	40670/2598	21.00	20.51	0.421	0.130	1.12	0.471	/
Right Tilt	0	N/A	D1	1	99	40670/2598	21.00	20.51	0.523	0.114	1.12	0.585	/
Left Cheek	0	N/A	D1	50%	50	40670/2598	21.00	20.37	0.465	0.020	1.16	0.538	/
Left Tilt	0	N/A	D1	50%	50	40670/2598	21.00	20.37	0.524	0.150	1.16	0.606	/
Right Cheek	0	N/A	D1	50%	50	40670/2598	21.00	20.37	0.501	0.036	1.16	0.579	/
Right Tilt	0	N/A	D1	50%	50	40670/2598	21.00	20.37	0.530	0.021	1.16	0.613	88
Right Tilt Battery 2	0	NA	D1	50%	50	40670/2598	21.00	20.37	0.495	0.010	1.16	0.572	/
Right Tilt SIM 2	0	NA	D1	50%	50	40670/2598	21.00	20.37	0.488	0.044	1.16	0.564	/
Body-worn SAR (QPSK)													
Back Side	15	on	D3	1	99	40670/2598	21.00	20.51	0.114	0.033	1.12	0.128	/
Front Side	15	off	D2	1	99	41140/2645	25.50	25.30	0.068	0.028	1.05	0.071	/
Back Side	15	on	D3	50%	50	40670/2598	21.00	20.37	0.121	-0.042	1.16	0.140	89
Front Side	15	off	D2	50%	50	41140/2645	24.50	24.47	0.064	0.010	1.01	0.064	/
Back Side Battery 2	15	on	D3	50%	50	40670/2598	21.00	20.37	0.116	0.099	1.16	0.134	/
Back Side SIM 2	15	on	D3	50%	50	40670/2598	21.00	20.37	0.108	0.140	1.16	0.125	/
Hotspot SAR(QPSK)													
Back Side	10	on	D3	1	99	40670/2598	21.00	20.51	0.189	0.033	1.12	0.212	/
Front Side	10	on	D3	1	99	40670/2598	21.00	20.51	0.144	0.042	1.12	0.161	/
Left Edge	10	N/A	D2	1	99	41140/2645	25.50	25.30	0.173	-0.061	1.05	0.181	/
Right Edge	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Top Edge	10	on	D3	1	99	40670/2598	21.00	20.51	0.264	0.090	1.12	0.296	90
Bottom Edge	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Back Side	10	on	D3	50%	50	40670/2598	21.00	20.37	0.191	0.020	1.16	0.221	/
Front Side	10	on	D3	50%	50	40670/2598	21.00	20.37	0.131	0.018	1.16	0.151	/
Left Edge	10	N/A	D2	50%	50	41140/2645	24.50	24.47	0.184	-0.033	1.01	0.185	/
Right Edge	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Top Edge	10	on	D1&D3	50%	50	40670/2598	21.00	20.37	0.198	0.024	1.16	0.229	/
Bottom Edge	N/A	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Top Edge	10	on	D3	1	99	40670/2598	21.00	20.51	0.257	0.064	1.12	0.288	/

Battery 2													
Top Edge SIM 2	10	on	D3	1	99	40670/2598	21.00	20.51	0.259	0.111	1.12	0.290	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	19	off	D2	1	99	41140/2645	25.50	25.30	0.189	-0.040	1.05	0.198	/
Top Edge	19	off	D2	1	99	41140/2645	25.50	25.30	0.162	0.067	1.05	0.170	/

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

2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).

MAX Adjusted SAR												
Test Position	**Dist. (mm)**	**Sensor**	**Power Reduction**	**RB allocation**	**RB offset**	**Channel/ Frequency (MHz)**	**Full power (dBm)**	**Tune-up (dBm)**	**Report SAR_{1g} (mW/g)**	**Scaling Factor**	**Full power Report SAR_{1g} (mW/g)**	**0mm SAR**
Back Side	10	on	D3	1	99	41140/2645	25.50	21.00	0.195	2.82	0.549	NO
Front Side	10	on	D3	1	99	41140/2645	25.50	21.00	0.148	2.82	0.418	NO
Left Edge	10	N/A	D2	1	99	41140/2645	25.50	25.50	0.181	1.00	0.181	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	1	99	41140/2645	25.50	21.00	0.272	2.82	0.767	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Back Side	10	on	D3	50%	50	41140/2645	24.50	21.00	0.200	2.24	0.448	NO
Front Side	10	on	D3	50%	50	41140/2645	24.50	21.00	0.137	2.24	0.307	NO
Left Edge	10	N/A	D2	50%	50	41140/2645	24.50	24.50	0.185	1.00	0.185	NO
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO
Top Edge	10	on	D3	50%	50	41140/2645	24.50	24.50	0.207	1.00	0.207	NO
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO

Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 1-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.

Table 32: Wi-Fi (2.4G)

Test Position	Power Reduction	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	Full Power	802.11b	99.0%	6/2437	18.00	17.12	0.542	0.042	1.24	0.670	91
Left Tilt	Full Power	802.11b	99.0%	6/2437	18.00	17.12	0.305	0.031	1.24	0.377	/
Right Cheek	Full Power	802.11b	99.0%	6/2437	18.00	17.12	0.315	-0.120	1.24	0.390	/
Right Tilt	Full Power	802.11b	99.0%	6/2437	18.00	17.12	0.297	0.000	1.24	0.367	/
Left Cheek Battery 2	Full Power	802.11b	99.0%	6/2437	18.00	17.12	0.535	0.011	1.24	0.662	/
Body SAR(Distance 10mm)											
Back Side	Full Power	802.11b	99.0%	6/2437	19.00	17.93	0.134	0.036	1.29	0.173	92
Front Side	Full Power	802.11b	99.0%	6/2437	19.00	17.93	0.100	-0.014	1.29	0.129	/
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	Full Power	802.11b	99.0%	6/2437	19.00	17.93	0.072	0.022	1.29	0.093	/
Top Edge	Full Power	802.11b	99.0%	6/2437	19.00	17.93	0.094	0.048	1.29	0.121	/
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	Full Power	802.11b	99.0%	6/2437	19.00	17.93	0.128	0.011	1.29	0.165	/
Note: 1. The value with blue color is the maximum SAR Value of each test band.											

MAX Adjusted SAR							
Mode	Test Position	Channel/ Frequency (MHz)	MAX Reported 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	6/2437	0.670	18.00	18.00	1.00	0.670
802.11n HT20	Left Cheek	6/2437	0.670	18.00	13.50	0.35	0.238
802.11n HT40	Left Cheek	6/2437	0.670	18.00	13.50	0.35	0.238
802.11g	Back Side	6/2437	0.173	19.00	18.50	0.89	0.154
802.11n HT20	Back Side	6/2437	0.173	19.00	13.50	0.28	0.049
802.11n HT40	Back Side	6/2437	0.173	19.00	13.50	0.28	0.049
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.							

Table 33: Wi-Fi (5G,U-NII-1)

Test Position	Power Reduction	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	Receiver On	802.11a	98.0%	48/5240	11.50	10.78	0.310	-0.050	1.20	0.373	/
Left Tilt	Receiver On	802.11a	98.0%	48/5240	11.50	10.78	0.315	0.034	1.20	0.379	93
Right Cheek	Receiver On	802.11a	98.0%	48/5240	11.50	10.78	0.311	0.125	1.20	0.375	/
Right Tilt	Receiver On	802.11a	98.0%	48/5240	11.50	10.78	0.306	0.116	1.20	0.369	/
Left Tilt Battery 2	Receiver On	802.11a	98.0%	48/5240	11.50	10.78	0.310	0.087	1.20	0.373	/
Hotspot SAR (Distance 10mm)											
Back Side	Full Power	802.11a	98.0%	48/5240	17.50	16.61	0.553	0.021	1.25	0.693	/
Front Side	Full Power	802.11a	98.0%	48/5240	17.50	16.61	0.249	0.035	1.25	0.312	/
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	Full Power	802.11a	98.0%	48/5240	17.50	16.61	0.164	-0.022	1.25	0.205	/
Top Edge	Full Power	802.11a	98.0%	36/5180	17.50	16.58	0.772	0.056	1.26	0.974	/
	Full Power	802.11a	98.0%	40/5200	17.50	16.59	0.785	0.139	1.26	0.988	/
	Full Power	802.11a	98.0%	48/5240	17.50	16.61	0.819	0.038	1.25	1.026	94
Bottom 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 Battery 2	Full Power	802.11a	98.0%	48/5240	17.50	16.61	0.697	-0.124	1.25	0.873	/

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

Table 34: Wi-Fi (5G,U-NII-2A)

Per 248227, for band U-NII-1 and U-NII-2A, 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.

Test Position	Power Reduction	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	Receiver On	802.11a	98.0%	64/5320	11.50	10.94	0.374	0.170	1.16	0.434	95
Left Tilt	Receiver On	802.11a	98.0%	64/5320	11.50	10.94	0.373	0.034	1.16	0.433	/
Right Cheek	Receiver On	802.11a	98.0%	64/5320	11.50	10.94	0.311	0.064	1.16	0.361	/
Right Tilt	Receiver On	802.11a	98.0%	64/5320	11.50	10.94	0.316	0.115	1.16	0.367	/
Left Cheek Battery 2	Receiver On	802.11a	98.0%	64/5320	11.50	10.94	0.365	0.100	1.16	0.424	/
Body-worn SAR (Distance 15mm)											
Back Side	Full Power	802.11a	98.0%	64/5320	17.50	16.51	0.197	0.044	1.26	0.247	96
Front Side	Full Power	802.11a	98.0%	64/5320	17.50	16.51	0.082	0.189	1.26	0.102	/
Back Side Battery 2	Full Power	802.11a	98.0%	64/5320	17.50	16.51	0.188	0.031	1.26	0.236	/
Test Position	**Power Reduction**	**Mode**	**Duty Cycle**	**Channel/ Frequency (MHz)**	**Tune-up dBm)**	**Measured power (dBm)**	**Limit of SAR 4 W/kg (mW/g)**				**Plot No.**
							Measured SAR_{10g}	**Power Drift (dB)**	**Scaling Factor**	**Report SAR_{10g}**	
Product Specific 10-g SAR (Distance 0mm)											
Back Side	Full Power	802.11a	98.0%	64/5320	17.50	16.51	0.727	0.010	1.28	0.932	/
Front Side	Full Power	802.11a	98.0%	64/5320	17.50	16.51	0.633	0.035	1.28	0.811	/
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Right Edge	Full Power	802.11a	98.0%	64/5320	17.50	16.51	0.309	0.024	1.28	0.396	/
Top Edge	Full Power	802.11a	98.0%	64/5320	17.50	16.51	0.882	-0.170	1.28	1.130	97
Bottom 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 Battery 2	Full Power	802.11a	98.0%	64/5320	17.50	16.51	3.980	0.012	1.28	0.963	/
Note: 1. The value with blue color is the maximum SAR Value of each test band.											

Table 35: Wi-Fi (5G,U-NII-2C)

Test Position	Power Reduction	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	Receiver On	802.11a	98.0%	120/5600	11.50	11.26	0.397	0.145	1.08	0.428	/
Left Tilt	Receiver On	802.11a	98.0%	120/5600	11.50	11.26	0.659	0.100	1.08	0.711	98
Right Cheek	Receiver On	802.11a	98.0%	120/5600	11.50	11.26	0.354	0.033	1.08	0.382	/
Right Tilt	Receiver On	802.11a	98.0%	120/5600	11.50	11.26	0.324	0.154	1.08	0.349	/
Left Tilt Battery 2	Receiver On	802.11a	98.0%	120/5600	11.50	11.26	0.640	0.025	1.08	0.690	/
Body-worn SAR (Distance 15mm)											
Back Side	Full Power	802.11a	98.0%	120/5600	17.50	16.77	0.273	0.160	1.18	0.323	99
Front Side	Full Power	802.11a	98.0%	120/5600	17.50	16.77	0.106	0.063	1.18	0.125	/
Back Side Battery 2	Full Power	802.11a	98.0%	120/5600	17.50	16.77	0.264	0.022	1.18	0.312	/
Test Position	**Power Reduction**	**Mode**	**Duty Cycle**	**Channel/ Frequency (MHz)**	**Tune-up dBm)**	**Measured power (dBm)**	**Limit of SAR 4 W/kg (mW/g)**				**Plot No.**
							Measured SAR_{10g}	**Power Drift (dB)**	**Scaling Factor**	**Report SAR_{10g}**	
Product Specific 10-g SAR (Distance 0mm)											
Back Side	Full Power	802.11a	98.0%	120/5600	17.50	16.77	1.010	0.022	1.21	1.219	/
Front Side	Full Power	802.11a	98.0%	120/5600	17.50	16.77	0.727	0.038	1.21	0.878	/
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Right Edge	Full Power	802.11a	98.0%	120/5600	17.50	16.77	0.236	-0.080	1.21	0.285	/
Top Edge	Full Power	802.11a	98.0%	120/5600	17.50	16.77	1.610	0.010	1.21	1.944	100
Bottom 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 Battery 2	Full Power	802.11a	98.0%	120/5600	17.50	16.77	6.950	0.175	1.21	1.799	/

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

Table 36: Wi-Fi (5G,U-NII-3)

Test Position	Power Reduction	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	Receiver On	802.11a	98.0%	157/5785	11.50	10.76	0.338	0.045	1.21	0.409	/
Left Tilt	Receiver On	802.11a	98.0%	157/5785	11.50	10.76	0.373	0.041	1.21	0.451	101
Right Cheek	Receiver On	802.11a	98.0%	157/5785	11.50	10.76	0.289	0.023	1.21	0.350	/
Right Tilt	Receiver On	802.11a	98.0%	157/5785	11.50	10.76	0.304	0.011	1.21	0.368	/
Left Tilt Battery 2	Receiver On	802.11a	98.0%	157/5785	11.50	10.76	0.350	0.010	1.21	0.423	/
Hotspot SAR(Distance 10mm)											
Back Side	Full Power	802.11a	98.0%	157/5785	15.50	14.23	0.474	0.025	1.37	0.648	/
Front Side	Full Power	802.11a	98.0%	157/5785	15.50	14.23	0.244	0.036	1.37	0.334	/
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	Full Power	802.11a	98.0%	157/5785	15.50	14.23	0.168	-0.028	1.37	0.229	/
Top Edge	Full Power	802.11a	98.0%	157/5785	15.50	14.23	0.718	0.042	1.37	0.982	102
Bottom 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 Battery 2	Full Power	802.11a	98.0%	157/5785	15.50	14.23	0.700	0.048	1.37	0.957	/
Note: 1. The value with blue color is the maximum SAR Value of each test band.											

Table 37: BT

Test Position	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
						Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR										
Left Cheek	DH5	76.6%	78/2480	11.00	9.96	0.104	0.070	1.66	0.173	103
Left Tilt	DH5	76.6%	78/2480	11.00	9.96	0.098	0.037	1.66	0.162	/
Right Cheek	DH5	76.6%	78/2480	11.00	9.96	0.053	0.022	1.66	0.088	/
Right Tilt	DH5	76.6%	78/2480	11.00	9.96	0.049	0.102	1.66	0.081	/
Body SAR (Distance 10mm)										
Back Side	DH5	76.6%	78/2480	11.00	9.96	0.010	0.031	1.66	0.017	/
Front Side	DH5	76.6%	78/2480	11.00	9.96	0.001	0.102	1.66	0.002	/
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	DH5	76.6%	78/2480	11.00	9.96	0.003	0.110	1.66	0.004	/
Top Edge	DH5	76.6%	78/2480	11.00	9.96	0.012	0.025	1.66	0.020	104
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Note: 1. The value with blue color is the maximum SAR Value of each test band.										

Band	Configuration	Frequency (MHz)	Maximum Power (dBm)	Separation Distance (mm)	Estimated SAR (W/kg)
Bluetooth	Product Specific 10-g 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.					

10.4 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Head	Body-worn	Hotspot	Product Specific 10-g SAR
WWAN + WLAN2.4GHz	Yes	Yes	Yes	Yes
WWAN+ WLAN5GHz	Yes	Yes	Yes	Yes
WWAN + Bluetooth + WLAN2.4GHz	Yes	Yes	Yes	Yes
WWAN+ Bluetooth + WLAN5GHz	Yes	Yes	Yes	Yes
Note: 1. Main antenna and Second-Antenna can't transmit simultaneously.				

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.

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

SAR_{1g}(W/kg) / Test Position		GSM 850	GSM 1900	WCDMA 2	WCDMA 4	WCDMA 5	LTE 2	LTE 4	LTE 5	LTE 7	LTE 38	LTE 41	MAX. SAR_{1g}
Head	Left Cheek	0.119	0.065	0.161	0.072	0.182	0.187	0.087	0.248	0.274	0.222	0.190	0.274
	Left Tilt	0.104	0.049	0.111	0.071	0.072	0.185	0.096	0.228	0.188	0.144	0.144	0.228
	Right Cheek	0.157	0.077	0.174	0.094	0.190	0.399	0.165	0.279	0.210	0.108	0.090	0.399
	Right Tilt	0.079	0.035	0.149	0.073	0.114	0.261	0.083	0.151	0.225	0.056	0.081	0.261
Body worn	Back Side	0.267	0.248	0.203	0.027	0.242	0.226	0.185	0.331	0.184	0.189	0.216	0.331
	Front Side	0.234	0.220	0.342	0.338	0.205	0.527	0.524	0.315	0.665	0.231	0.326	0.665
Hotspot	Back Side	0.235	0.423	0.401	0.361	0.275	0.363	0.343	0.387	0.413	0.383	0.218	0.423
	Front Side	0.213	0.286	0.242	0.195	0.195	0.274	0.188	0.261	0.437	0.394	0.243	0.437
	Left Edge	0.030	0.181	0.322	0.119	0.000	0.353	0.136	0.140	0.596	0.393	0.197	0.596
	Right Edge	0.096	0.195	0.030	0.000	0.063	0.096	0.089	0.184	0.122	0.164	0.059	0.195
	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	0.212	0.658	0.678	0.525	0.236	0.750	0.505	0.293	0.576	0.456	0.549	0.750
Product Specific 10-g SAR	Back Side	N/A	N/A	N/A	N/A	N/A	1.317	0.795	N/A	N/A	N/A	N/A	1.317
	Front Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	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	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	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	N/A	N/A	1.845	N/A	N/A	2.023	1.541	N/A	1.829	N/A	N/A	2.023

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

SAR_{1g}(W/kg) / Test Position		GSM 850	GSM 1900	WCDMA 2	WCDMA 4	WCDMA 5	LTE 2	LTE 4	LTE 5	LTE 7	LTE 38	LTE 41	MAX. SAR_{1g}
Head	Left Cheek	0.497	0.308	0.490	0.283	0.558	0.432	0.195	0.677	0.598	0.585	0.538	0.677
	Left Tilt	0.399	0.383	0.618	0.346	0.486	0.552	0.275	0.534	0.639	0.680	0.606	0.680
	Right Cheek	0.776	0.447	0.779	0.454	0.690	0.960	0.548	0.794	0.859	0.665	0.579	0.960
	Right Tilt	0.542	0.524	0.892	0.527	0.621	1.085	0.525	0.660	0.848	0.699	0.613	1.085
Body worn	Back Side	0.174	0.164	0.101	0.051	0.166	0.117	0.090	0.165	0.122	0.114	0.140	0.174
	Front Side	0.139	0.369	0.681	0.273	0.117	1.090	0.341	0.194	0.095	0.050	0.071	1.090
Hotspot	Back Side	0.228	0.267	0.200	0.087	0.196	0.234	0.084	0.200	0.250	0.187	0.221	0.267
	Front Side	0.206	0.234	0.189	0.093	0.176	0.205	0.097	0.201	0.211	0.117	0.161	0.234
	Left Edge	0.084	0.136	0.225	0.090	0.069	0.296	0.094	0.106	0.078	0.112	0.185	0.296
	Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
	Top Edge	0.184	0.540	0.032	0.167	0.144	0.415	0.160	0.173	0.549	0.302	0.296	0.549
	Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
Product Specific 10-g SAR	Back Side	N/A	N/A	0.470	N/A	N/A	0.688	N/A	N/A	N/A	N/A	N/A	0.688
	Front Side	N/A	N/A	0.533	N/A	N/A	0.599	N/A	N/A	N/A	N/A	N/A	0.599
	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	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	N/A	N/A	N/A	N/A	N/A	1.069	N/A	N/A	1.492	N/A	N/A	1.492
	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

About Wi-Fi, BT and Main-Antenna

$SAR_{1g/10g}$(W/kg) Test Position		Main-antenna	Wi-Fi 2.4G	Wi-Fi (U-NII-1)	Wi-Fi (U-NII-2A)	Wi-Fi (U-NII-2C)	Wi-Fi (U-NII-3)	BT	MAX. ΣSAR_{1g}
Head	Left, Cheek	0.274	**0.670**	0.373	0.434	0.428	0.409	0.173	1.117
	Left, Tilt	0.228	0.377	0.379	0.433	**0.711**	0.451	0.162	1.101
	Right, Cheek	0.399	**0.390**	0.375	0.361	0.382	0.350	0.088	0.877
	Right, Tilt	0.261	0.367	**0.369**	0.367	0.349	0.368	0.081	0.711
Body worn	Back Side	0.331	0.173	N/A	0.247	**0.323**	N/A	0.017	0.671
	Front Side	0.665	**0.129**	N/A	0.102	0.125	N/A	0.002	0.796
Hotspot	Back Side	0.423	0.173	**0.693**	N/A	N/A	0.648	0.017	1.133
	Front Side	0.437	0.129	0.312	N/A	N/A	**0.334**	0.002	0.773
	Left Edge	0.596	N/A	N/A	N/A	N/A	N/A	NA	0.596
	Right Edge	0.195	0.093	0.205	N/A	N/A	**0.229**	0.004	0.428
	Top Edge	N/A	0.121	**1.026**	N/A	N/A	**0.982**	0.020	1.046
	Bottom Edge	0.750	N/A	N/A	N/A	N/A	N/A	N/A	0.750
Product Specific 10-g SAR	Back Side	1.317	N/A	N/A	0.932	**1.219**	N/A	0.211	2.747
	Front Side	N/A	N/A	N/A	0.811	**0.878**	N/A	0.211	1.089
	Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000
	Right Edge	N/A	N/A	N/A	**0.396**	0.285	N/A	0.211	0.607
	Top Edge	N/A	N/A	N/A	1.130	**1.944**	N/A	0.211	2.155
	Bottom Edge	2.023	N/A	N/A	N/A	N/A	N/A	N/A	2.023

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} = 1.133W/kg<1.6W/kg and MAX. ΣSAR_{10g} =2.747W/kg<4 W/kg, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi, BT and Main-Antenna.

About Wi-Fi, BT and Second-Antenna

$SAR_{1g/10g}$(W/kg) Test Position		Second-antenna	Wi-Fi 2.4G	Wi-Fi (U-NII-1)	Wi-Fi (U-NII-2A)	Wi-Fi (U-NII-2C)	Wi-Fi (U-NII-3)	BT	MAX. ΣSAR_{1g}
Head	Left, Cheek	0.677	**0.670**	0.373	0.434	0.428	0.409	0.173	1.520
	Left, Tilt	0.680	0.377	0.379	0.433	**0.711**	0.451	0.162	1.553
	Right, Cheek	0.960	**0.390**	0.375	0.361	0.382	0.350	0.088	1.438
	Right, Tilt	1.085	0.367	**0.369**	0.367	0.349	0.368	0.081	1.535
Body worn	Back Side	0.174	0.173	N/A	0.247	**0.323**	N/A	0.017	0.514
	Front Side	1.090	**0.129**	N/A	0.102	0.125	N/A	0.002	1.221
Hotspot	Back Side	0.267	0.173	**0.693**	N/A	N/A	0.648	0.017	0.977
	Front Side	0.234	0.129	0.312	N/A	N/A	**0.334**	0.002	0.570
	Left Edge	0.296	N/A	N/A	N/A	N/A	N/A	NA	0.296
	Right Edge	N/A	0.093	0.205	N/A	N/A	**0.229**	0.004	0.233
	Top Edge	0.549	0.121	**1.026**	N/A	N/A	0.982	0.020	1.595
	Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Product Specific 10-g SAR	Back Side	0.688	N/A	N/A	0.932	**1.219**	N/A	0.211	2.118
	Front Side	0.599	N/A	N/A	0.811	**0.878**	N/A	0.211	1.688
	Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A	**0.396**	0.285	N/A	0.211	0.607
	Top Edge	1.492	N/A	N/A	1.130	**1.944**	N/A	0.211	3.647
	Bottom Edge	N/A	N/A	N/A	N/A	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} = 1.595W/kg<1.6W/kg and MAX. ΣSAR_{10g} = 3.647W/kg<4 W/kg, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi and Second-Antenna.

11 Measurement Uncertainty

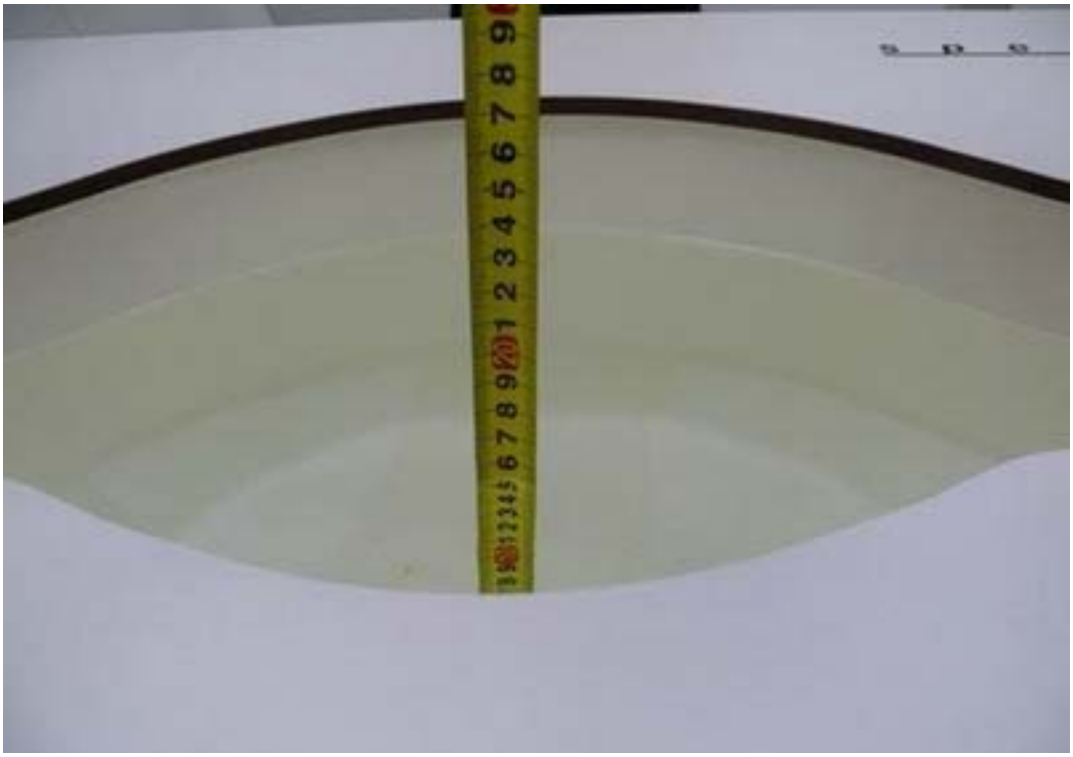
Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528- 2013 is not required in SAR reports submitted for equipment approval. This also applies to the 10-g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

ANNEX A: Test Layout

Tissue Simulating Liquids

For the measurement of the field distribution inside the flat phantom with DASY, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For Head and Body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm, which is shown in Picture 3 and Picture 4.

Picture 3: liquid depth in the head Phantom



Picture 4: Liquid depth in the flat Phantom

ANNEX B: System Check Results

Plot 1 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2

Date: 12/28/2020

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

Medium parameters used: f = 835 MHz; σ = 0.88 S/m; ε_r = 41.4; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: dx=15mm, dy=15mm

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

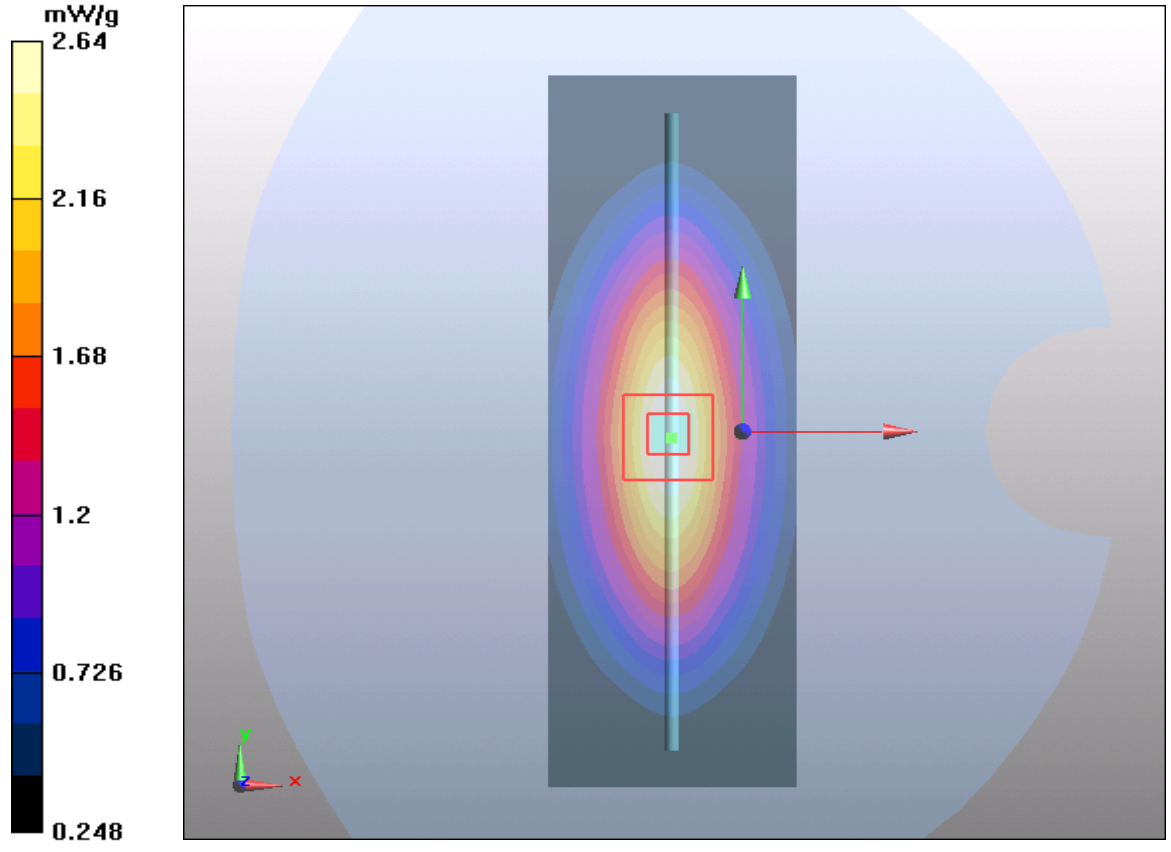
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 2 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2

Date: 12/29/2020

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

Medium parameters used: f = 835 MHz; σ =0.87 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=15mm, Pin=250mW/Area Scan (4x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.59 mW/g

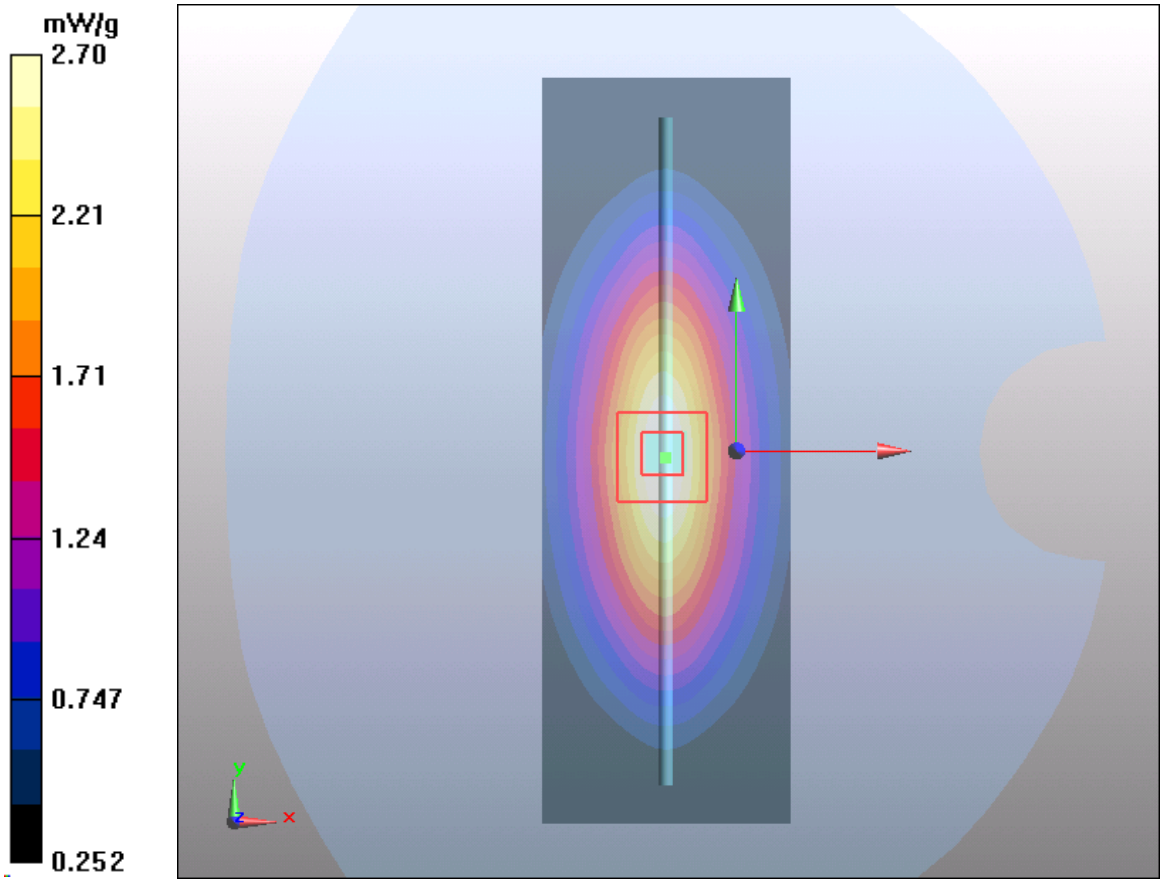
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.3 V/m; Power Drift = -0.06 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 3 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2

Date: 1/10/2021

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; σ = 1.34 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.78 mW/g

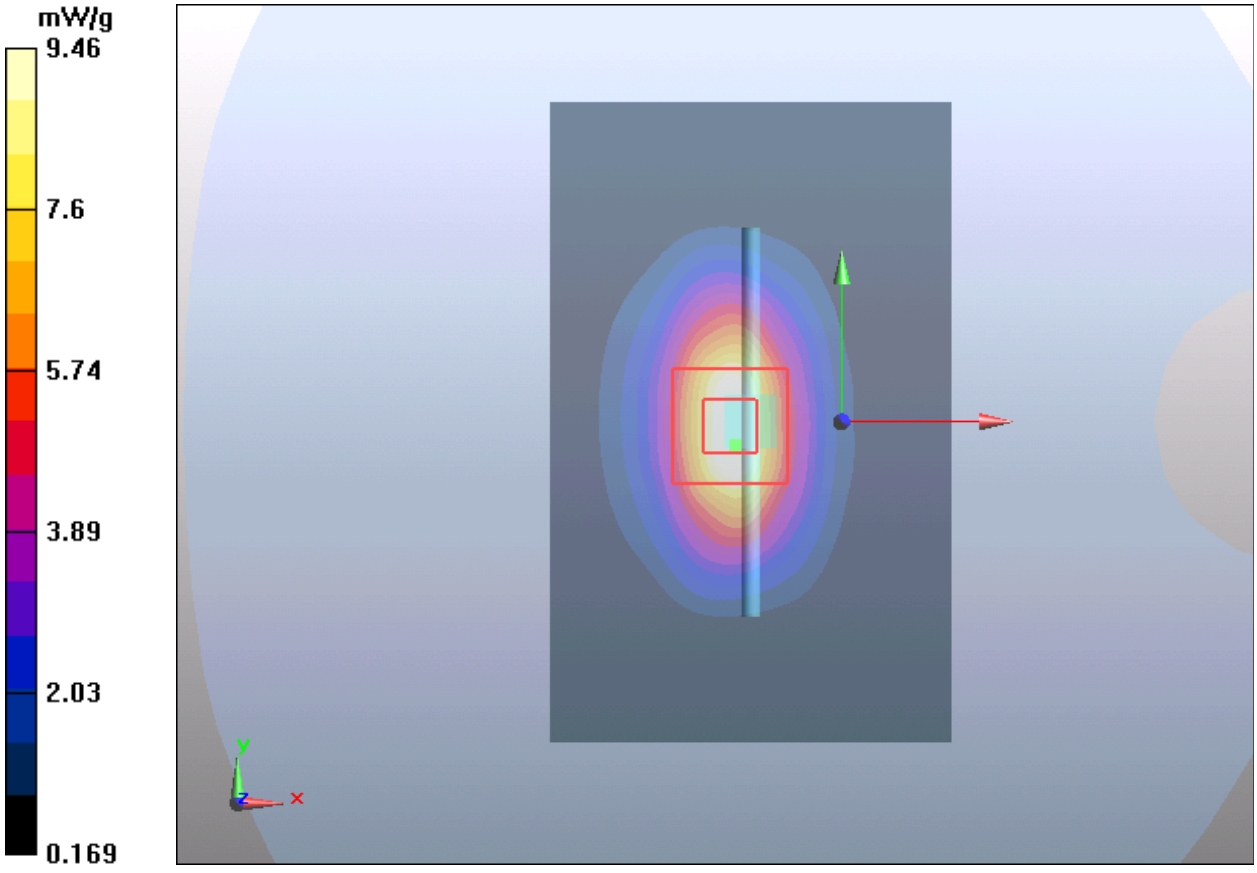
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 4 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: D1750V2

Date: 1/11/2021

Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1750 MHz; σ = 1.34 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.77 mW/g

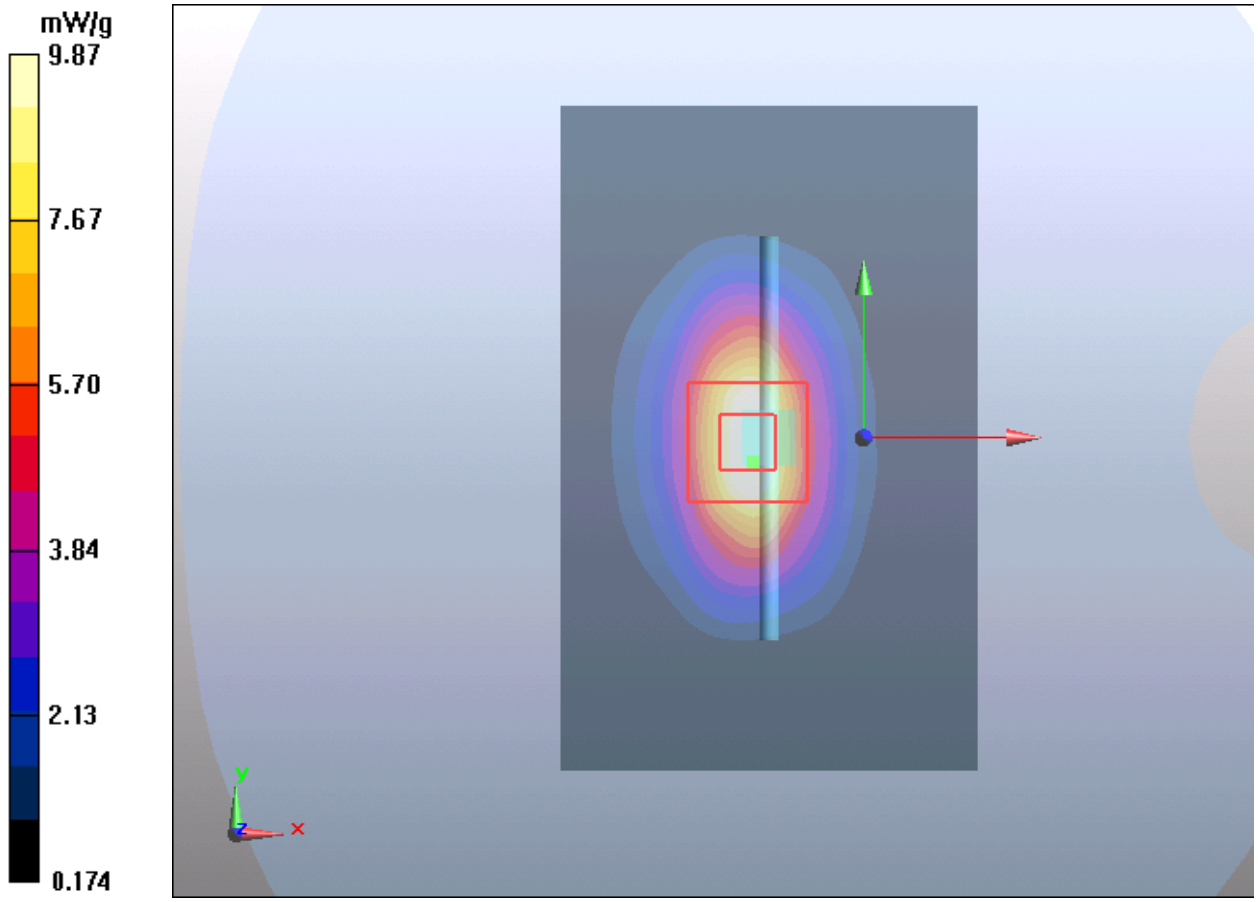
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 5 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 12/31/2020

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.41 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 11.3 mW/g

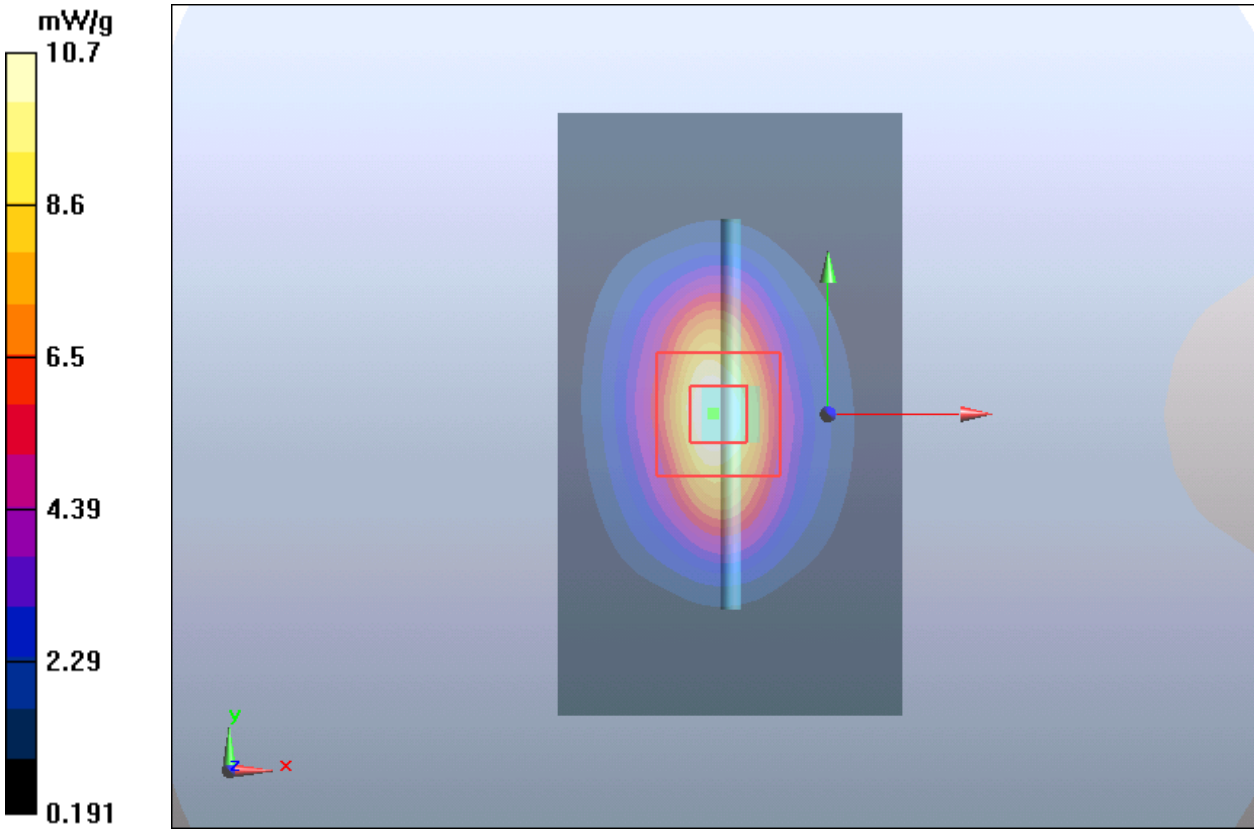
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.5 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 9.88 mW/g; SAR(10 g) = 4.9 mW/g

Maximum value of SAR (measured) = 10.7 mW/g



Plot 6 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 1/1/2021

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.43 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 11.23 mW/g

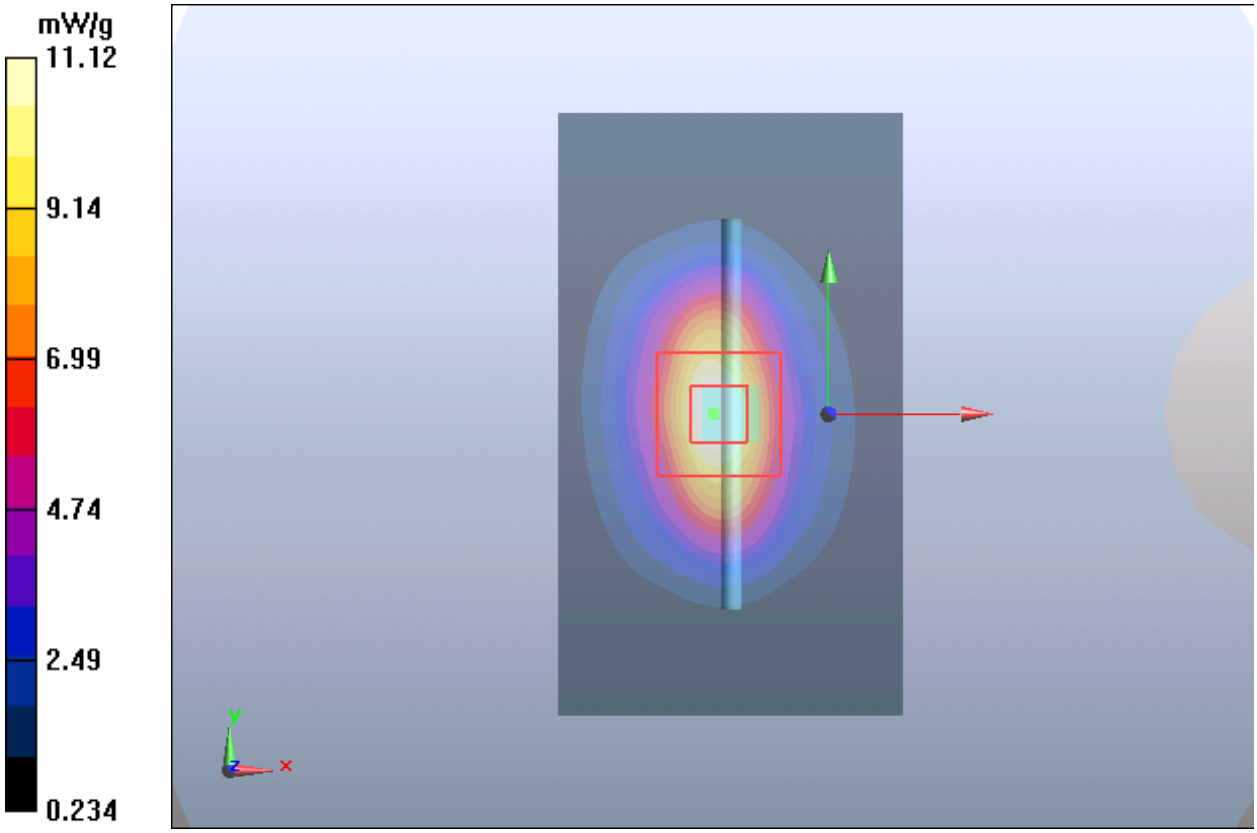
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 85.0 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 9.85 mW/g; SAR(10 g) = 4.93 mW/g

Maximum value of SAR (measured) = 11.12 mW/g

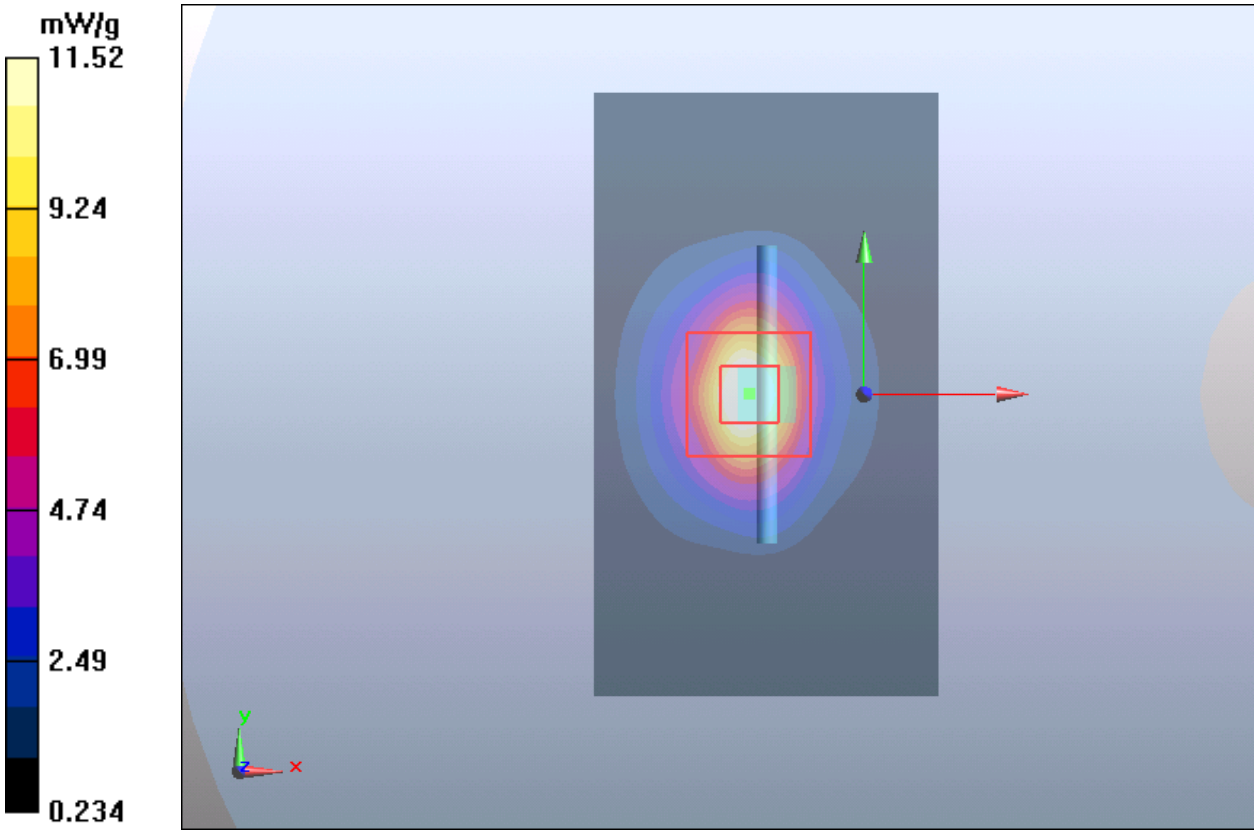


Plot 7 System Performance Check at 1900 MHz
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 1/2/2021
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.40 mho/m; ε_r = 40.0; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 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) = 10.55 mW/g; SAR(10 g) = 5.39 mW/g
Maximum value of SAR (measured) = 11.52 mW/g

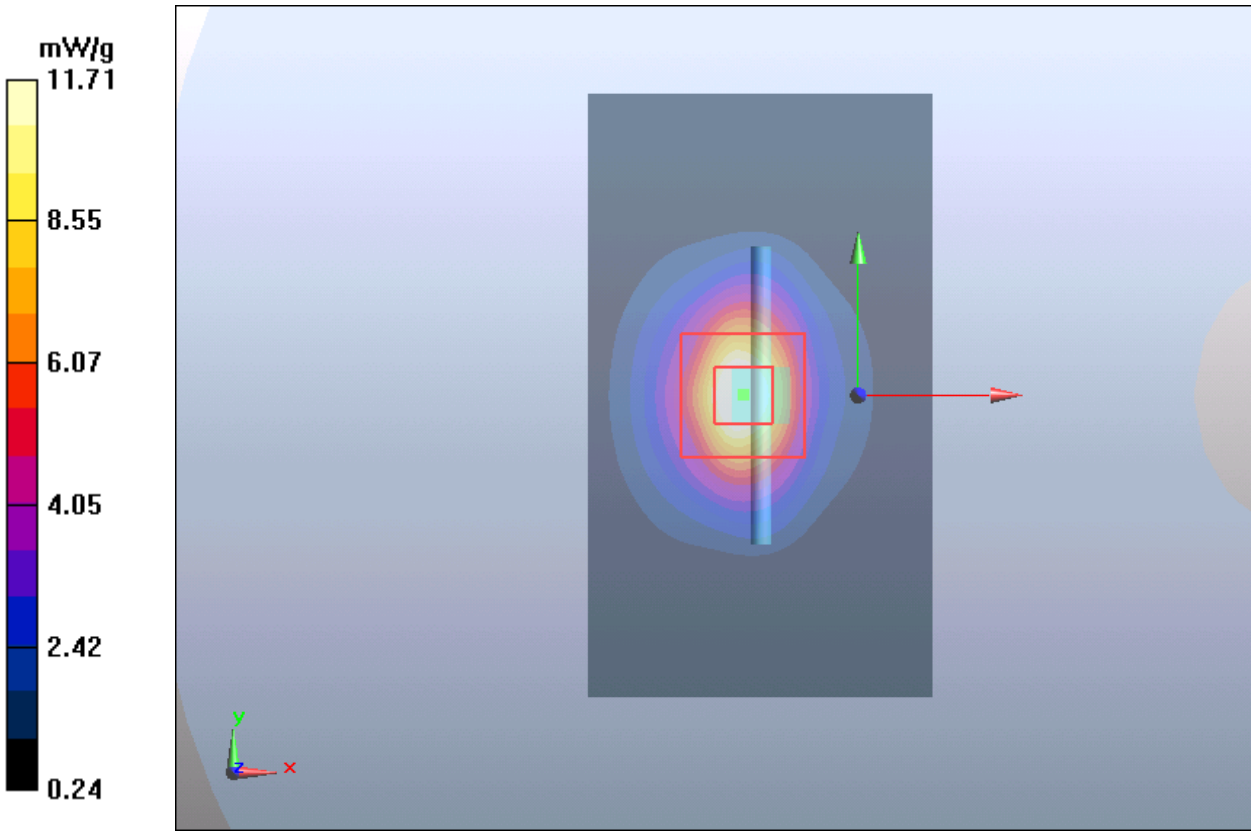


Plot 8 System Performance Check at 1900 MHz
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2

Date: 1/3/2021
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.34 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.74 mW/g

d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 87.5 V/m; Power Drift = 0.032 dB
Peak SAR (extrapolated) = 20.0 W/kg
SAR(1 g) = 10.50 mW/g; SAR(10 g) = 5.38 mW/g
Maximum value of SAR (measured) = 11.71 mW/g



Plot 9 System Performance Check at 2450 MHz TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2

Date: 12/18/2020

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2450 MHz; σ = 1.81 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.54, 7.54, 7.54); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 18.2 mW/g

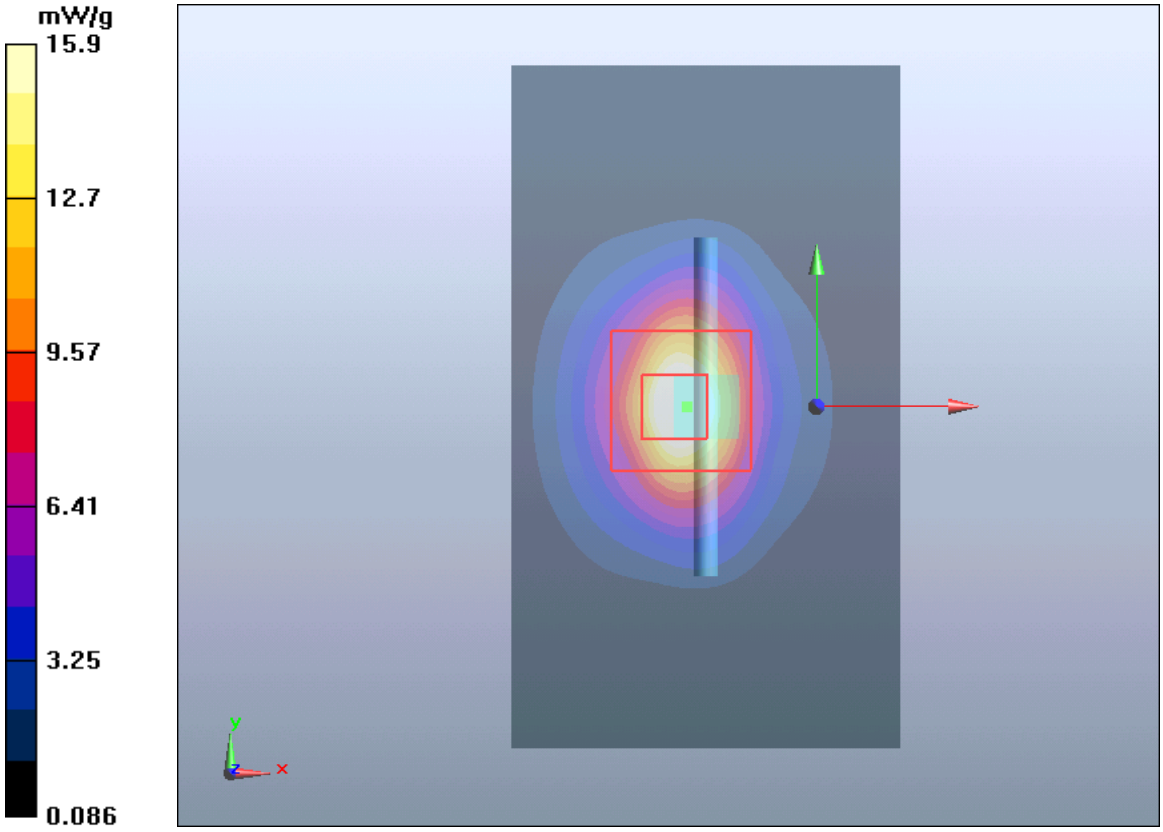
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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 10 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 12/24/2020

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ = 2.01 S/m; ε_r = 38.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid:dx=12mm, dy=12mm

Maximum value of SAR (measured) = 17.439 mW/g

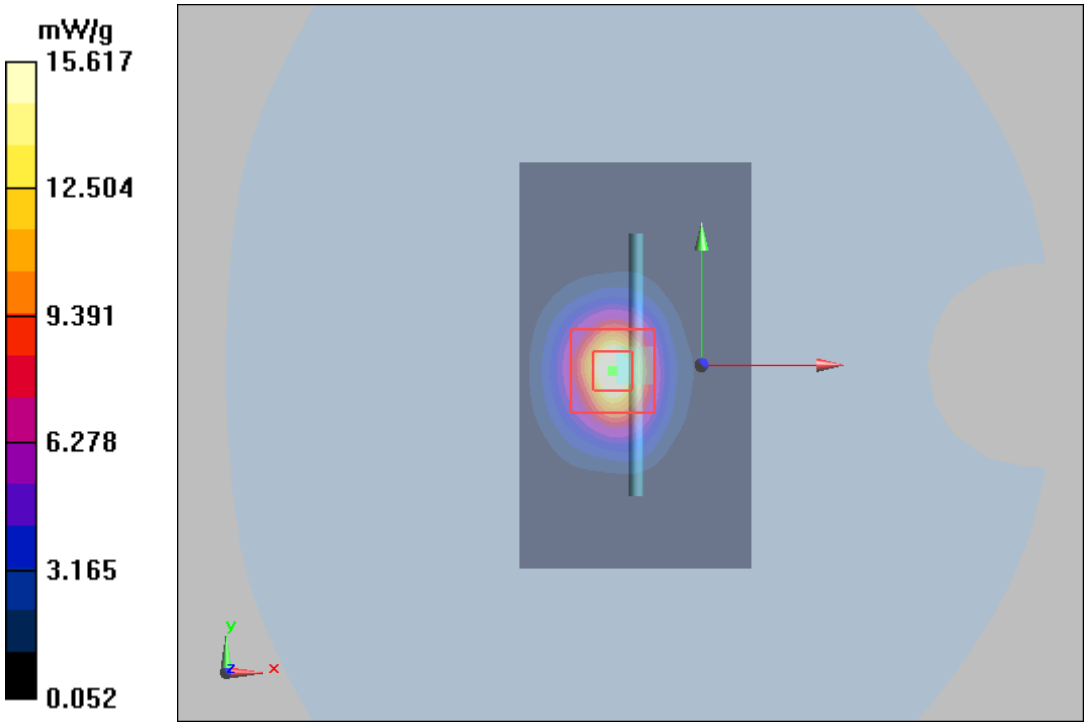
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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 11 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 12/26/2020

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ =1.94S/m; ε_r = 38.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid:dx=12mm, dy=12mm

Maximum value of SAR (measured) = 17.59 mW/g

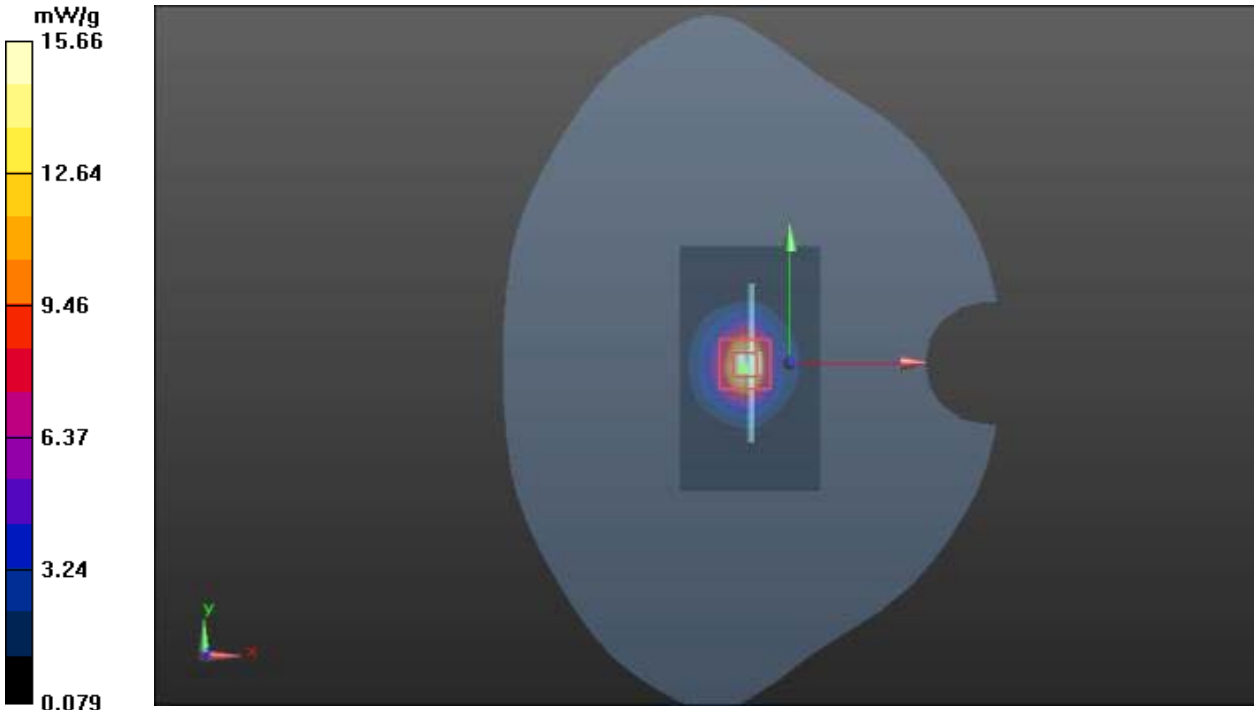
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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 12 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 1/7/2021

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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (4x7x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 17.32 mW/g

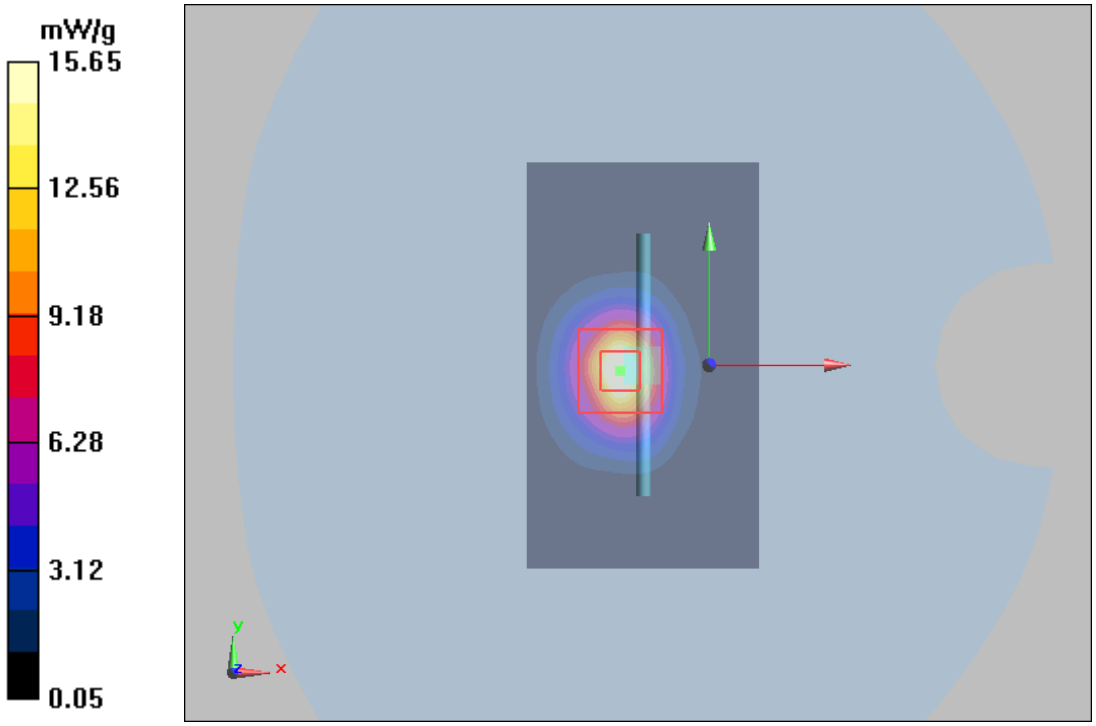
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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) = 15.65 mW/g



Plot 13 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 1/8/2021

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ =1.95mho/m; ε_r = 38.5; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (6x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 17.59 mW/g

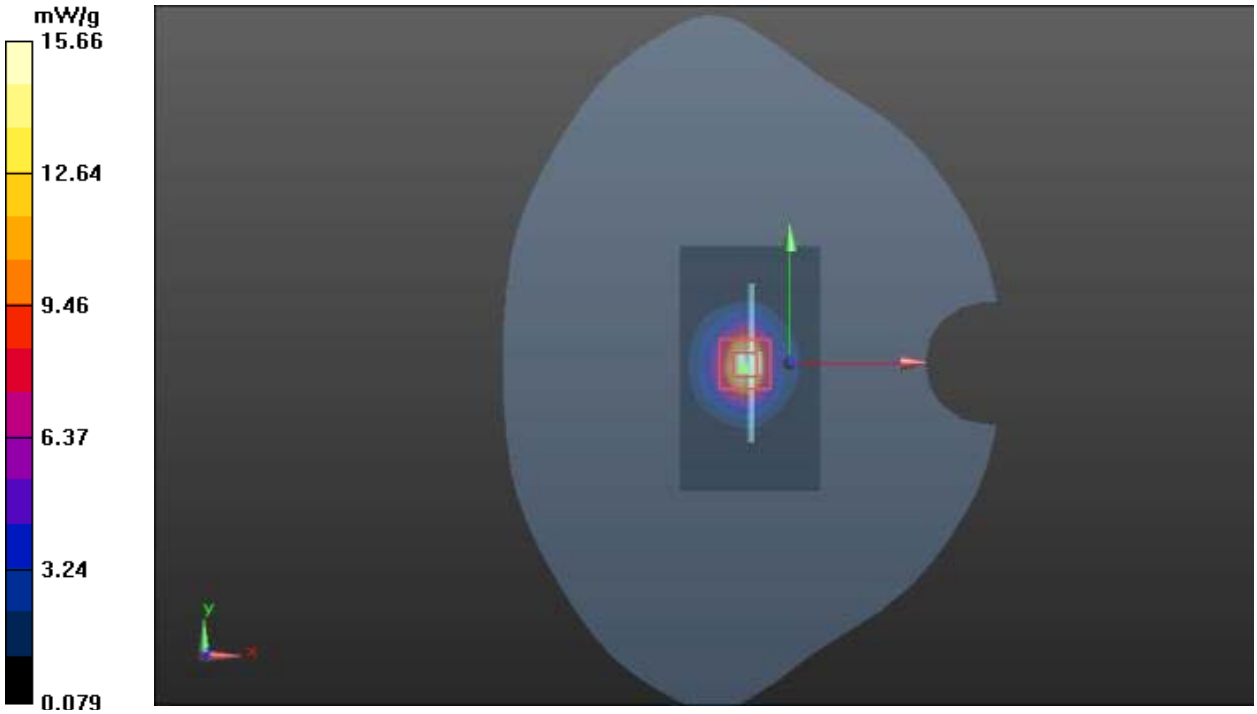
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.858 W/kg

SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.09 mW/g

Maximum value of SAR (measured) = 15.66 mW/g



Plot 14 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2

Date: 1/9/2021

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: f = 2600 MHz; σ = 1.96mho/m; ε_r = 38.2; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=250mW/Area Scan (6x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 17.439 mW/g

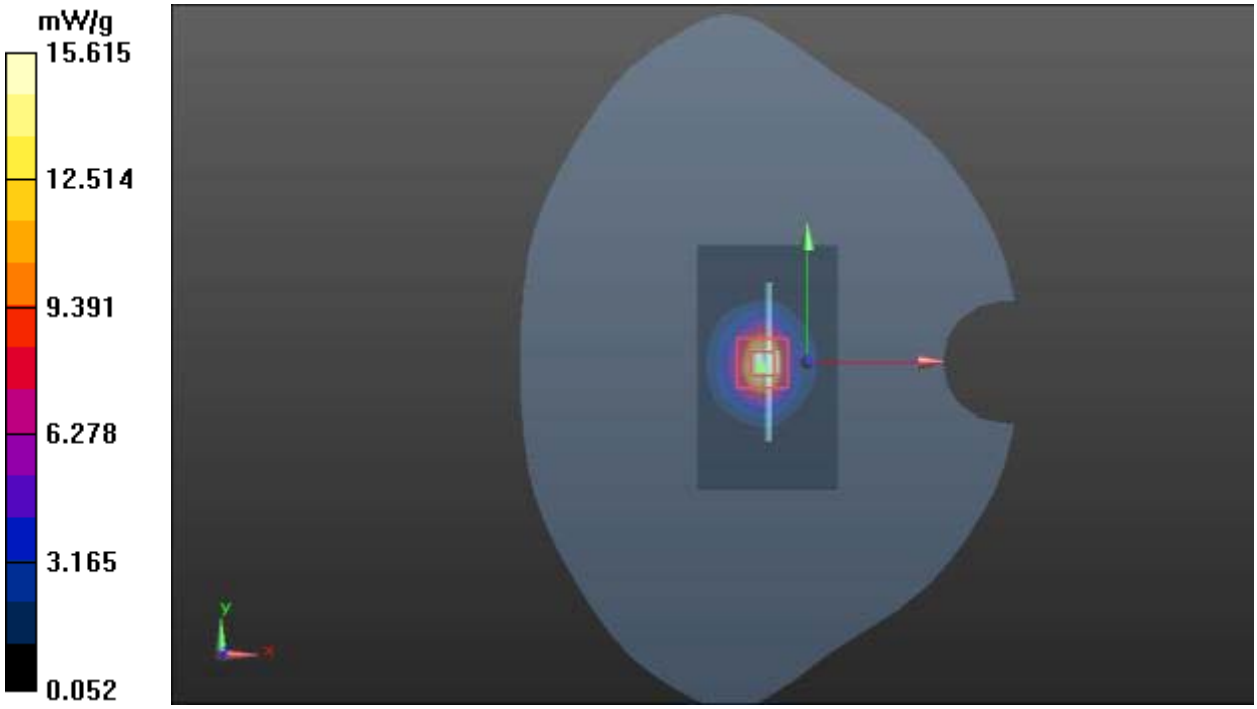
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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 15 System Performance Check at 5250 MHz TSL

DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 12/19/2020

Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5250 MHz; σ = 4.80 S/m; ε_r = 35.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(5.55, 5.55, 5.55); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 9.14 mW/g

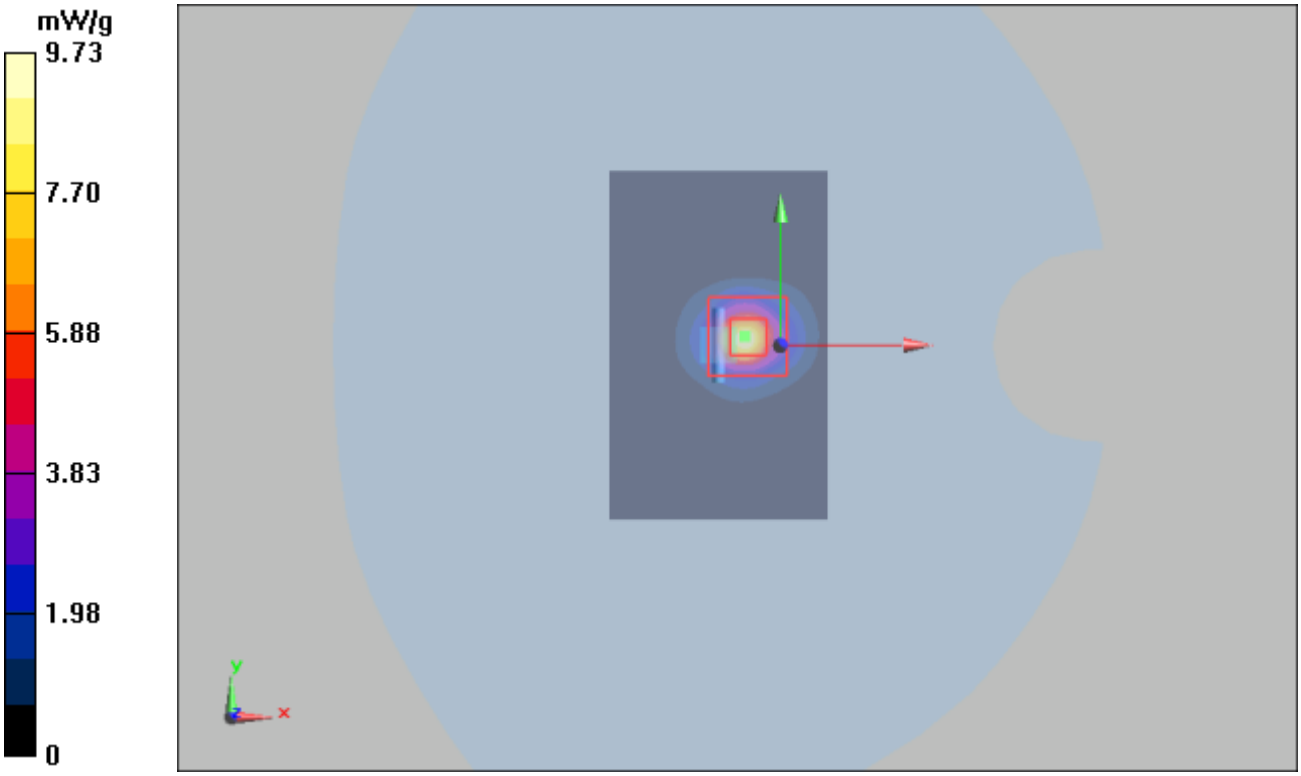
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 33.6 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 52.2 W/kg

SAR(1 g) = 7.87 mW/g; SAR(10 g) = 2.25 mW/g

Maximum value of SAR (measured) = 9.73 mW/g



Plot 16 System Performance Check at 5600 MHz TSL

DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 12/18/2020

Communication System: CW; Frequency: 5600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5600 MHz; σ = 5.21 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.97, 4.97, 4.97); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.25 mW/g

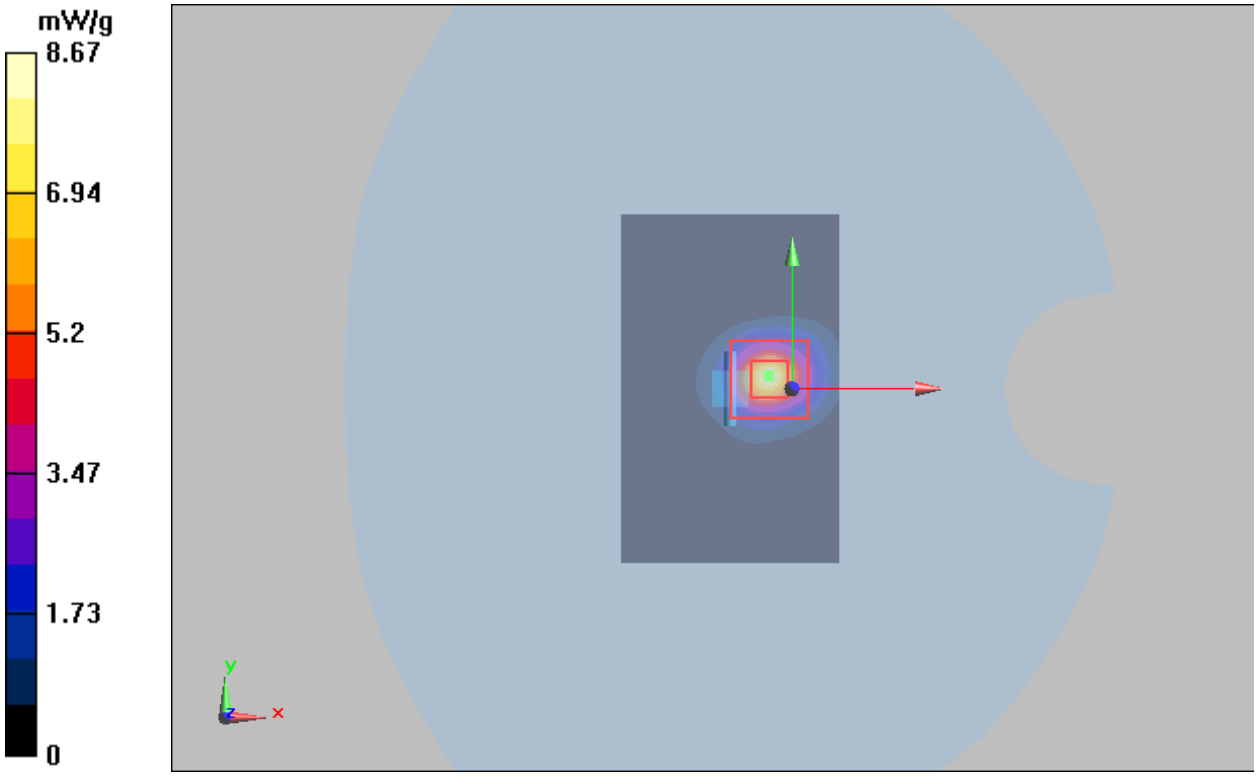
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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 17 System Performance Check at 5750 MHz TSL

DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2

Date: 12/17/2020

Communication System: CW; Frequency: 5750 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5750 MHz; σ = 5.21 S/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: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(5.00, 5.00, 5.00); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

d=10mm, Pin=100mW/Area Scan (6x10x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 8.31 mW/g

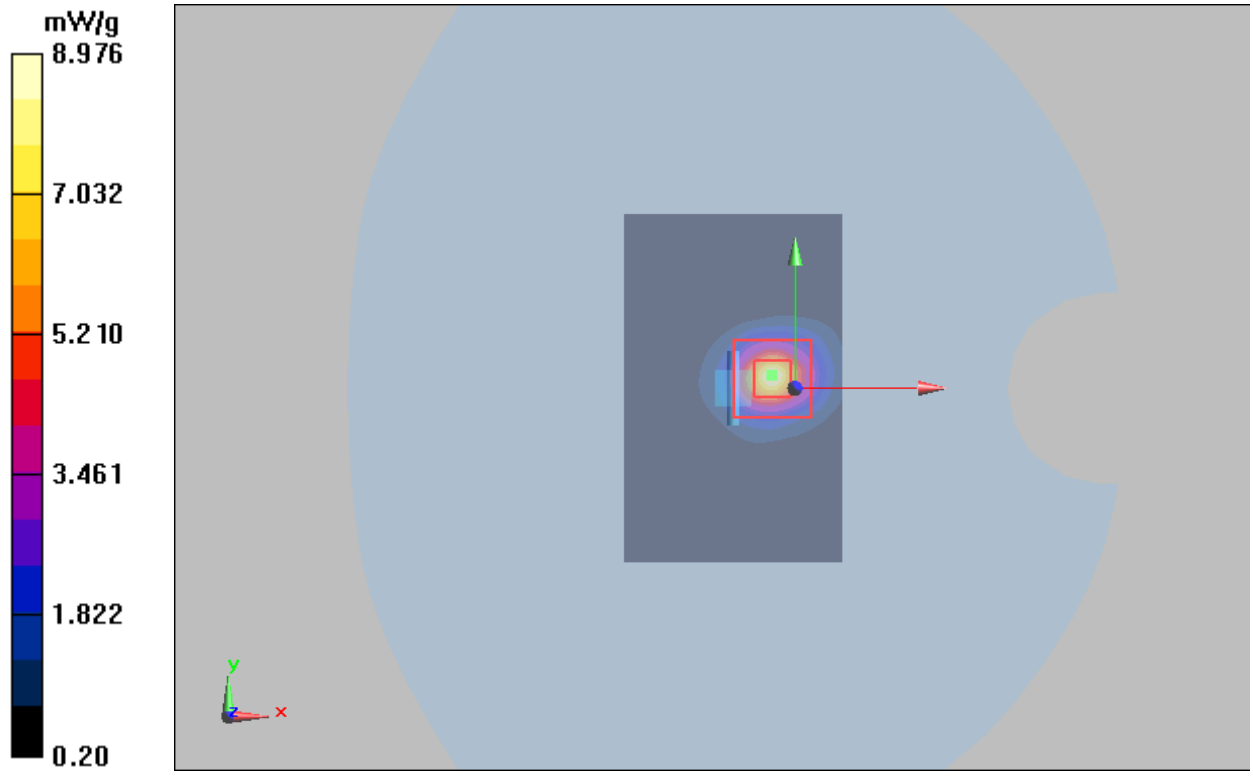
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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



ANNEX C: Highest Graph Results

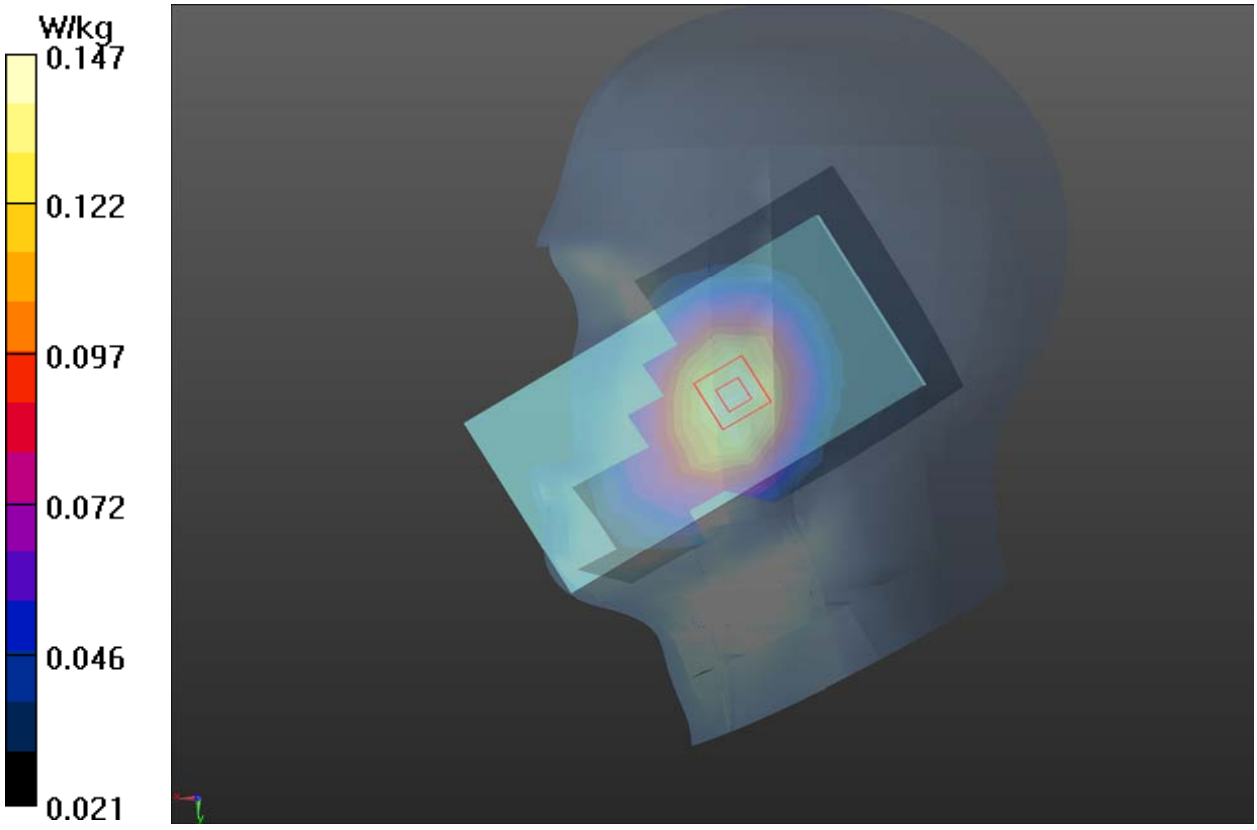
Plot 18 GSM 850 Right Cheek Middle (Main-Antenna)

Date: 12/28/2020
Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.140 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.991 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.166 W/kg
SAR(1 g) = 0.139 W/kg; SAR(10 g) = 0.109 W/kg

Maximum value of SAR (measured) = 0.147 W/kg



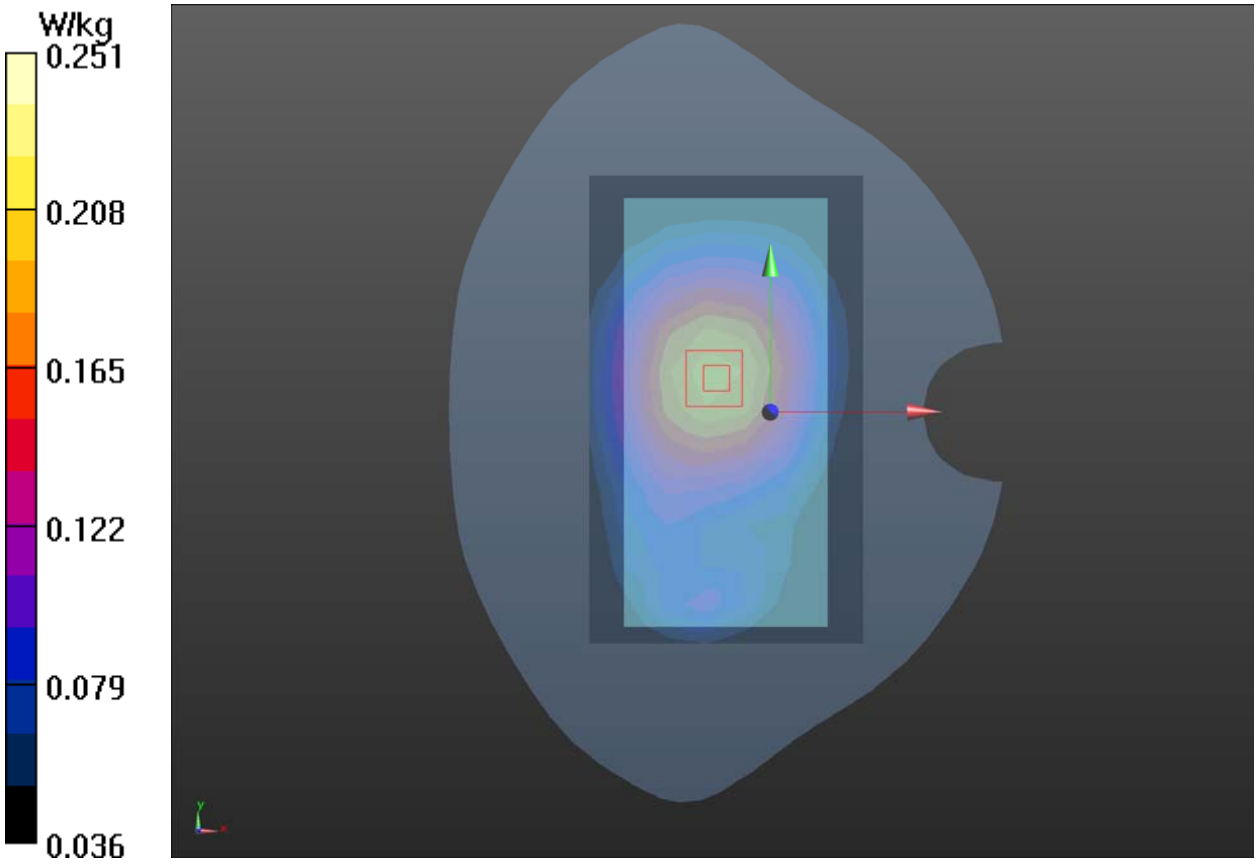
Plot 19 GSM 850 Back Side Middle (Main-Antenna, Distance 15mm)

Date: 12/28/2020
Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.243 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.60 V/m; Power Drift = 0.103 dB
Peak SAR (extrapolated) = 0.399 W/kg
SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.251 W/kg



Plot 20 GSM 850 GPRS (4Txslots) Back Side Middle (Main-Antenna, Distance 10mm)

Date: 12/28/2020

Communication System: UID 0, GPRS 4TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.07491

Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.217 W/kg

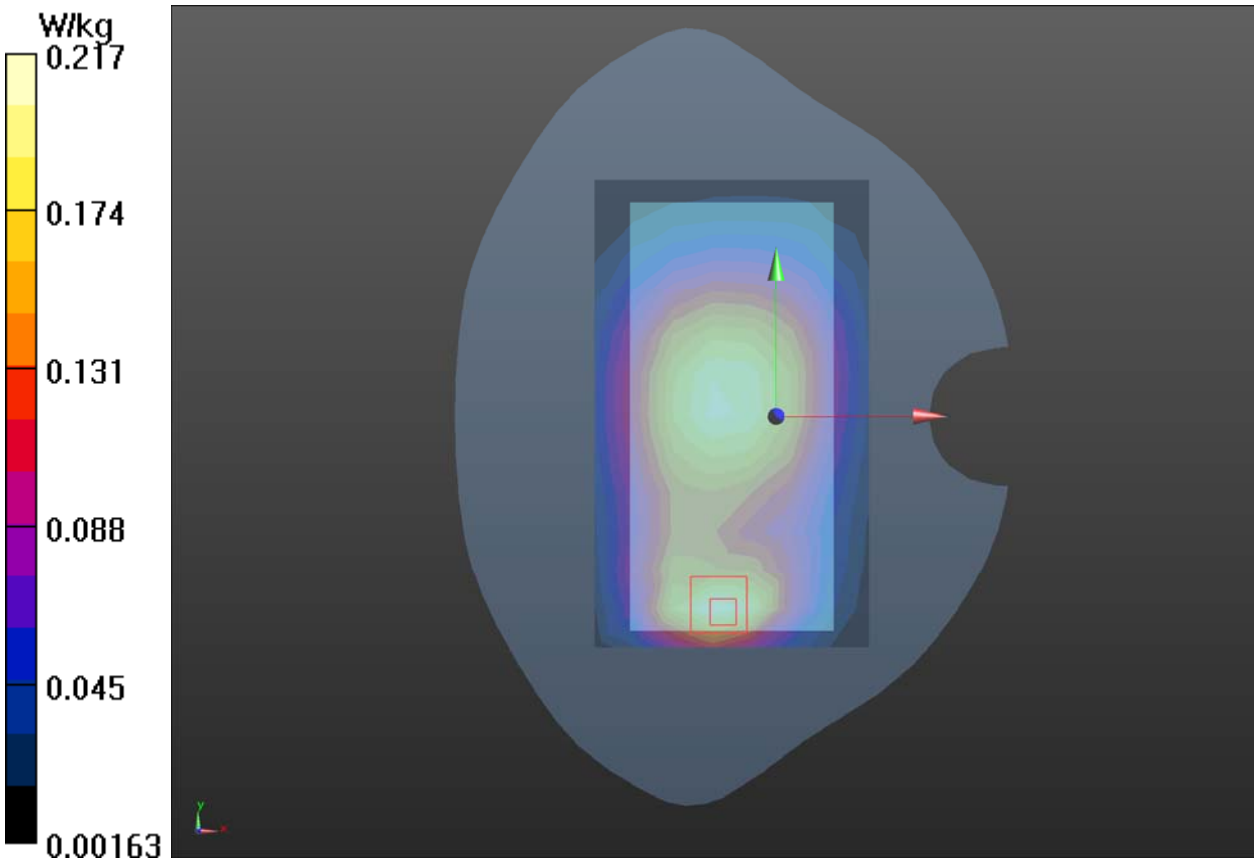
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.90 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.360 W/kg

SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.118 W/kg

Maximum value of SAR (measured) = 0.217 W/kg



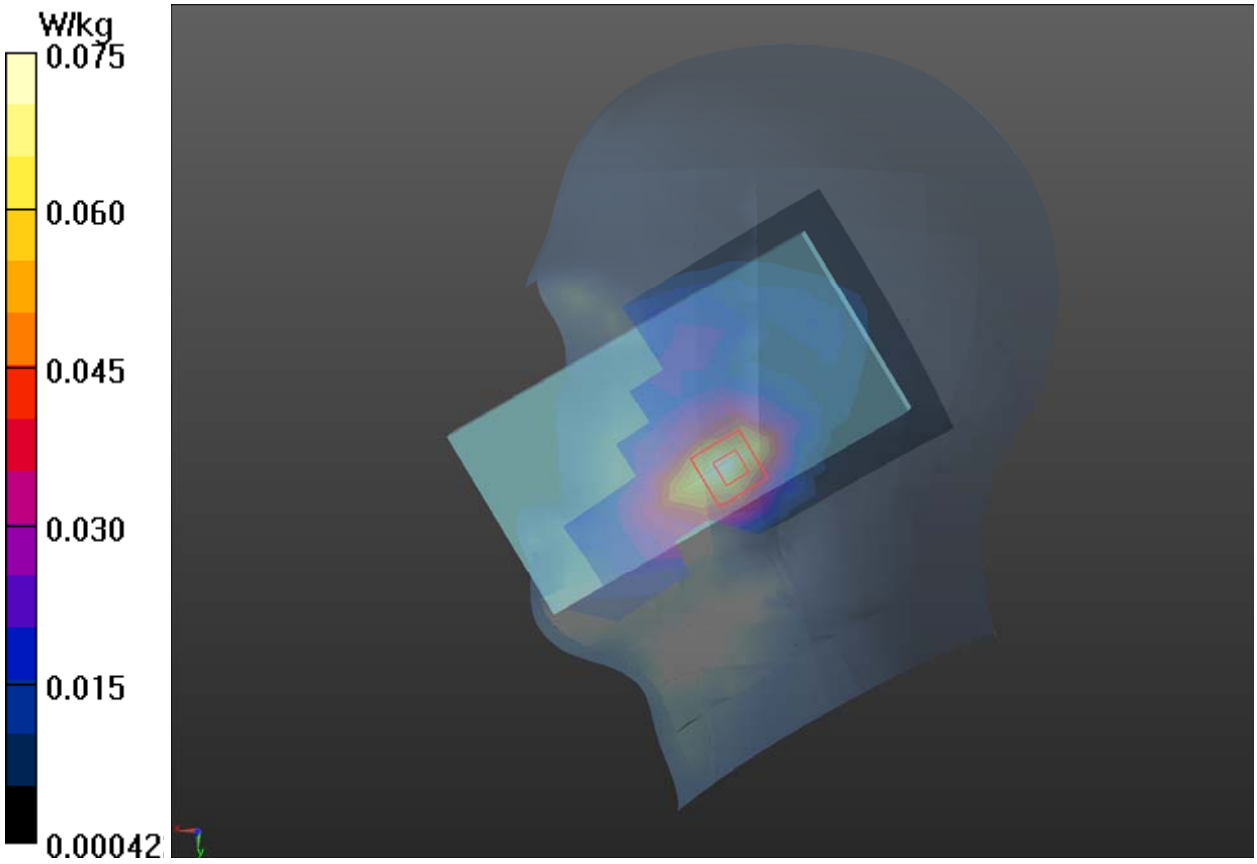
Plot 21 GSM 1900 Right Cheek Middle (Main-Antenna)

Date: 12/31/2020
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.076 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.237 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 0.111 W/kg
SAR(1 g) = 0.071 W/kg; SAR(10 g) = 0.043 W/kg

Maximum value of SAR (measured) = 0.075 W/kg



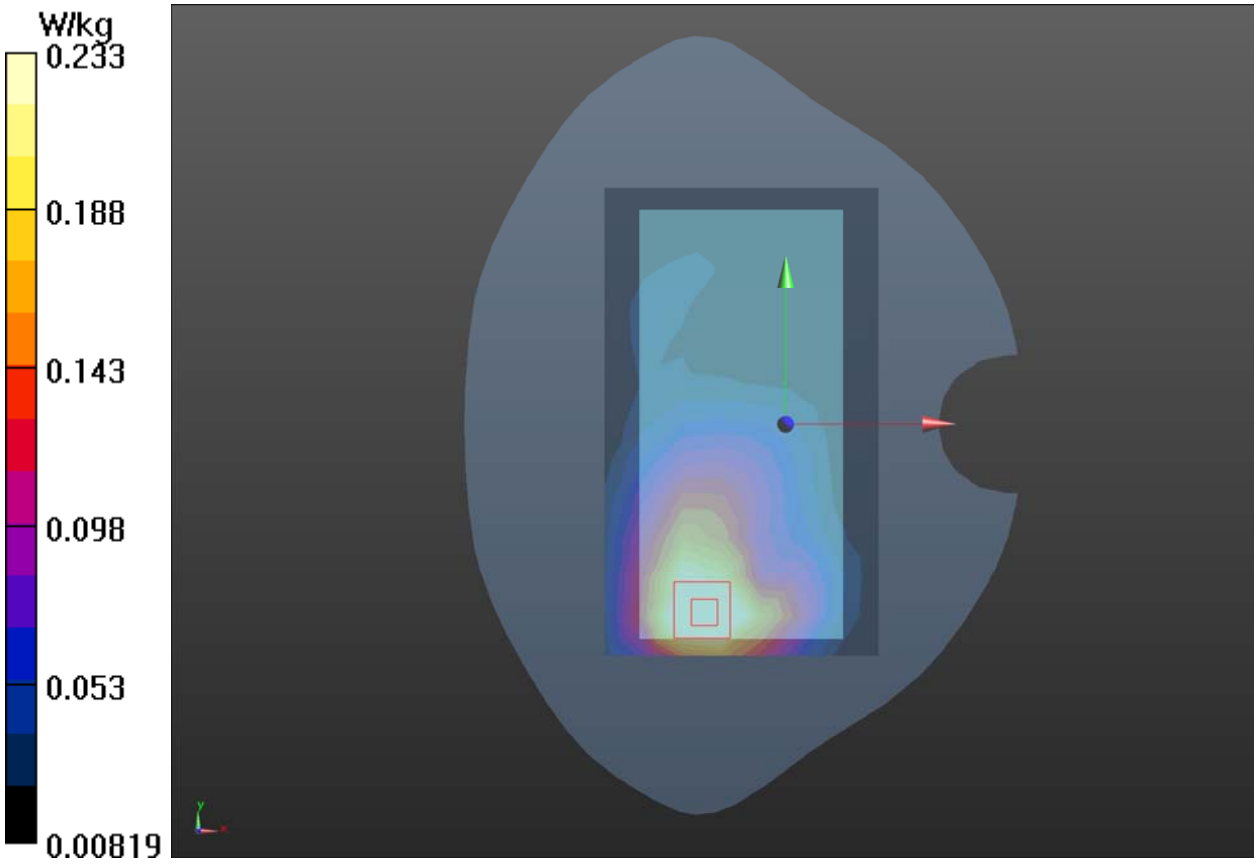
Plot 22 GSM 1900 Back Side Middle (Main-Antenna, Distance 15mm)

Date: 12/31/2020
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.231 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.422 V/m; Power Drift = 0.108 dB
Peak SAR (extrapolated) = 0.352 W/kg
SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.122 W/kg

Maximum value of SAR (measured) = 0.233 W/kg



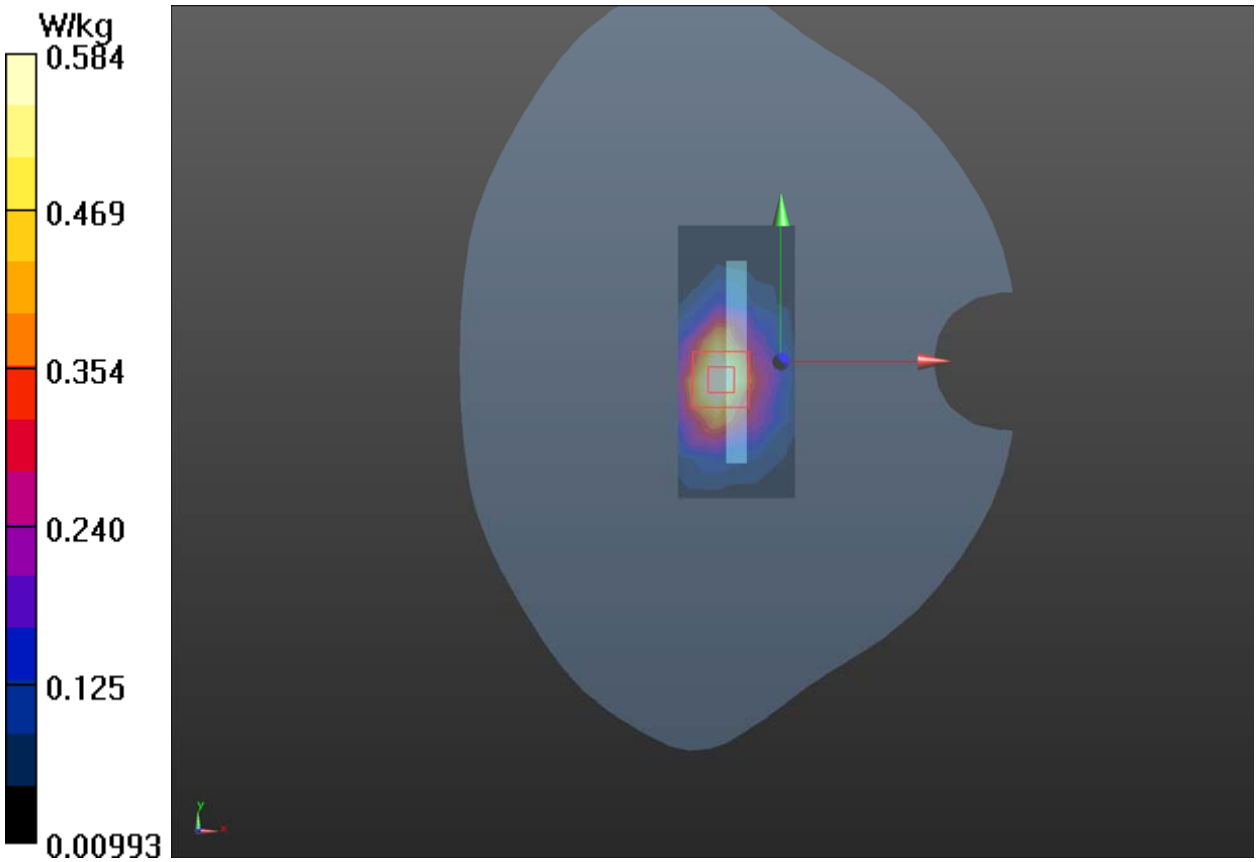
Plot 23 GSM 1900 GPRS (1Txslot) Bottom Edge Middle (Main-Antenna, Distance 10mm)

Date: 12/31/2020
Communication System: UID 0, GPRS 1TX (0); Frequency: 1880 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.586 W/kg

Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.23 V/m; Power Drift = 0.070 dB
Peak SAR (extrapolated) = 1.56 W/kg
SAR(1 g) = 0.545 W/kg; SAR(10 g) = 0.287 W/kg

Maximum value of SAR (measured) = 0.584 W/kg



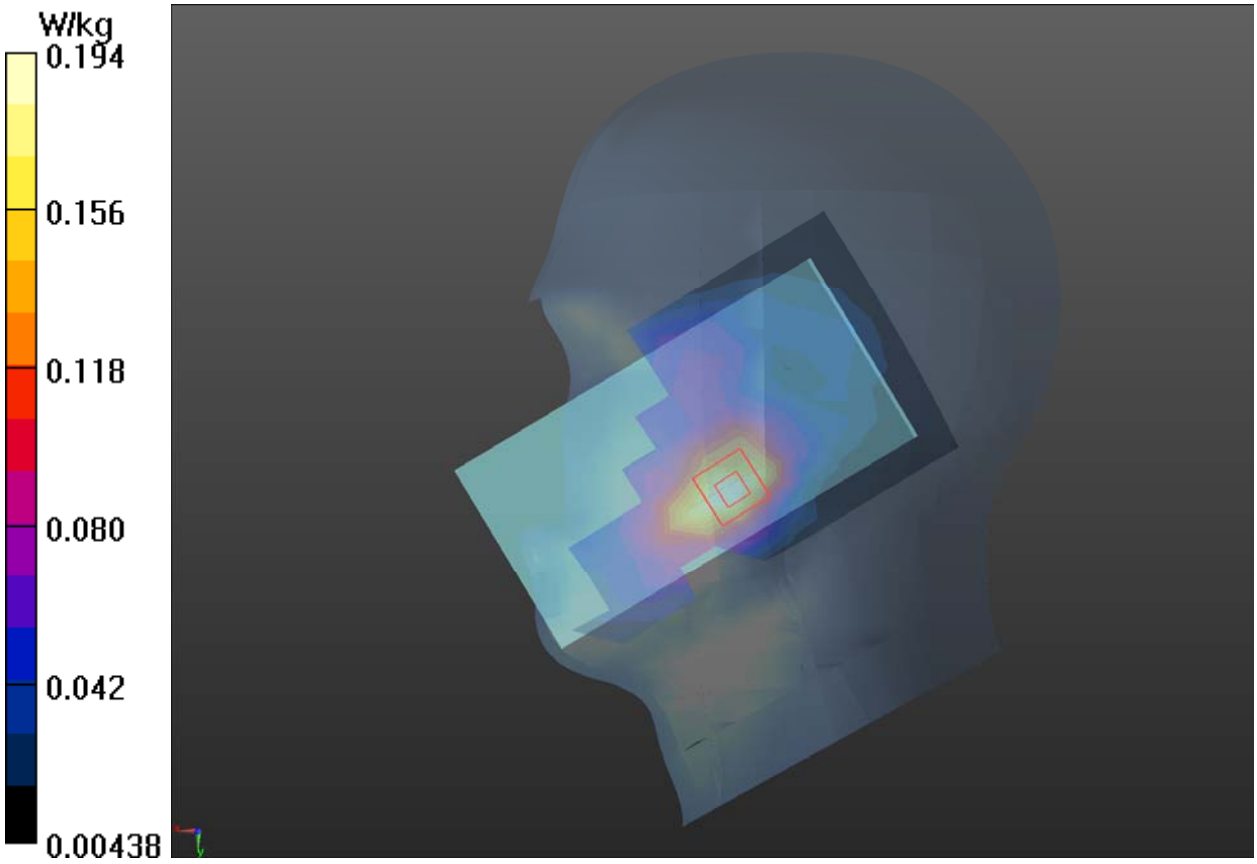
Plot 24 UMTS Band II Right Cheek Middle (Main-Antenna)

Date: 12/31/2020
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.193 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.443 V/m; Power Drift = 0.157 dB
Peak SAR (extrapolated) = 0.305 W/kg
SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.101 W/kg

Maximum value of SAR (measured) = 0.194 W/kg



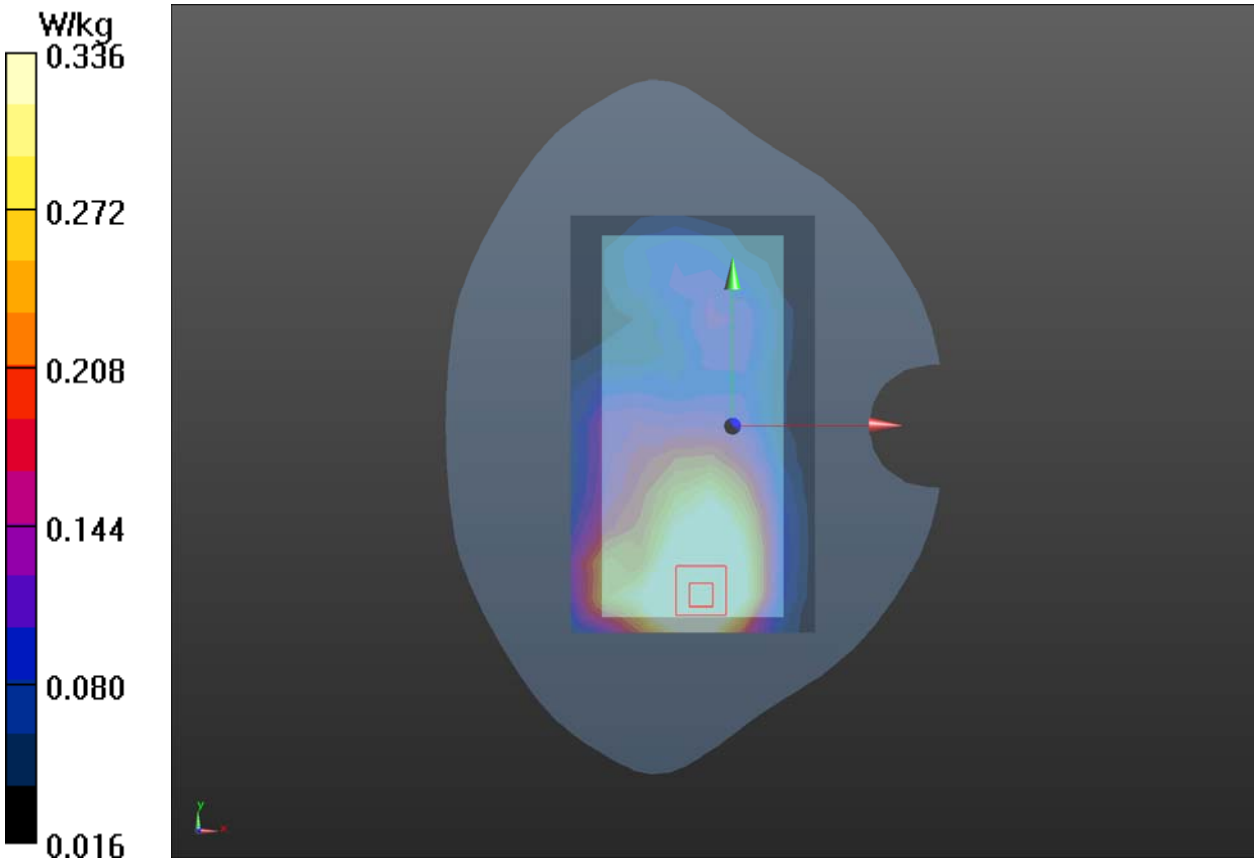
Plot 25 UMTS Band II Front Side Middle (Main-Antenna, Distance 15mm)

Date: 12/31/2020
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.326 W/kg

Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.890 V/m; Power Drift = 0.016 dB
Peak SAR (extrapolated) = 0.842 W/kg
SAR(1 g) = 0.318 W/kg; SAR(10 g) = 0.198 W/kg

Maximum value of SAR (measured) = 0.336 W/kg



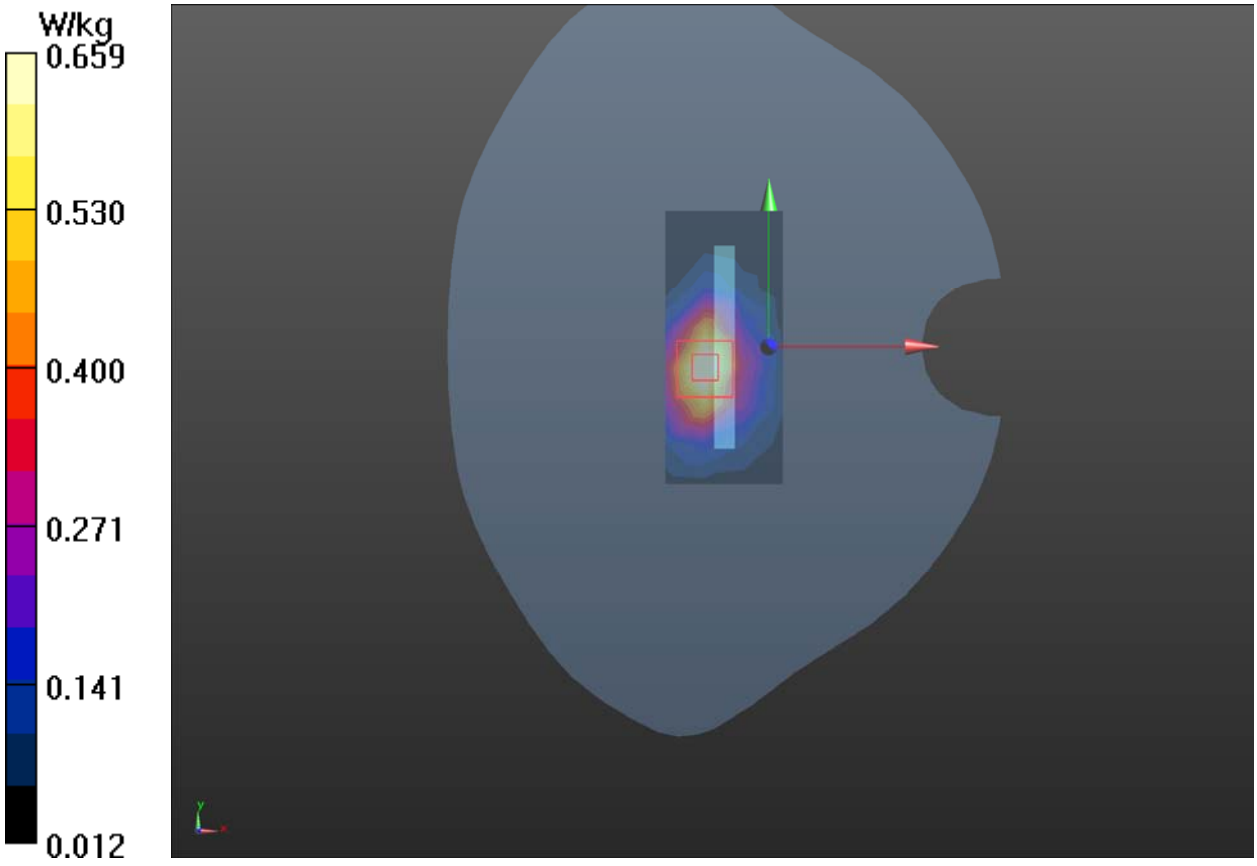
Plot 26 UMTS Band II Bottom Edge Middle (Main-Antenna, Distance 10mm)

Date: 12/31/2020
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.050 W/kg

Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.97 V/m; Power Drift = 0.133 dB
Peak SAR (extrapolated) = 1.96 W/kg
SAR(1 g) = 0.628 W/kg; SAR(10 g) = 0.332 W/kg

Maximum value of SAR (measured) = 0.659 W/kg

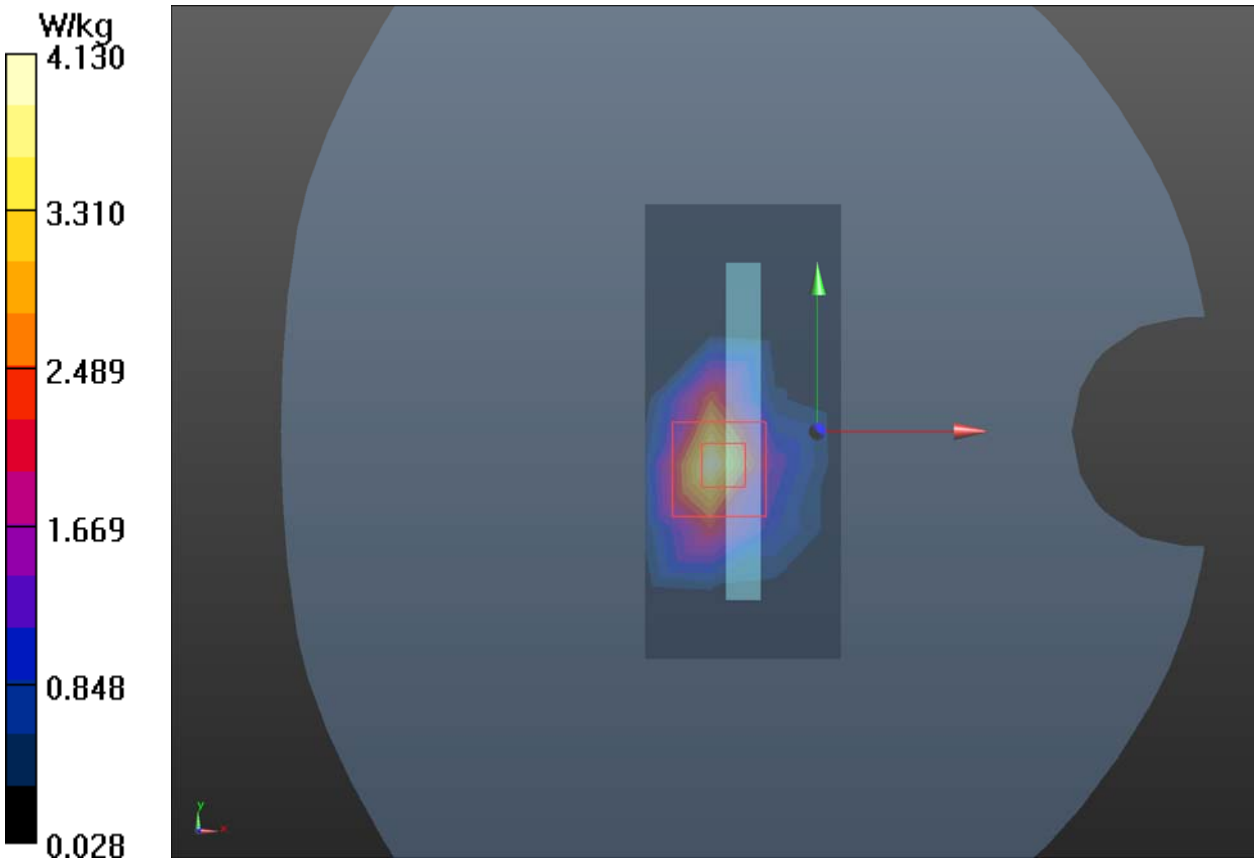


Plot 27 UMTS Band II Bottom Edge Middle (Main-Antenna, Distance 0mm)

Date: 12/31/2020
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 4.07 W/kg

Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.73 V/m; Power Drift = 0.029 dB
Peak SAR (extrapolated) = 7.32 W/kg
SAR(1 g) = 3.66 W/kg; SAR(10 g) = 1.71 W/kg
Maximum value of SAR (measured) = 4.13 W/kg

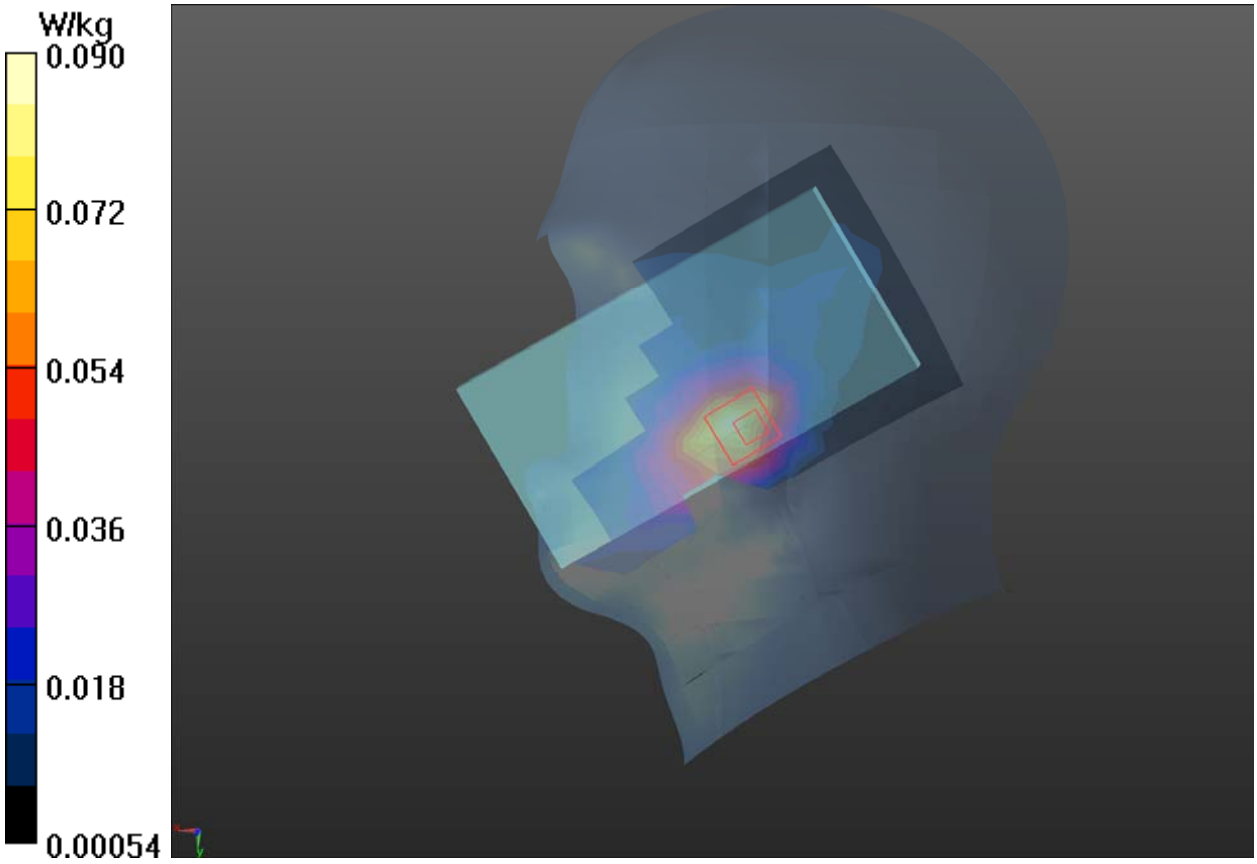


Plot 28 UMTS Band IV Right Cheek Middle (Main-Antenna)

Date: 1/11/2021
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.085 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.725 V/m; Power Drift = 0.102 dB
Peak SAR (extrapolated) = 0.101 W/kg
SAR(1 g) = 0.076 W/kg; SAR(10 g) = 0.047 W/kg
Maximum value of SAR (measured) = 0.090 W/kg



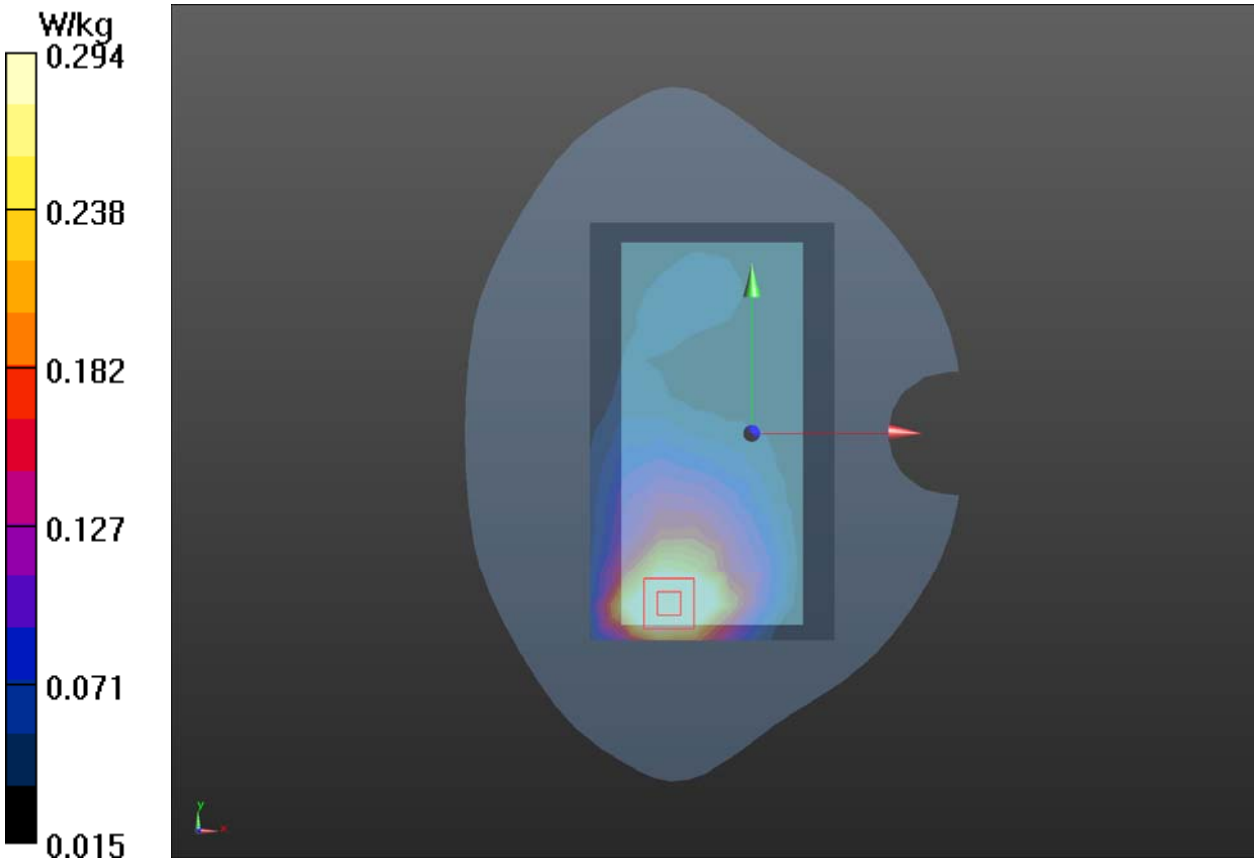
Plot 29 UMTS Band IV Front Side Middle (Main-Antenna, Distance 15mm)

Date: 1/11/2021
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.288 W/kg

Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.340 V/m; Power Drift = 0.016 dB
Peak SAR (extrapolated) = 0.716 W/kg
SAR(1 g) = 0.272 W/kg; SAR(10 g) = 0.158 W/kg

Maximum value of SAR (measured) = 0.294 W/kg



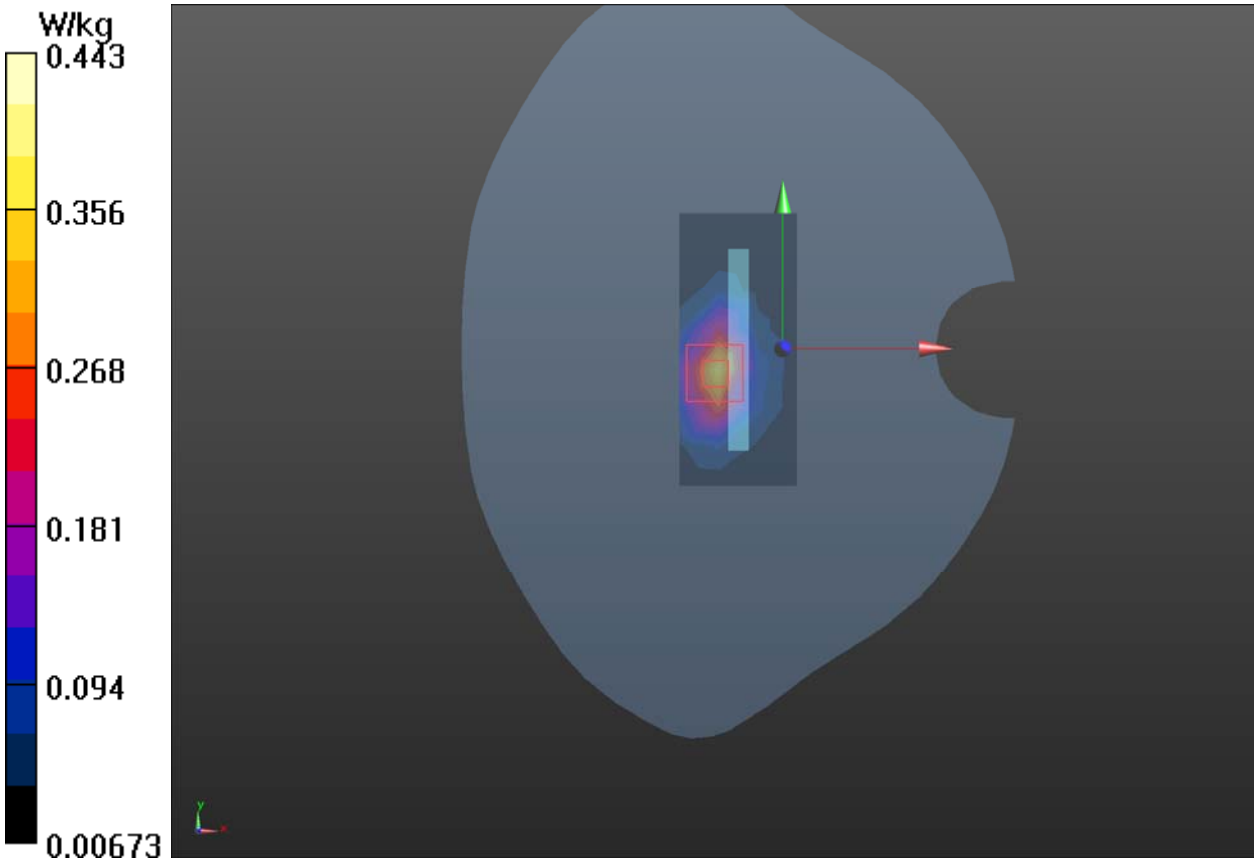
Plot 30 UMTS Band IV Bottom Edge Middle (Main-Antenna, Distance 10mm)

Date: 1/11/2021
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.449 W/kg

Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.47 V/m; Power Drift = 0.042 dB
Peak SAR (extrapolated) = 0.871 W/kg
SAR(1 g) = 0.420 W/kg; SAR(10 g) = 0.213 W/kg

Maximum value of SAR (measured) = 0.443 W/kg



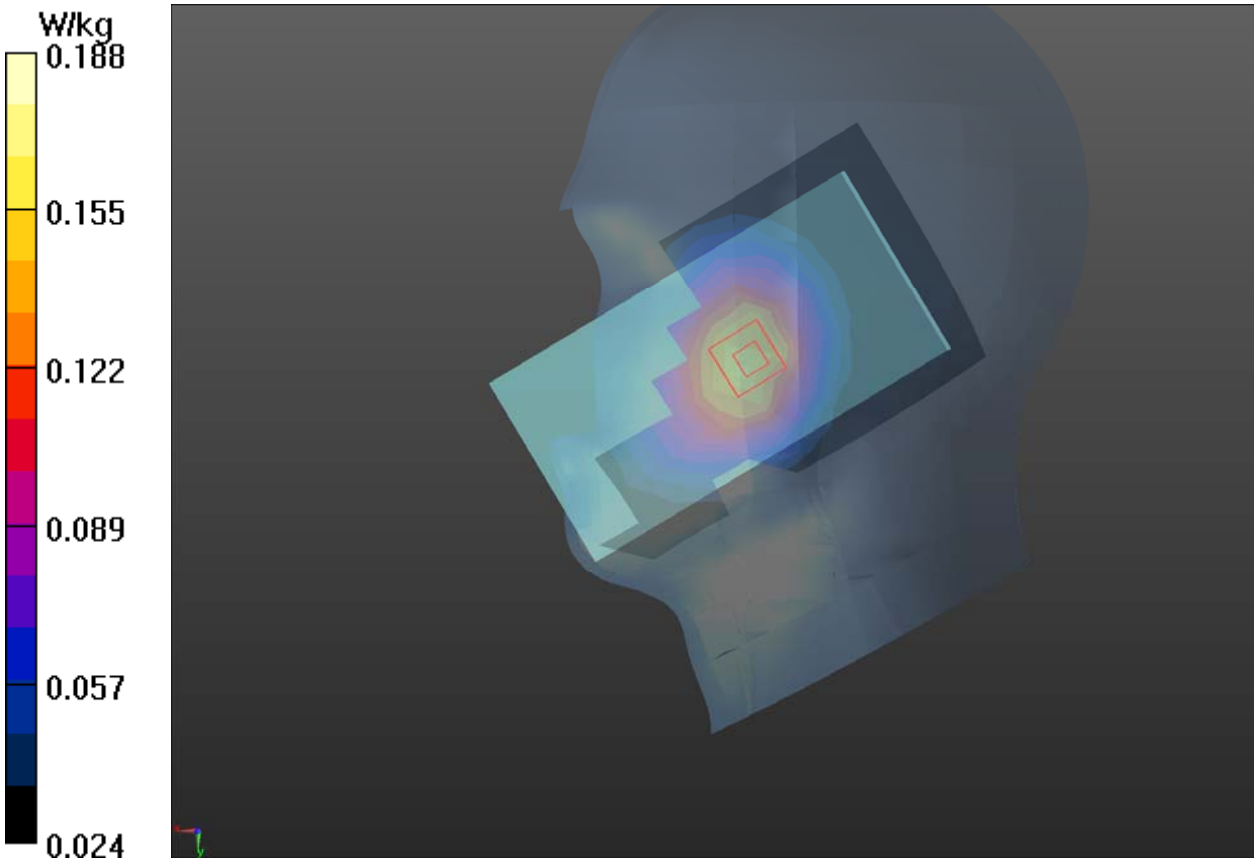
Plot 31 UMTS Band V Right Cheek Middle (Main-Antenna)

Date: 12/28/2020
Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.180 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.364 V/m; Power Drift = 0.152 dB
Peak SAR (extrapolated) = 0.285 W/kg
SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.126 W/kg

Maximum value of SAR (measured) = 0.188 W/kg

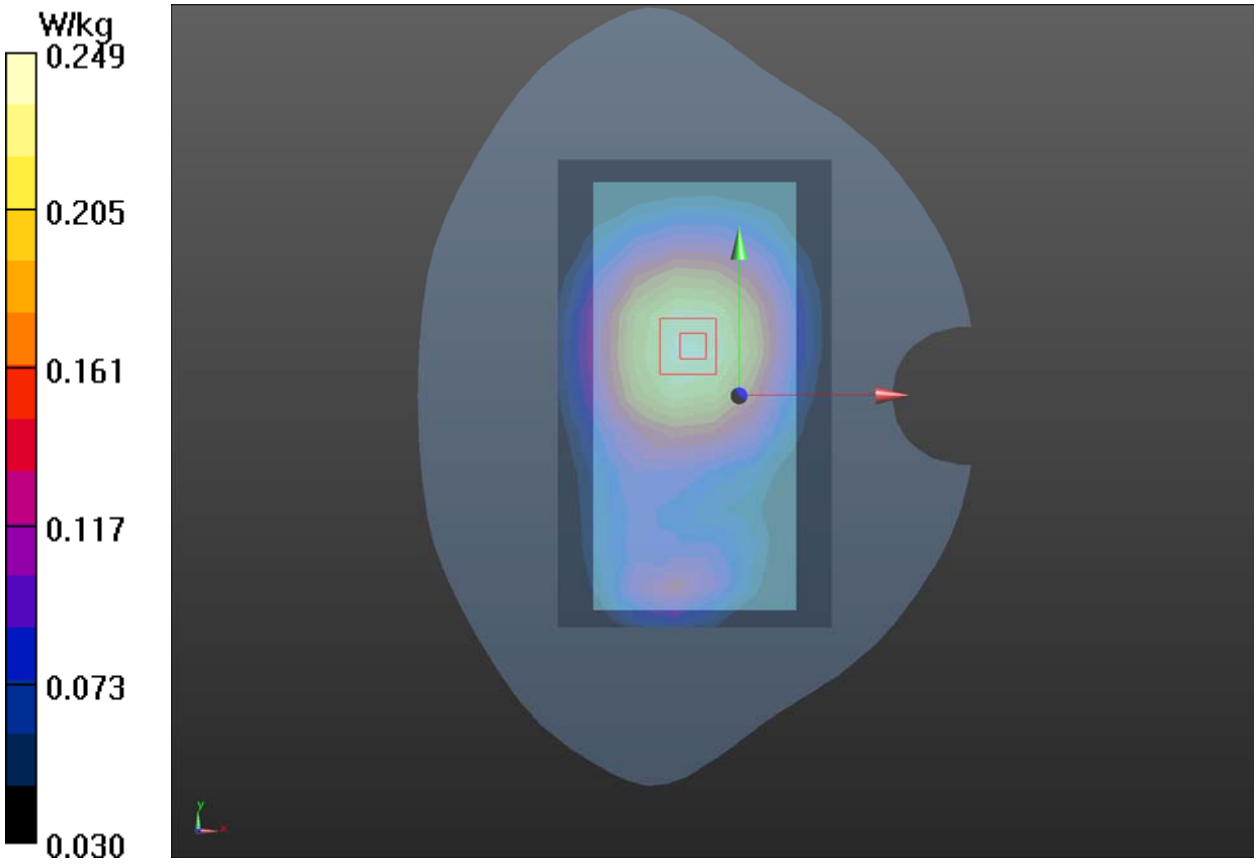


Plot 32 UMTS Band V Back Side Middle (Main-Antenna, Distance 15mm)

Date: 12/28/2020
Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.241 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.49 V/m; Power Drift = 0.112 dB
Peak SAR (extrapolated) = 0.496 W/kg
SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.157 W/kg
Maximum value of SAR (measured) = 0.249 W/kg



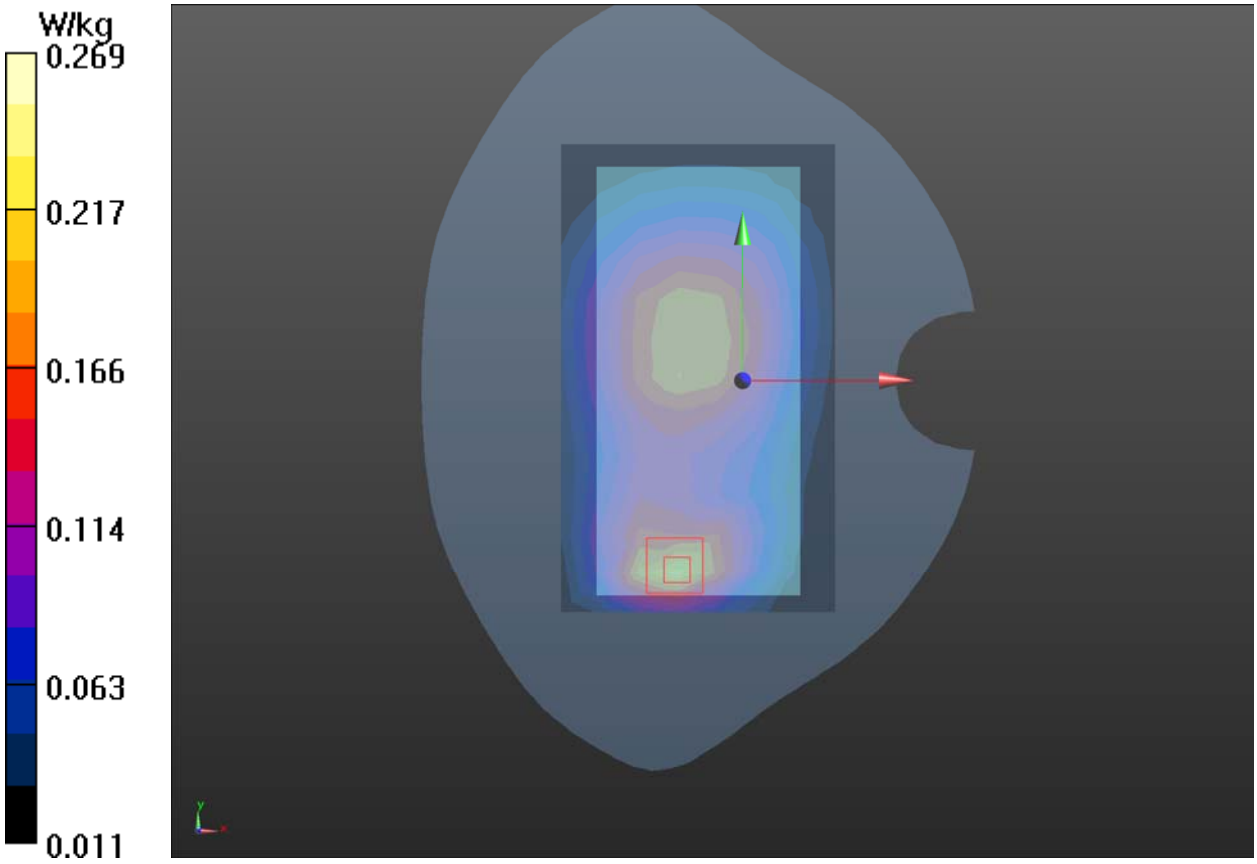
Plot 33 UMTS Band V Back Side Middle (Main-Antenna, Distance 10mm)

Date: 12/28/2020
Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.266 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.85 V/m; Power Drift = 0.113 dB
Peak SAR (extrapolated) = 0.561 W/kg
SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.178 W/kg

Maximum value of SAR (measured) = 0.269 W/kg



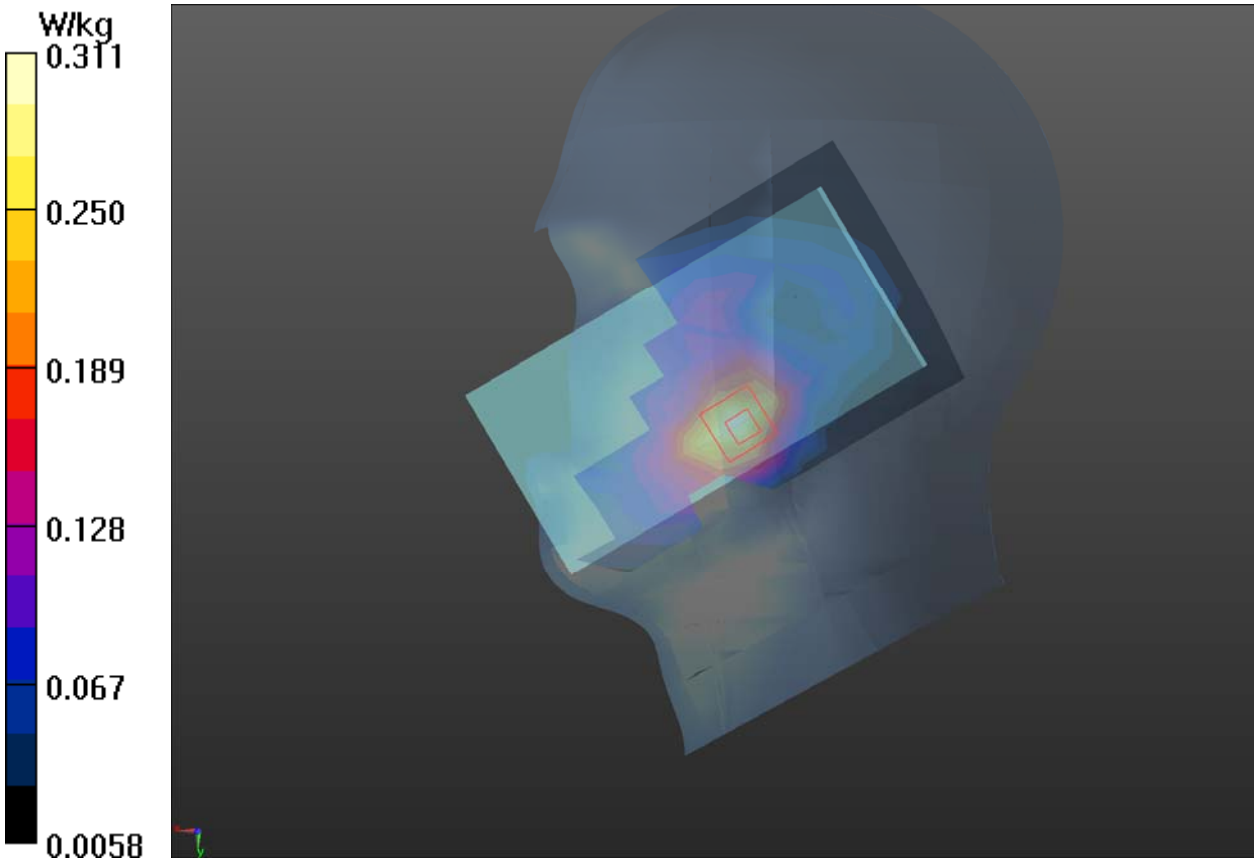
Plot 34 LTE Band 2 1RB Right Cheek High (Main-Antenna)

Date: 1/1/2021
Communication System: UID 0, LTE (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.434 S/m; ε_r = 38.861; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.313 W/kg

Right Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.474 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 0.451 W/kg
SAR(1 g) = 0.295 W/kg; SAR(10 g) = 0.178 W/kg

Maximum value of SAR (measured) = 0.311 W/kg



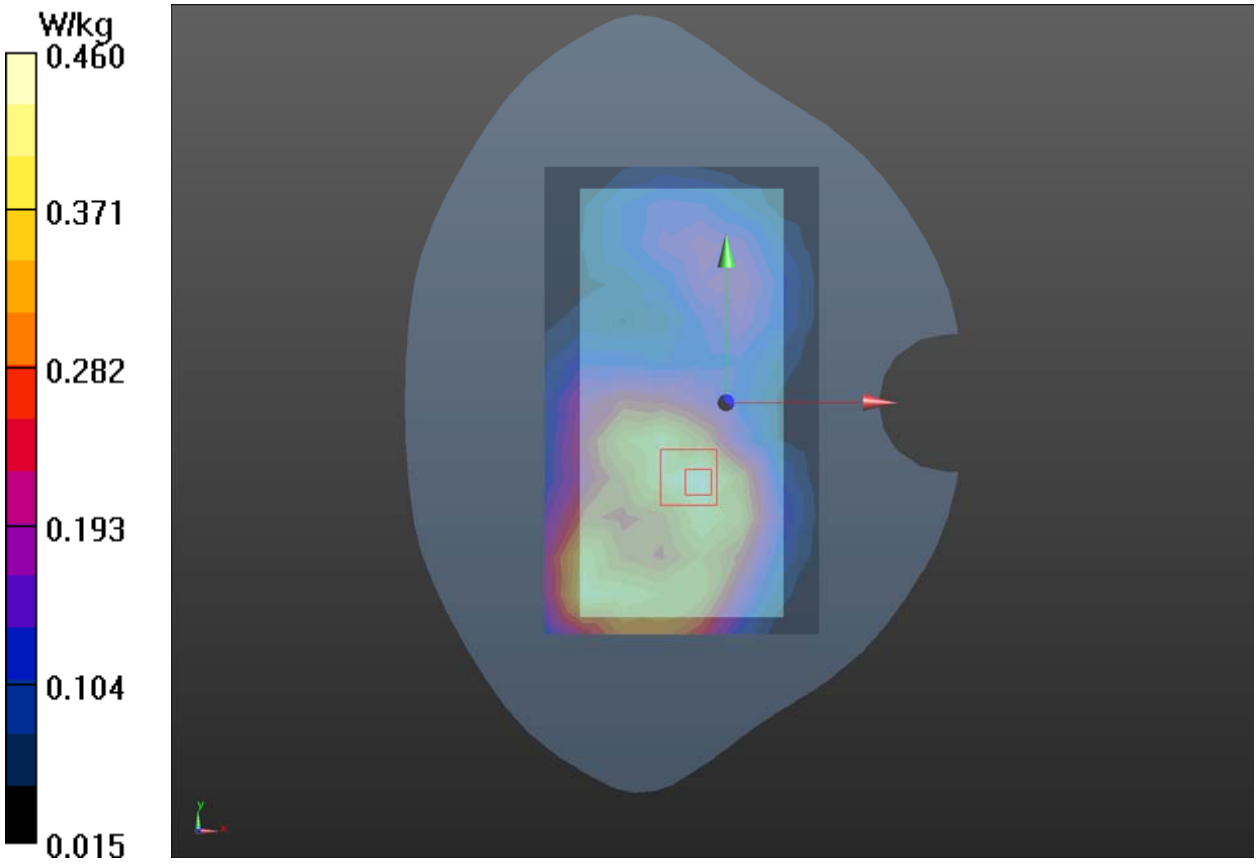
Plot 35 LTE Band 2 1RB Front Side High (Main-Antenna, Distance 15mm)

Date: 1/1/2021
Communication System: UID 0, LTE (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.434 S/m; ε_r = 38.861; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side High/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.459 W/kg

Front Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.56 V/m; Power Drift = 0.115 dB
Peak SAR (extrapolated) = 0.659 W/kg
SAR(1 g) = 0.390 W/kg; SAR(10 g) = 0.241 W/kg

Maximum value of SAR (measured) = 0.460 W/kg



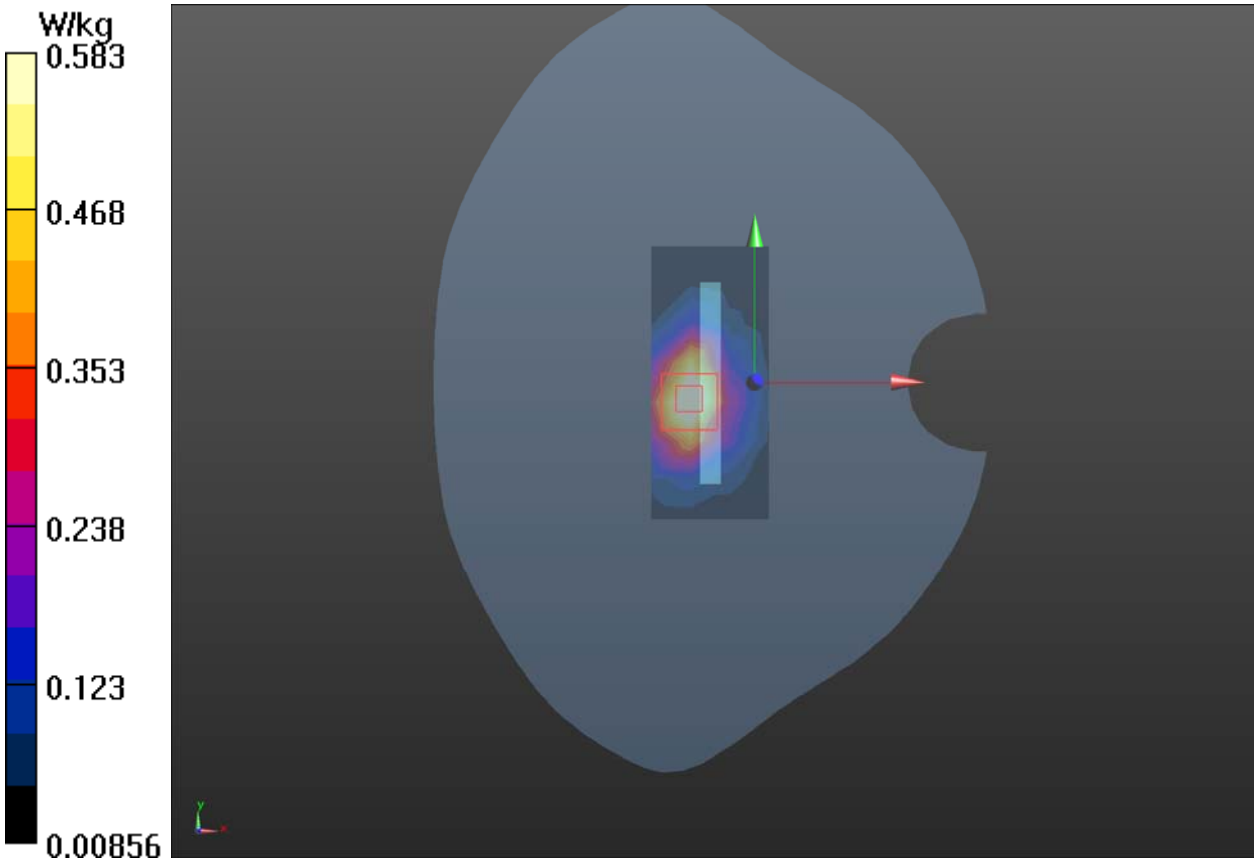
Plot 36 LTE Band 2 1RB Bottom Edge High (Main-Antenna, Distance 10mm)

Date: 1/1/2021
Communication System: UID 0, LTE (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.434 S/m; ε_r = 38.861; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.588 W/kg

Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.41 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 1.93 W/kg
SAR(1 g) = 0.556 W/kg; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.583 W/kg

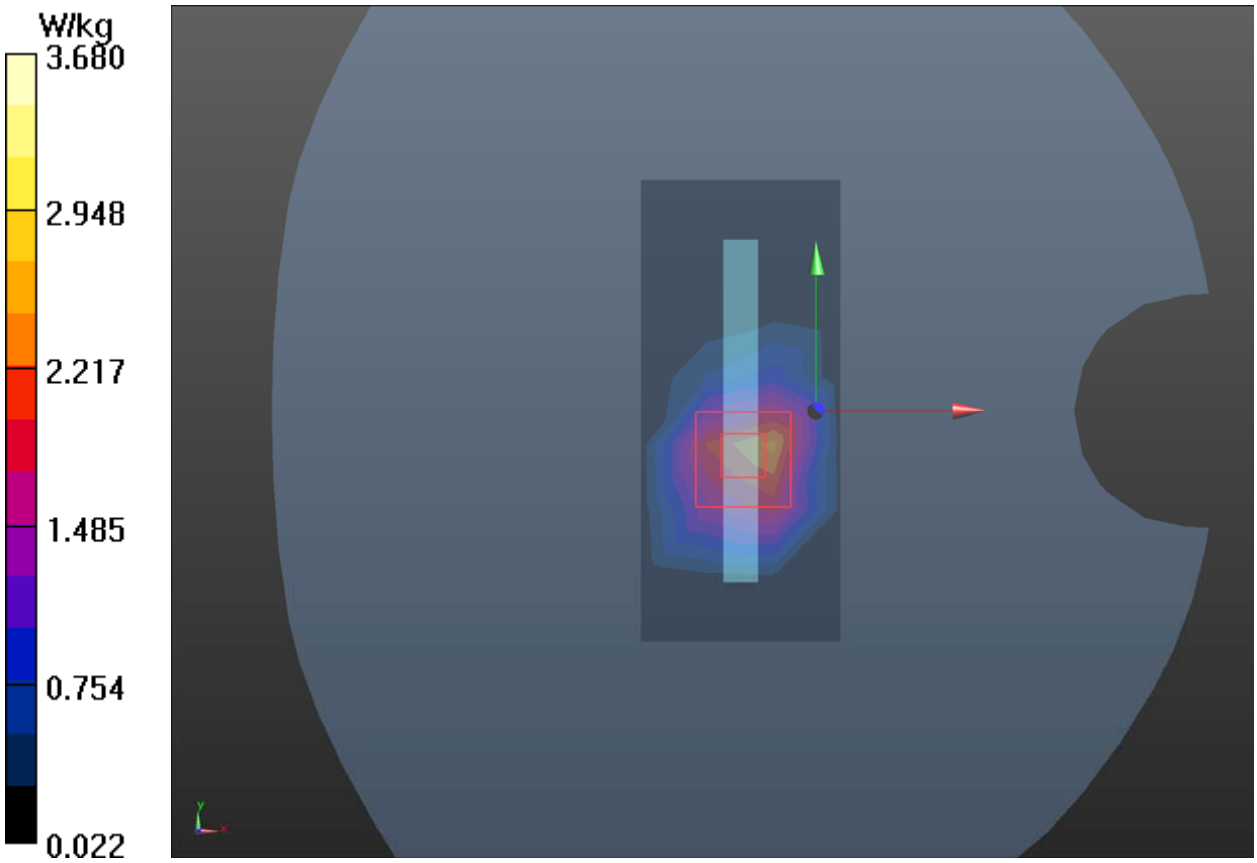


Plot 37 LTE Band 2 1RB Bottom Edge High (Main-Antenna, Distance 0mm)

Date: 1/1/2021
Communication System: UID 0, LTE (0); Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.434 S/m; ε_r = 38.861; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.57 W/kg

Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.94 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 6.41 W/kg
SAR(1 g) = 3.21 W/kg; SAR(10 g) = 1.5 W/kg
Maximum value of SAR (measured) = 3.68 W/kg



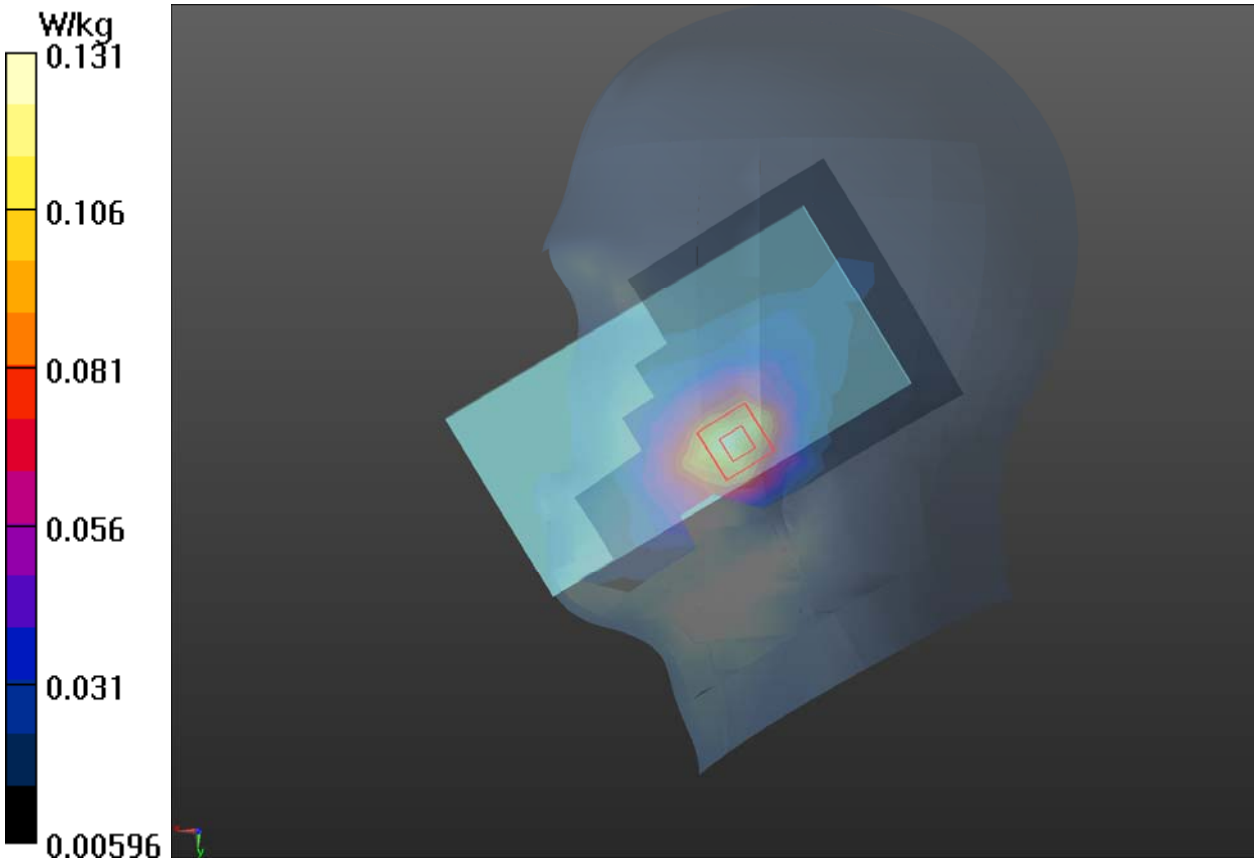
Plot 38 LTE Band 4 1RB Right Cheek Low (Main-Antenna)

Date: 1/11/2021
Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 39.467; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.130 W/kg

Right Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.985 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.179 W/kg
SAR(1 g) = 0.122 W/kg; SAR(10 g) = 0.077 W/kg

Maximum value of SAR (measured) = 0.131 W/kg



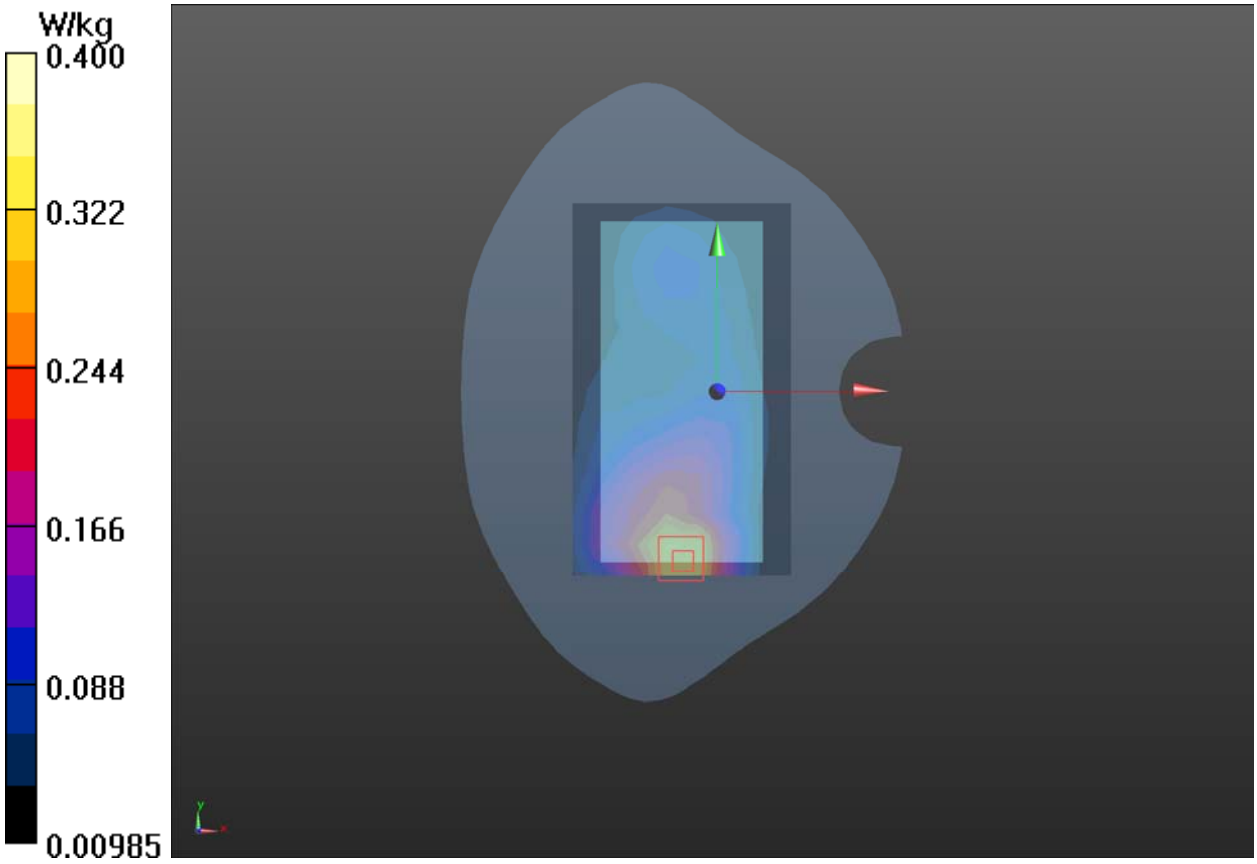
Plot 39 LTE Band 4 1RB Front Side Low (Main-Antenna, Distance 15mm)

Date: 1/11/2021
Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 39.467; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.392 W/kg

Front Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.782 V/m; Power Drift = 0.130 dB
Peak SAR (extrapolated) = 0.954 W/kg
SAR(1 g) = 0.387 W/kg; SAR(10 g) = 0.218 W/kg

Maximum value of SAR (measured) = 0.400 W/kg



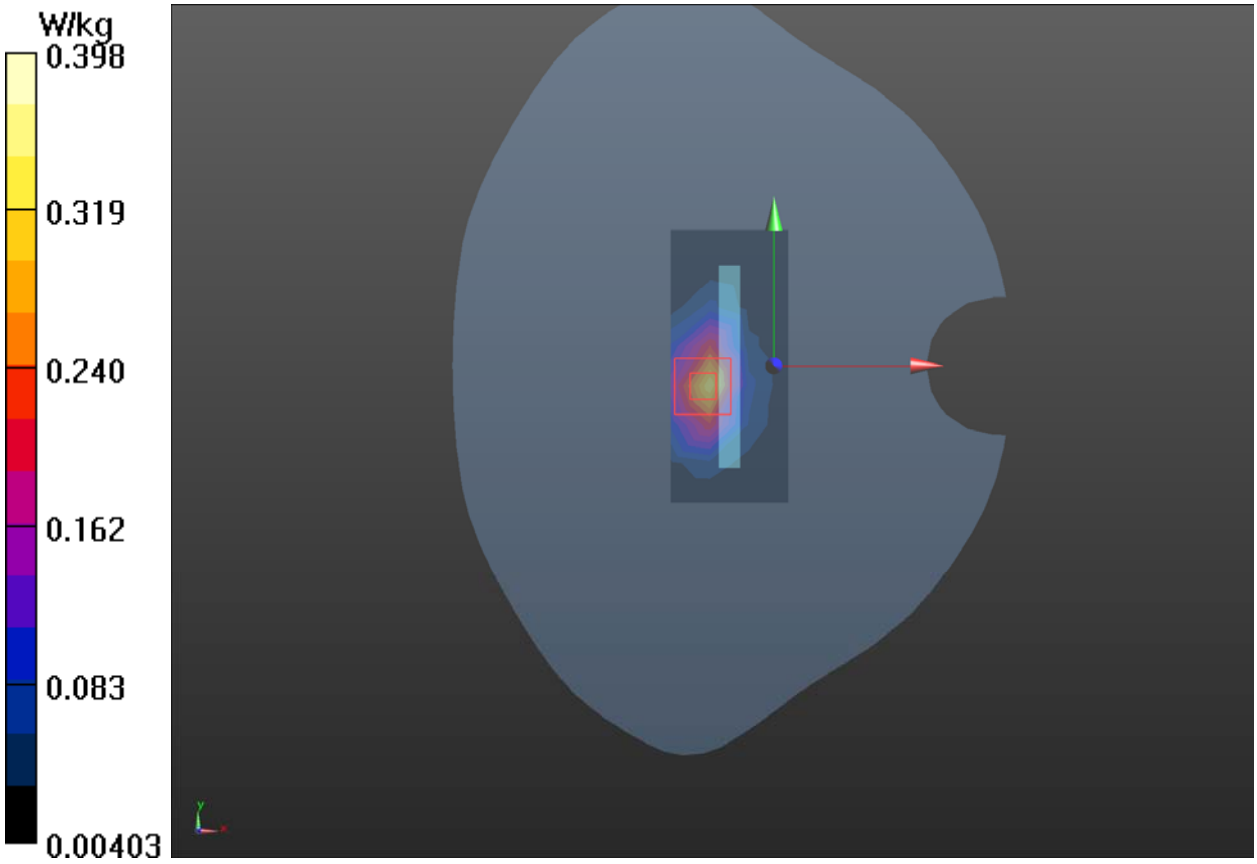
Plot 40 LTE Band 4 50%RB Bottom Edge Low (Main-Antenna, Distance 10mm)

Date: 1/11/2021
Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 39.467; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.396 W/kg

Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.23 V/m; Power Drift = -0.113 dB
Peak SAR (extrapolated) = 0.980 W/kg
SAR(1 g) = 0.377 W/kg; SAR(10 g) = 0.187 W/kg

Maximum value of SAR (measured) = 0.398 W/kg

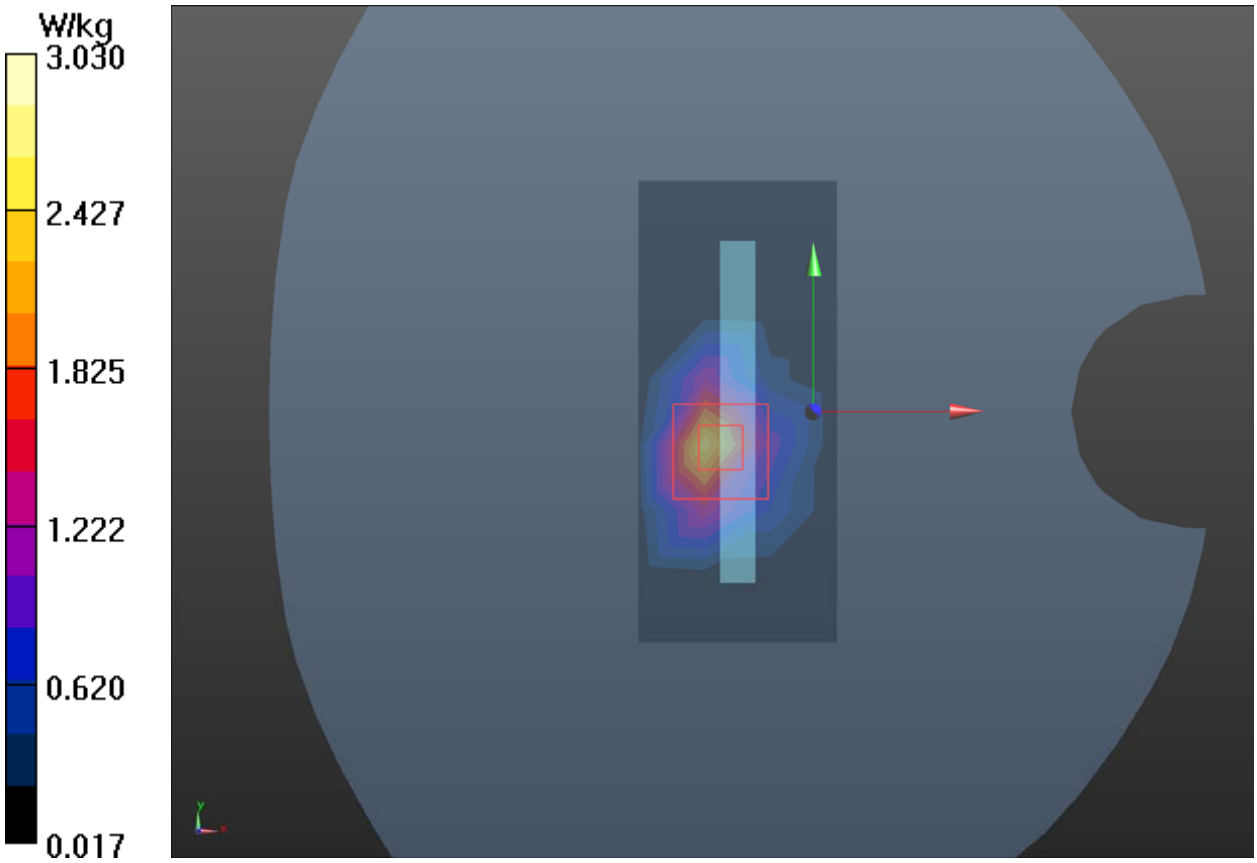


Plot 41 LTE Band 4 50%RB Bottom Edge Low (Main-Antenna, Distance 0mm)

Date: 1/11/2021
Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 39.467; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.59 W/kg

Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.86 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 5.33 W/kg
SAR(1 g) = 2.55 W/kg; SAR(10 g) = 1.15 W/kg
Maximum value of SAR (measured) = 3.03 W/kg



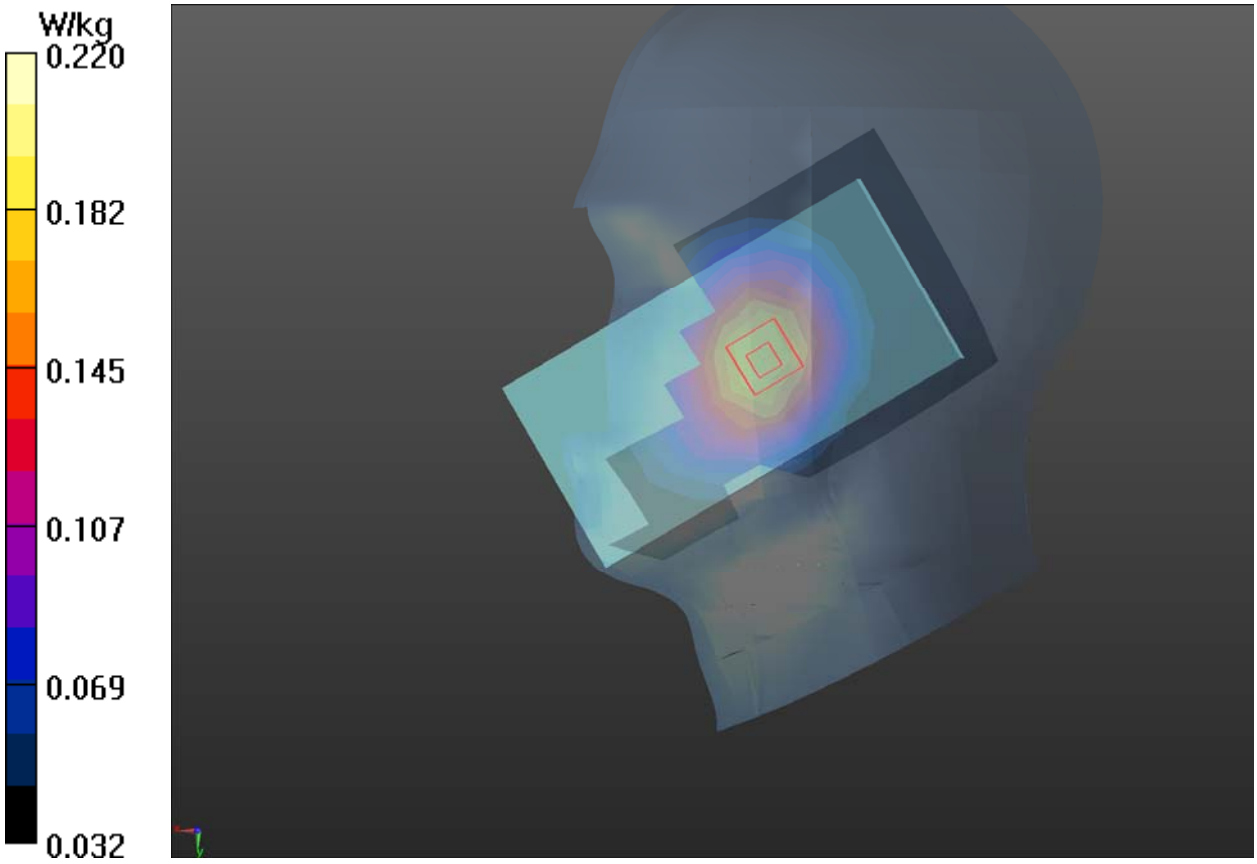
Plot 42 LTE Band 5 1RB Right Cheek Middle (Main-Antenna)

Date: 12/28/2020
Communication System: UID 0, LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.923 S/m; ε_r = 42.199; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.215 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.370 V/m; Power Drift = 0.116 dB
Peak SAR (extrapolated) = 0.409 W/kg
SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.144 W/kg

Maximum value of SAR (measured) = 0.220 W/kg



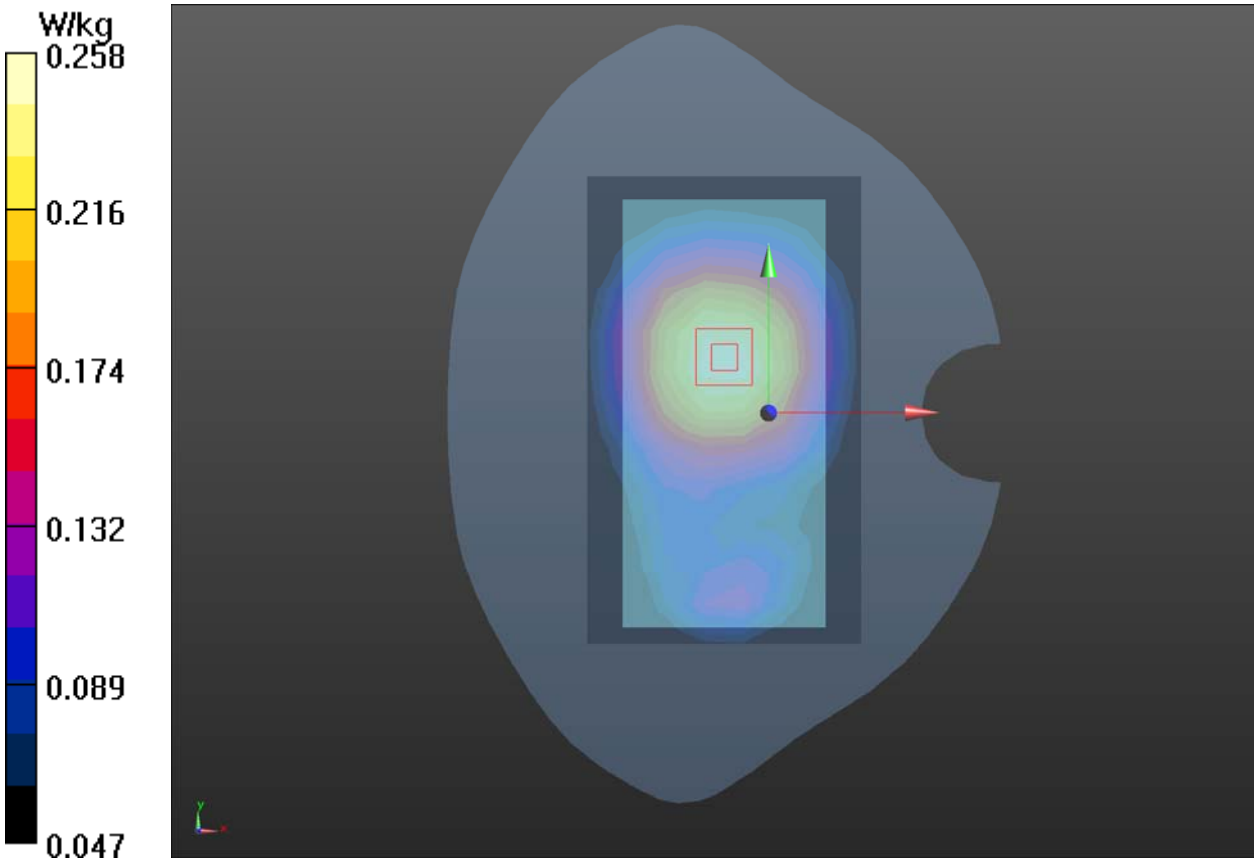
Plot 43 LTE Band 5 50%RB Back Side Middle (Main-Antenna, Distance 15mm)

Date: 12/28/2020
Communication System: UID 0, LTE (0); Frequency: 844 MHz;Duty Cycle: 1:1
Medium parameters used: f = 844 MHz; σ = 0.928 S/m; ε_r = 42.206; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.257 W/kg

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.43 V/m; Power Drift = 0.0100 dB
Peak SAR (extrapolated) = 0.300 W/kg
SAR(1 g) = 0.249 W/kg; SAR(10 g) = 0.176 W/kg

Maximum value of SAR (measured) = 0.258 W/kg



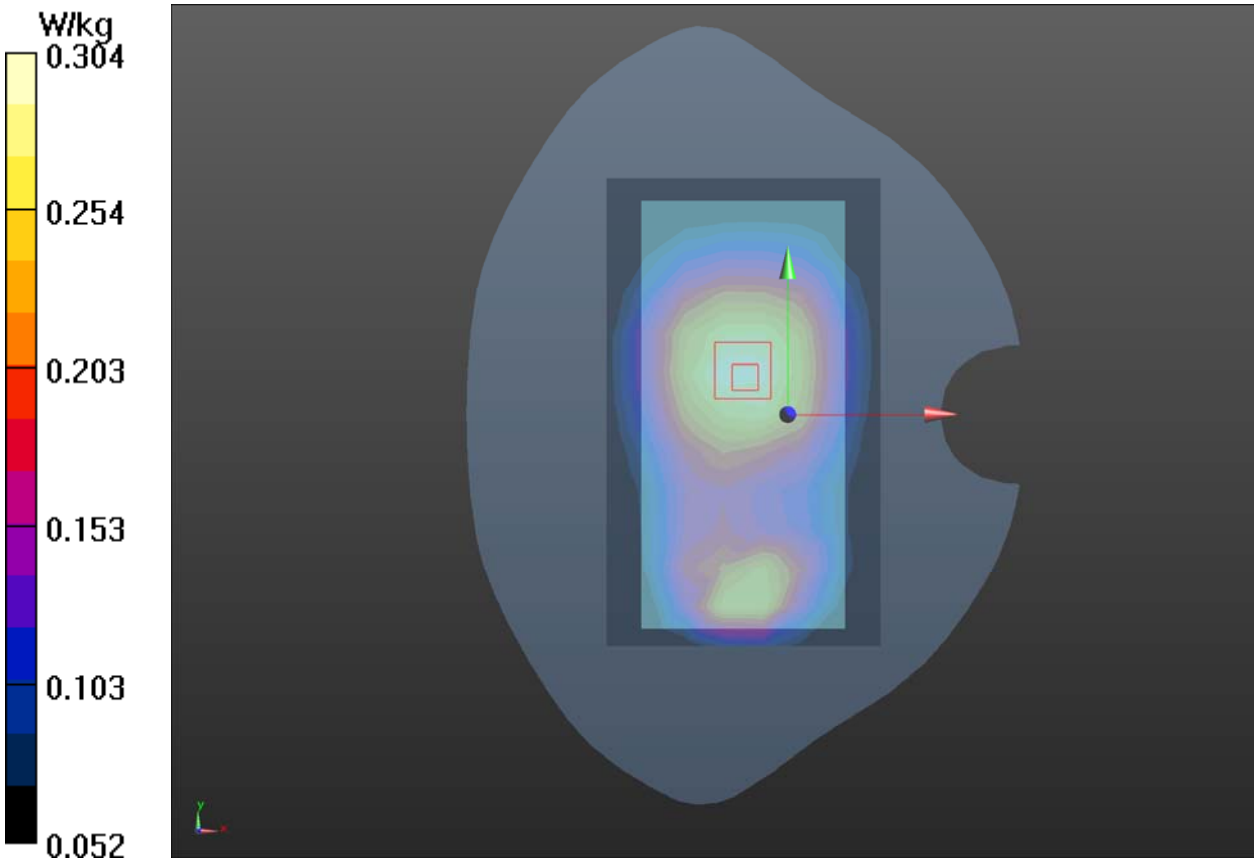
Plot 44 LTE Band 5 50%RB Back Side Middle (Main-Antenna, Distance 10mm)

Date: 12/28/2020
Communication System: UID 0, LTE (0); Frequency: 844 MHz;Duty Cycle: 1:1
Medium parameters used: f = 844 MHz; σ = 0.928 S/m; ε_r = 42.206; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.303 W/kg

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.80 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.659 W/kg
SAR(1 g) = 0.291 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.304 W/kg



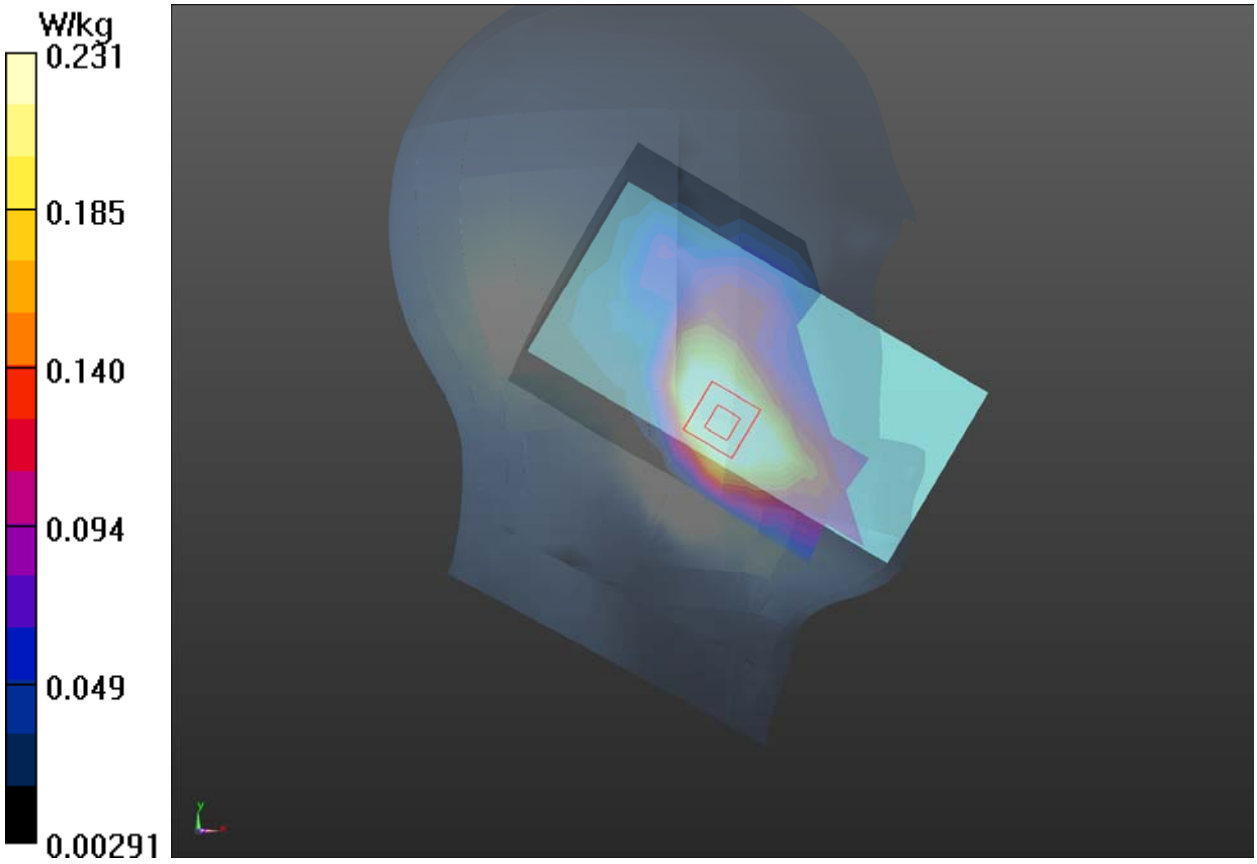
Plot 45 LTE Band 7 1RB Left Cheek Low (Main-Antenna)

Date: 12/24/2020
Communication System: UID 0, LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.876 S/m; ε_r = 38.352; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek Low/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.233 W/kg

Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = -0.166 dB
Peak SAR (extrapolated) = 0.475 W/kg
SAR(1 g) = 0.207 W/kg; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.231 W/kg



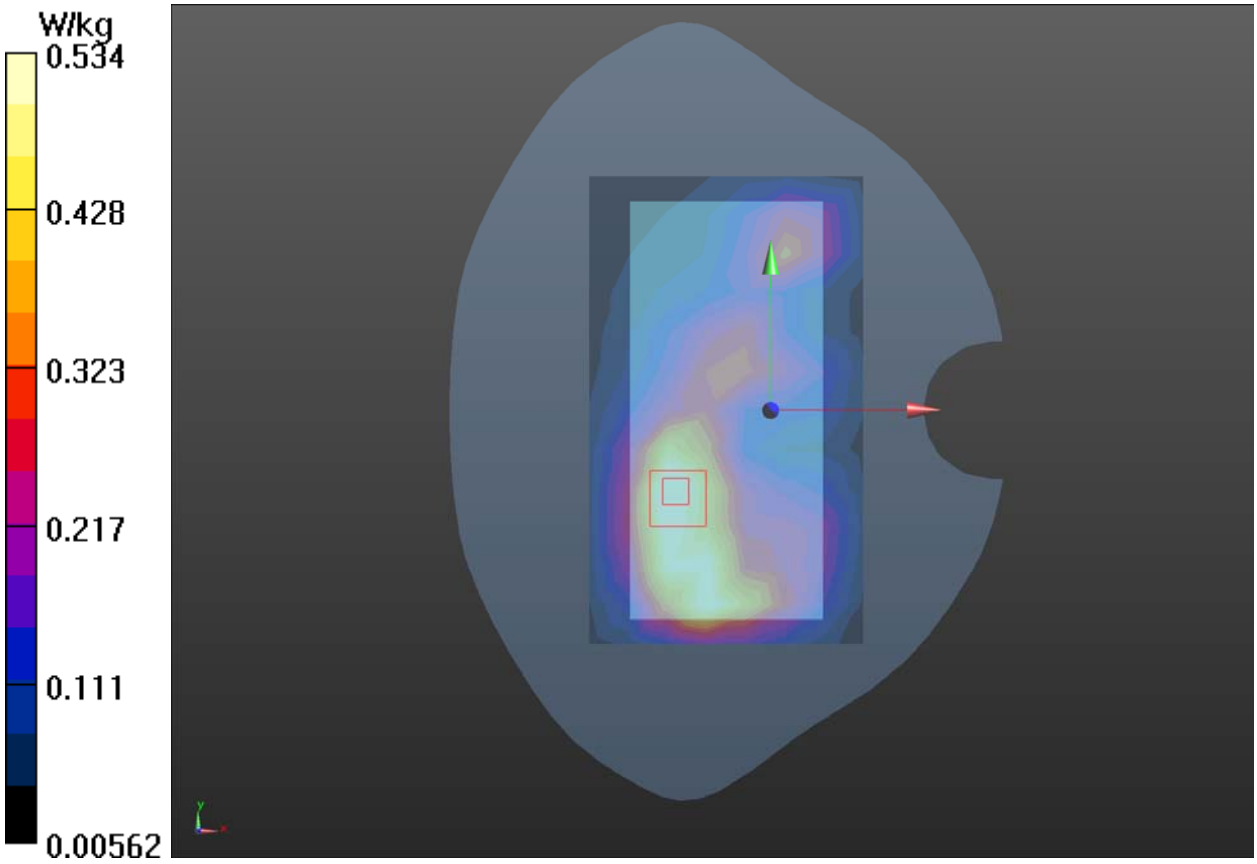
Plot 46 LTE Band 7 1RB Front Side Low (Main-Antenna, Distance 15mm)

Date: 12/24/2020
Communication System: UID 0, LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.876 S/m; ε_r = 38.352; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.530 W/kg

Front Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.33 V/m; Power Drift = 0.044 dB
Peak SAR (extrapolated) = 1.56 W/kg
SAR(1 g) = 0.503 W/kg; SAR(10 g) = 0.274 W/kg

Maximum value of SAR (measured) = 0.534 W/kg



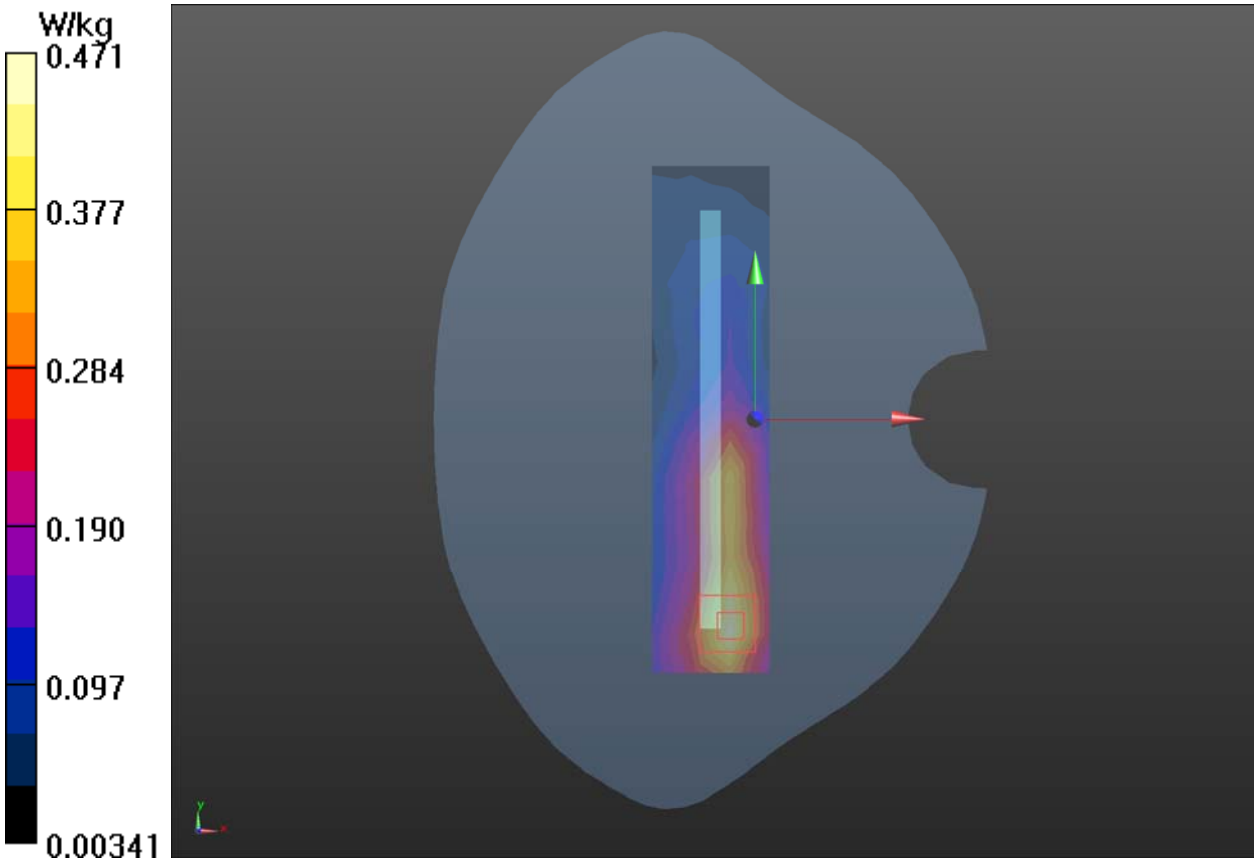
Plot 47 LTE Band 7 50%RB Left Edge Low (Main-Antenna, Distance 10mm)

Date: 12/24/2020
Communication System: UID 0, LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2510 MHz; σ = 1.876 S/m; ε_r = 38.352; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Low/Area Scan (5x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.350 W/kg

Left Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.116 V/m; Power Drift = 0.115 dB
Peak SAR (extrapolated) = 0.655 W/kg
SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.175 W/kg

Maximum value of SAR (measured) = 0.471 W/kg



Plot 48 LTE Band 7 50%RB Bottom Edge Low (Main-Antenna, Distance 0mm)

Date: 12/24/2020

Communication System: UID 0, LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2510 MHz; σ = 1.876 S/m; ε_r = 38.352; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 3.71 W/kg

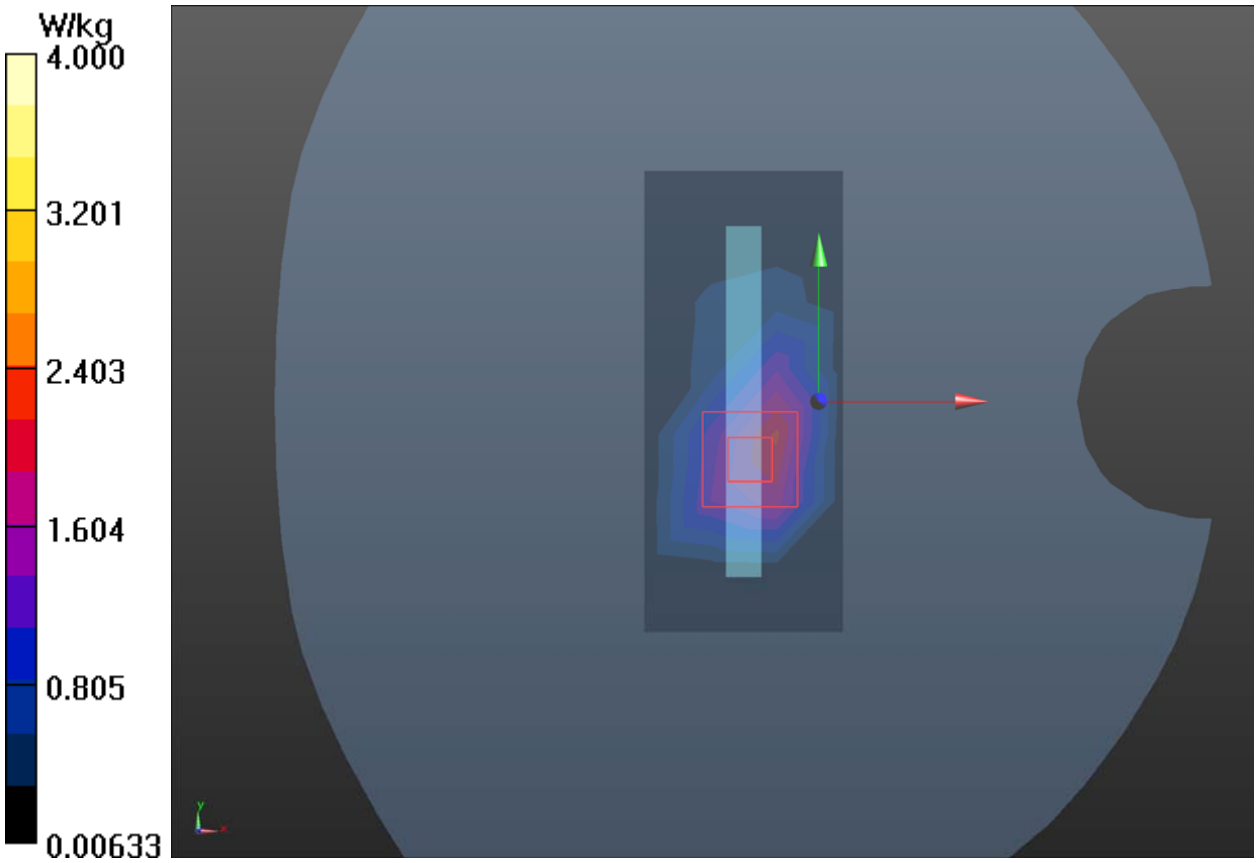
Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.53 V/m; Power Drift = -0.078 dB

Peak SAR (extrapolated) = 9.38 W/kg

SAR(1 g) = 3.4 W/kg; SAR(10 g) = 1.28 W/kg

Maximum value of SAR (measured) = 4.00 W/kg



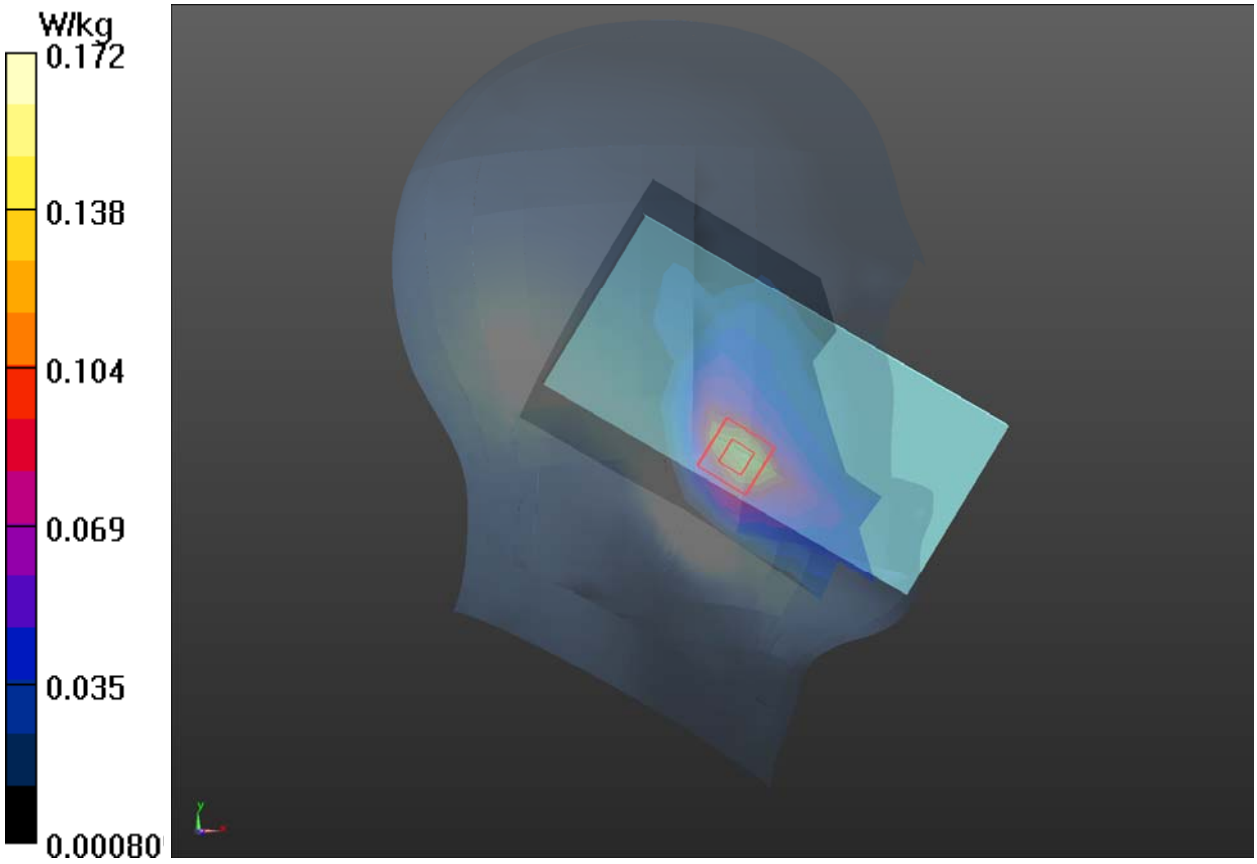
Plot 49 LTE Band 38 50%RB Left Cheek Low (Main-Antenna)

Date: 12/26/2020
Communication System: UID 0, LTE (0); Frequency: 2580 MHz;Duty Cycle: 1:1.58
Medium parameters used: f = 2580 MHz; σ = 1.954 S/m; ε_r = 38.099; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek Low/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.144 W/kg

Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.154 dB
Peak SAR (extrapolated) = 0.278 W/kg
SAR(1 g) = 0.156 W/kg; SAR(10 g) = 0.083 W/kg

Maximum value of SAR (measured) = 0.172 W/kg



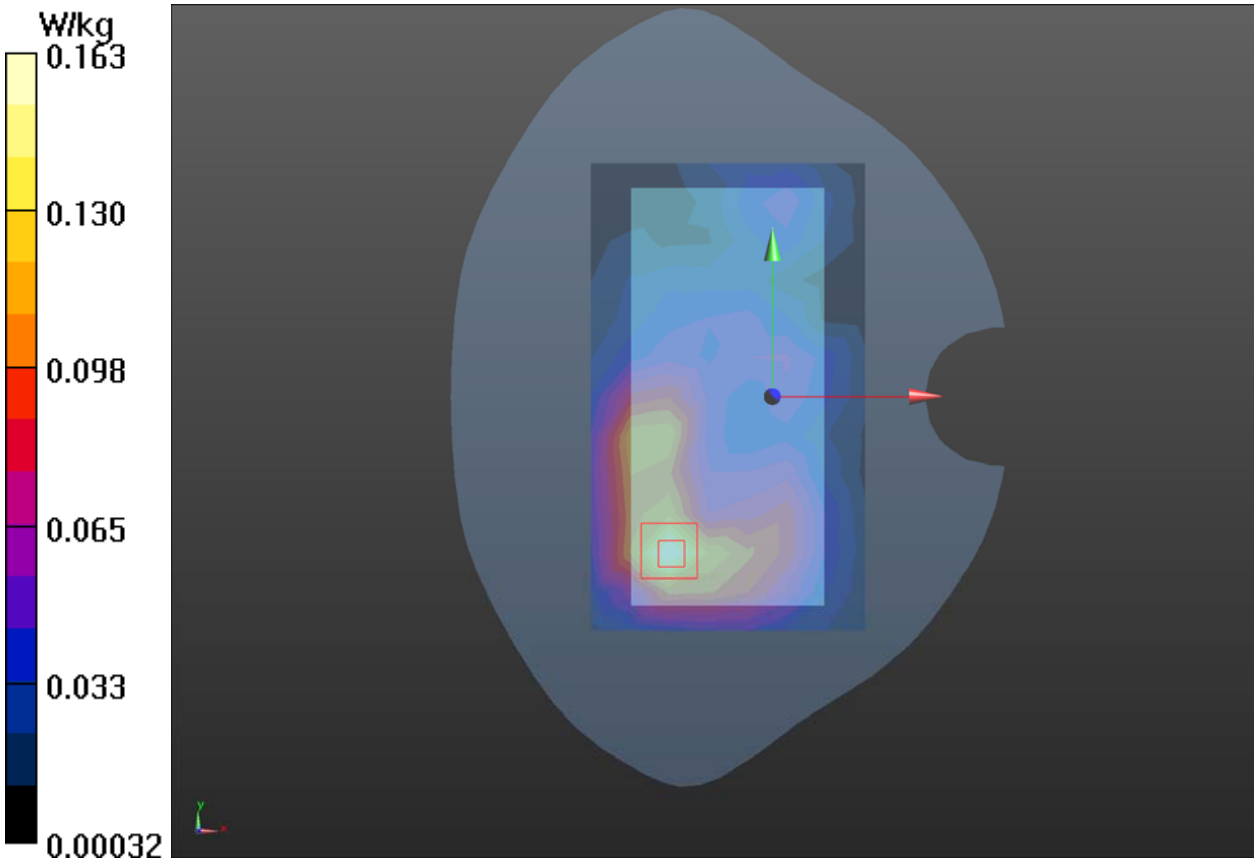
Plot 50 LTE Band 38 50%RB Front Side Low (Main-Antenna, Distance 15mm)

Date: 12/26/2020
Communication System: UID 0, LTE (0); Frequency: 2580 MHz;Duty Cycle: 1:1.58
Medium parameters used: f = 2580 MHz; σ = 1.954 S/m; ε_r = 38.099; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.151 W/kg

Front Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.483 V/m; Power Drift = 0.015 dB
Peak SAR (extrapolated) = 0.452 W/kg
SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.081 W/kg

Maximum value of SAR (measured) = 0.163 W/kg



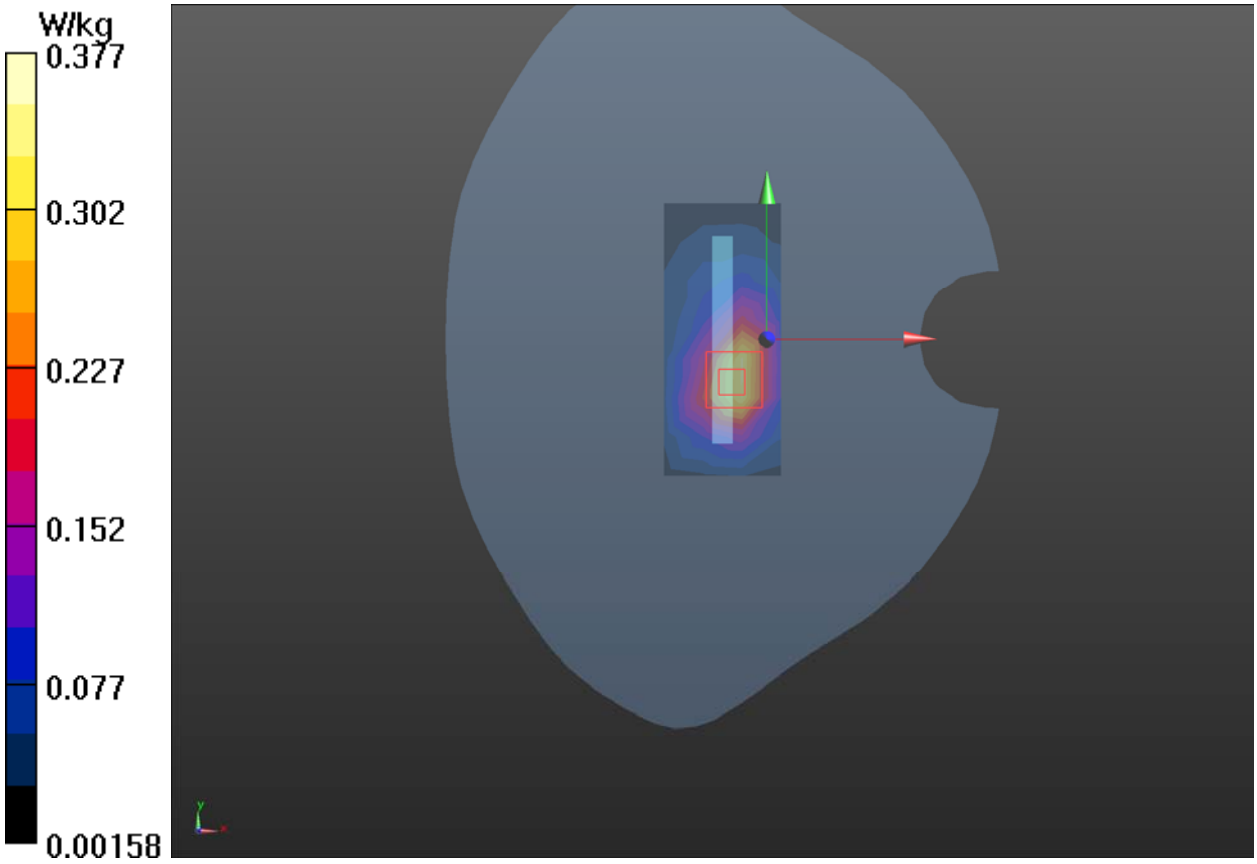
Plot 51 LTE Band 38 1RB Bottom Edge Low (Main-Antenna, Distance 10mm)

Date: 12/26/2020
Communication System: UID 0, LTE (0); Frequency: 2595 MHz;Duty Cycle: 1:1.58
Medium parameters used: f = 2595 MHz; σ = 1.973 S/m; ε_r = 38.008; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.372 W/kg

Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.98 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 0.970 W/kg
SAR(1 g) = 0.331 W/kg; SAR(10 g) = 0.160 W/kg

Maximum value of SAR (measured) = 0.377 W/kg



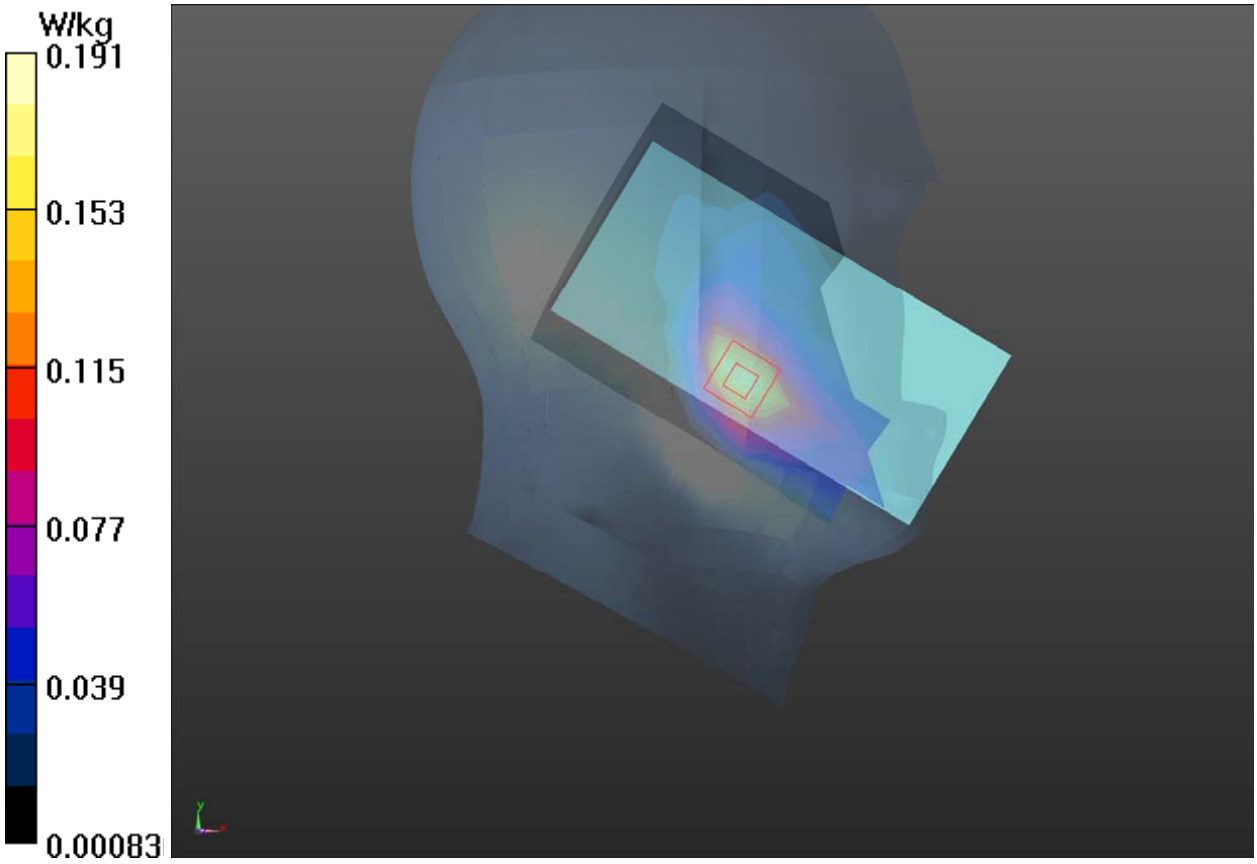
Plot 52 LTE Band 41 1RB Left Cheek High (Main-Antenna)

Date: 12/26/2020
Communication System: UID 0, LTE (0); Frequency: 2645 MHz;Duty Cycle: 1:1.58
Medium parameters used: f = 2645 MHz; σ = 2.028 S/m; ε_r = 37.868; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek High/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.188 W/kg

Left Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 0.7080 V/m; Power Drift = 0.065 dB
Peak SAR (extrapolated) = 0.364 W/kg
SAR(1 g) = 0.153 W/kg; SAR(10 g) = 0.079 W/kg

Maximum value of SAR (measured) = 0.191 W/kg



Plot 53 LTE Band 41 1RB Front Side High (Main-Antenna, Distance 15mm)

Date: 12/26/2020

Communication System: UID 0, LTE (0); Frequency: 2645 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2645 MHz; σ = 2.028 S/m; ε_r = 37.868; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side High/Area Scan (10x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.280 W/kg

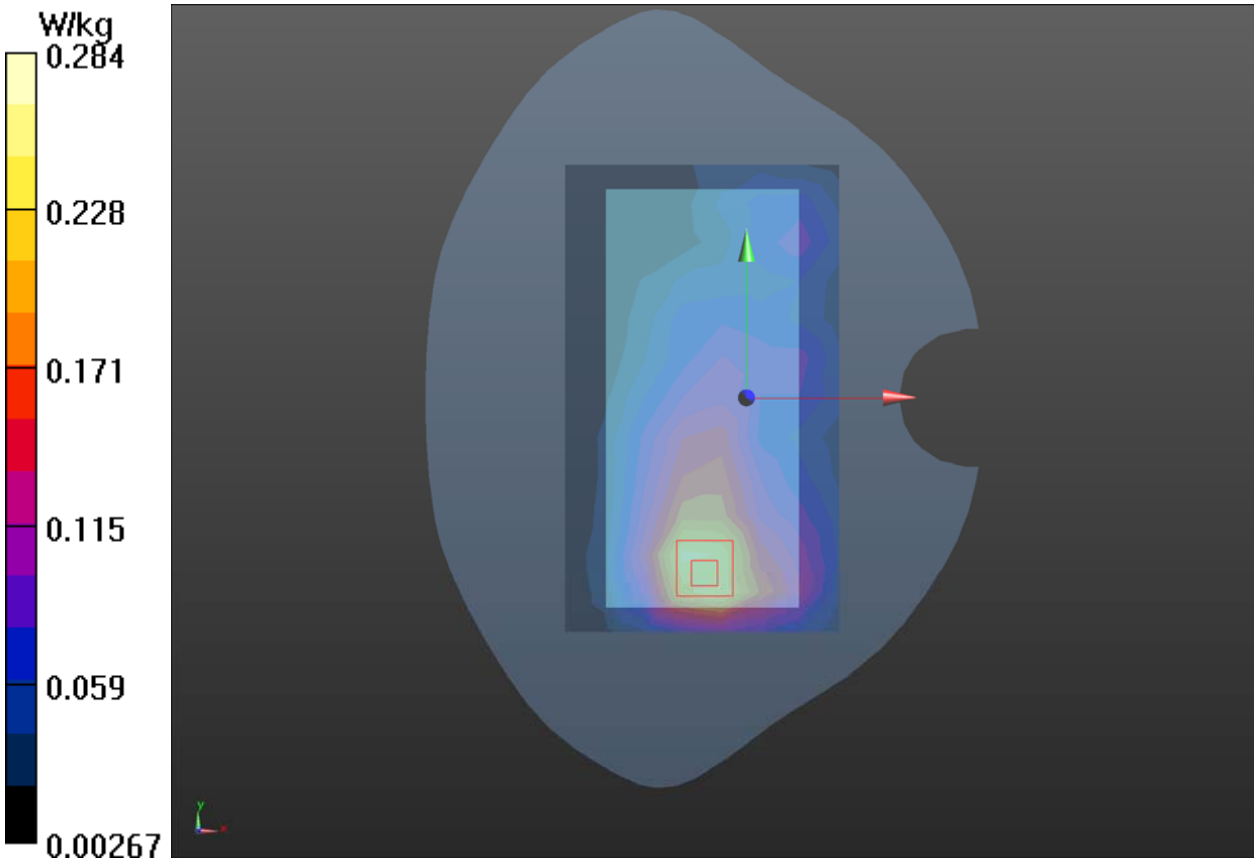
Front Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.349 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.263 W/kg; SAR(10 g) = 0.141 W/kg

Maximum value of SAR (measured) = 0.284 W/kg



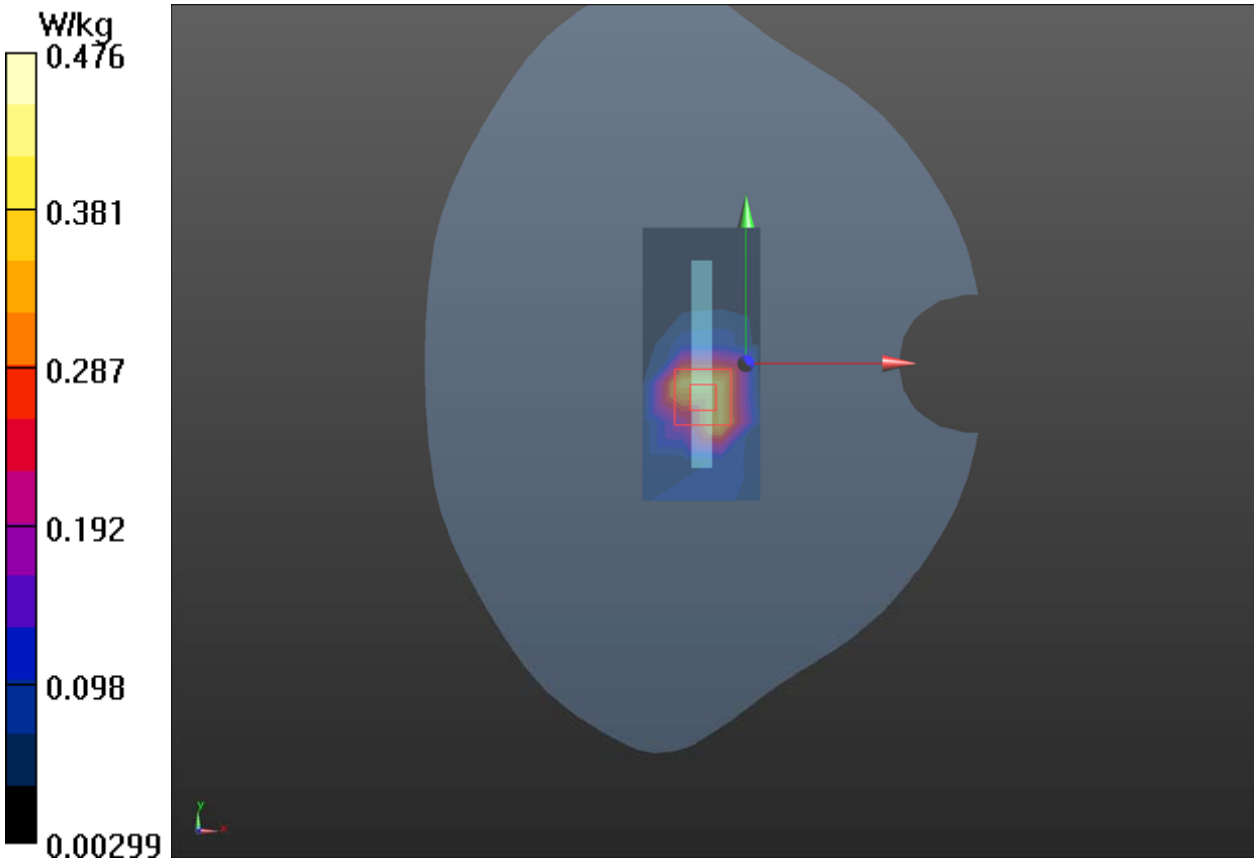
Plot 54 LTE Band 41 1RB Bottom Edge High (Main-Antenna, Distance 10mm)

Date: 1/7/2021
Communication System: UID 0, LTE (0); Frequency: 2645 MHz;Duty Cycle: 1:1.58
Medium parameters used: f = 2645 MHz; σ = 2.028 S/m; ε_r = 37.868; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.26, 7.26, 7.26); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.475 W/kg

Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.01 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.15 W/kg
SAR(1 g) = 0.426 W/kg; SAR(10 g) = 0.163 W/kg

Maximum value of SAR (measured) = 0.476 W/kg

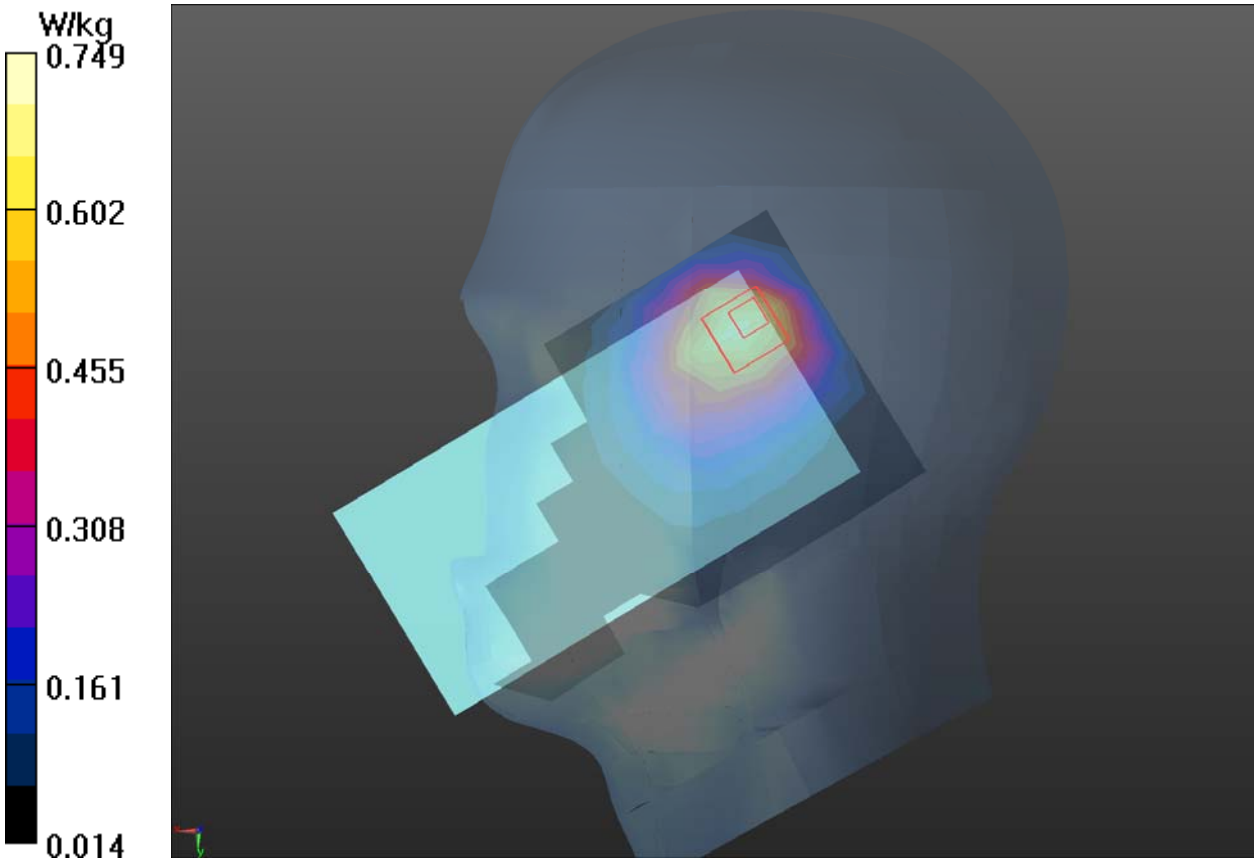


Plot 55 GSM 850 Right Cheek Middle (Second-Antenna)

Date: 12/29/2020
Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.714 W/kg

Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.41 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.709 W/kg; SAR(10 g) = 0.427 W/kg
Maximum value of SAR (measured) = 0.749 W/kg

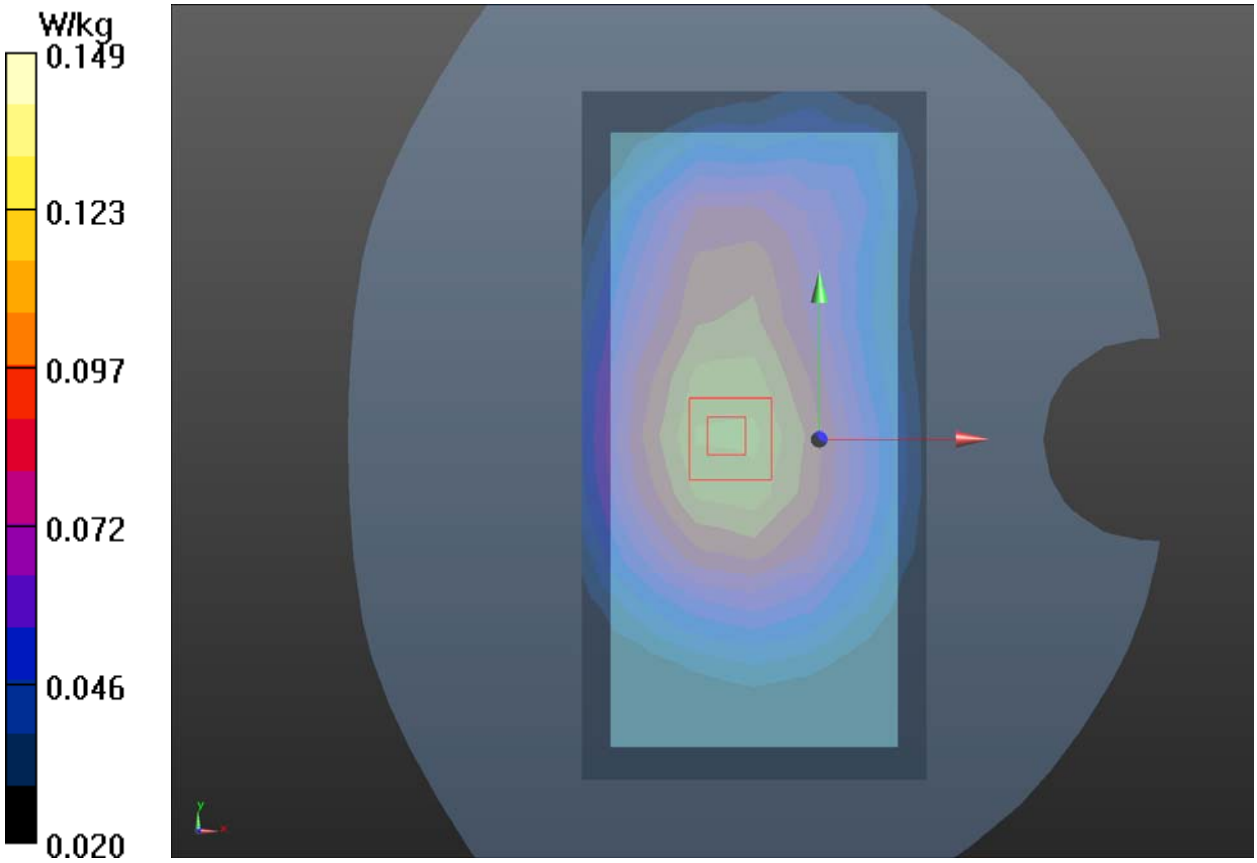


Plot 56 GSM 850 Back Side Middle (Second-Antenna, Distance 15mm)

Date: 12/29/2020
Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.147 W/kg

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.07 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.651 W/kg
SAR(1 g) = 0.137 W/kg; SAR(10 g) = 0.097 W/kg
Maximum value of SAR (measured) = 0.149 W/kg



Plot 57 GSM 850 GPRS (4Txslots) Back Side Middle (Second-Antenna, Distance 10mm)

Date: 12/29/2020

Communication System: UID 0, GPRS 4TX (0); Frequency: 836.6 MHz;Duty Cycle: 1:2.07

Medium parameters used: f = 836.6 MHz; σ = 0.923 S/m; ε_r = 42.201; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.38, 9.38, 9.38); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.180 W/kg

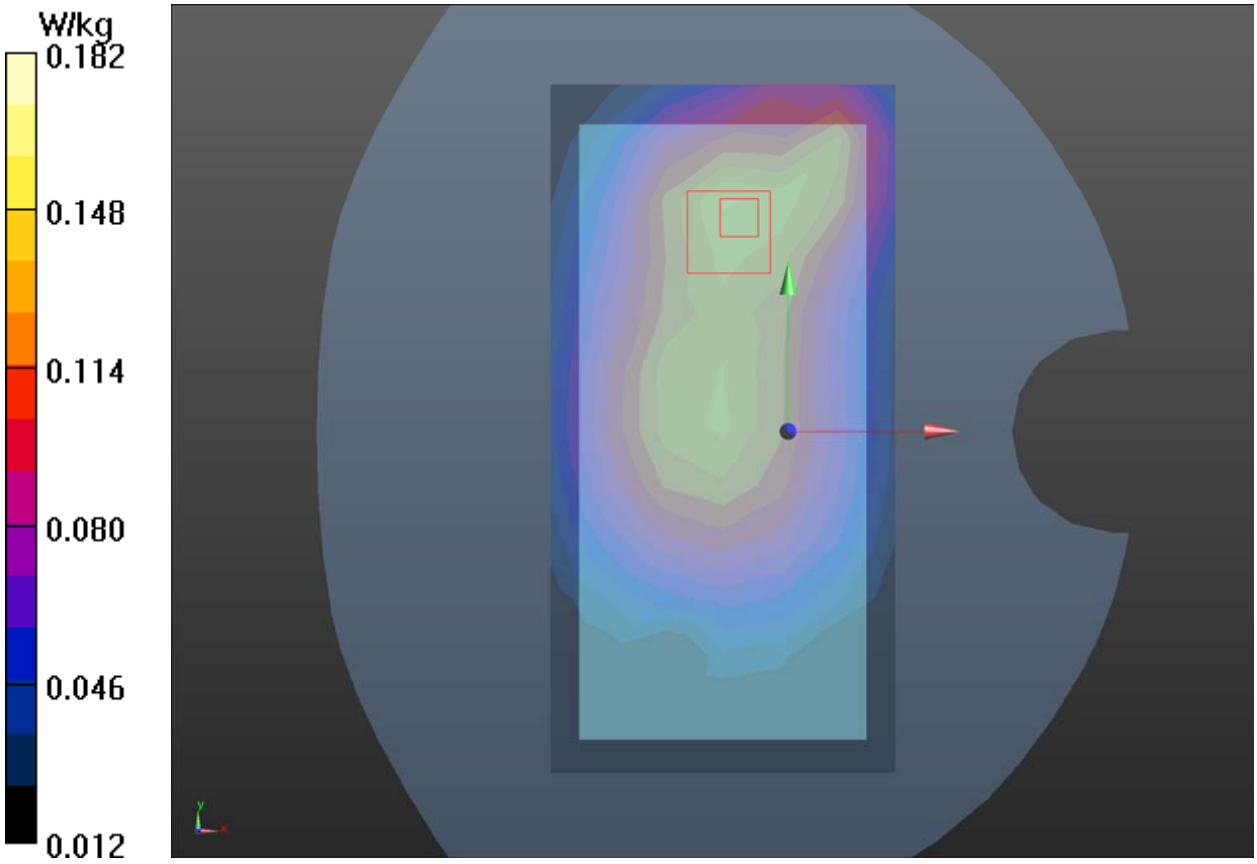
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.09 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 0.796 W/kg

SAR(1 g) = 0.176 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.182 W/kg

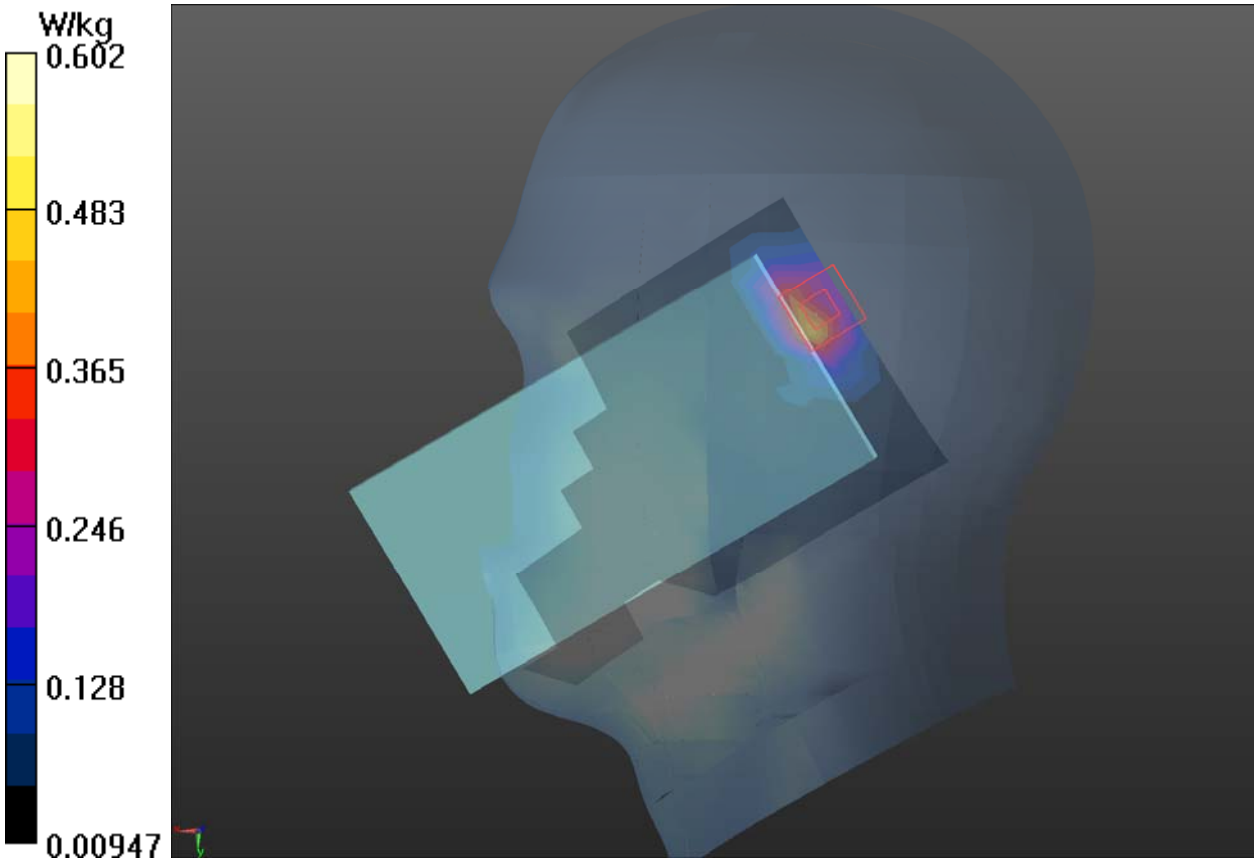


Plot 58 GSM 1900 Right Tilt Middle (Second-Antenna)

Date: 1/3/2021
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.501 W/kg

Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.489 V/m; Power Drift = 0.115 dB
Peak SAR (extrapolated) = 1.86 W/kg
SAR(1 g) = 0.478 W/kg; SAR(10 g) = 0.228 W/kg
Maximum value of SAR (measured) = 0.602 W/kg

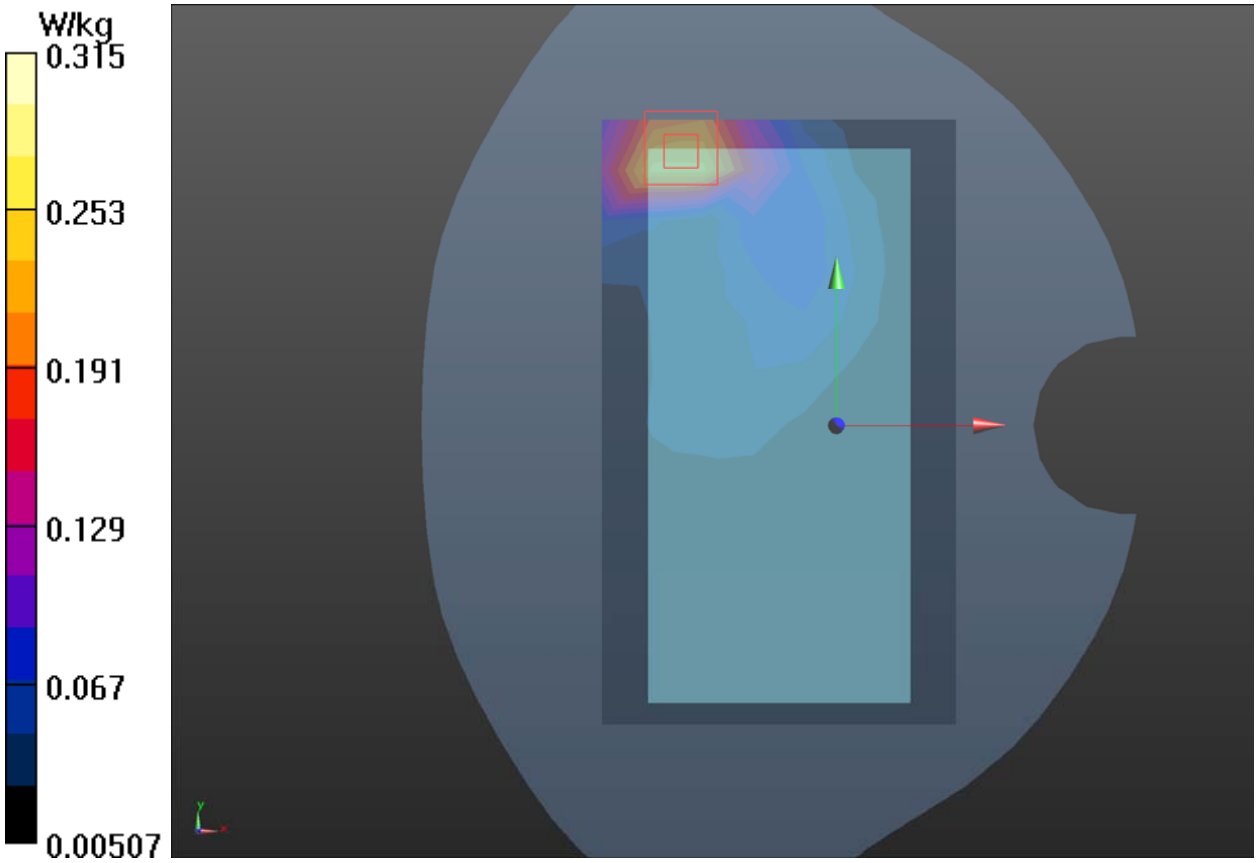


Plot 59 GSM 1900 Front Side Middle (Second-Antenna, Distance 15mm)

Date: 1/3/2021
Communication System: UID 0, GSM (0); Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.309 W/kg

Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.392 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.803 W/kg
SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.165 W/kg
Maximum value of SAR (measured) = 0.315 W/kg

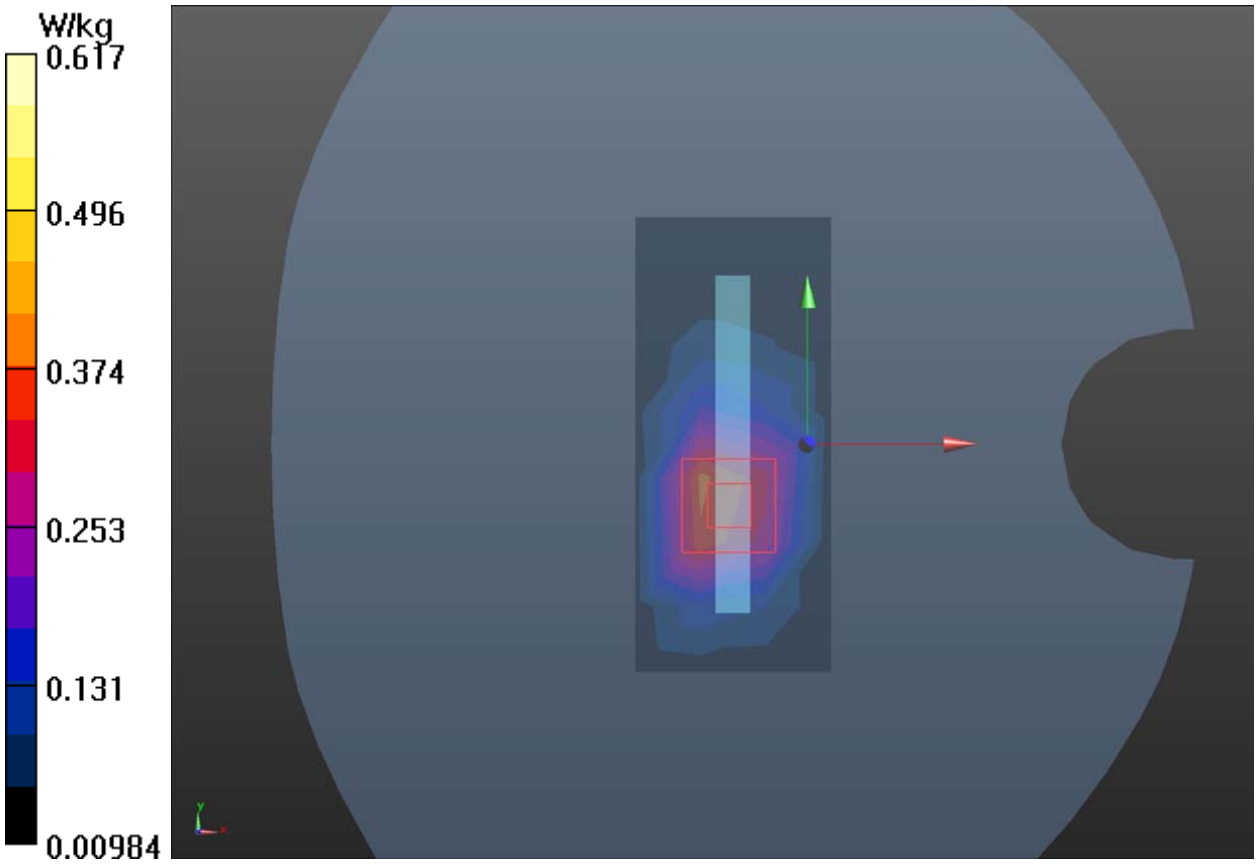


Plot 60 GSM 1900 GPRS (4Txslots) Top Edge Middle (Second-Antenna, Distance 10mm)

Date: 1/3/2021
Communication System: UID 0, GPRS 1TX (0); Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.519 W/kg

Top Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.92 V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 2.11 W/kg
SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.204 W/kg
Maximum value of SAR (measured) = 0.617 W/kg



Plot 61 UMTS Band II Right Tilt Middle (Second-Antenna)

Date: 1/3/2021

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.792 W/kg

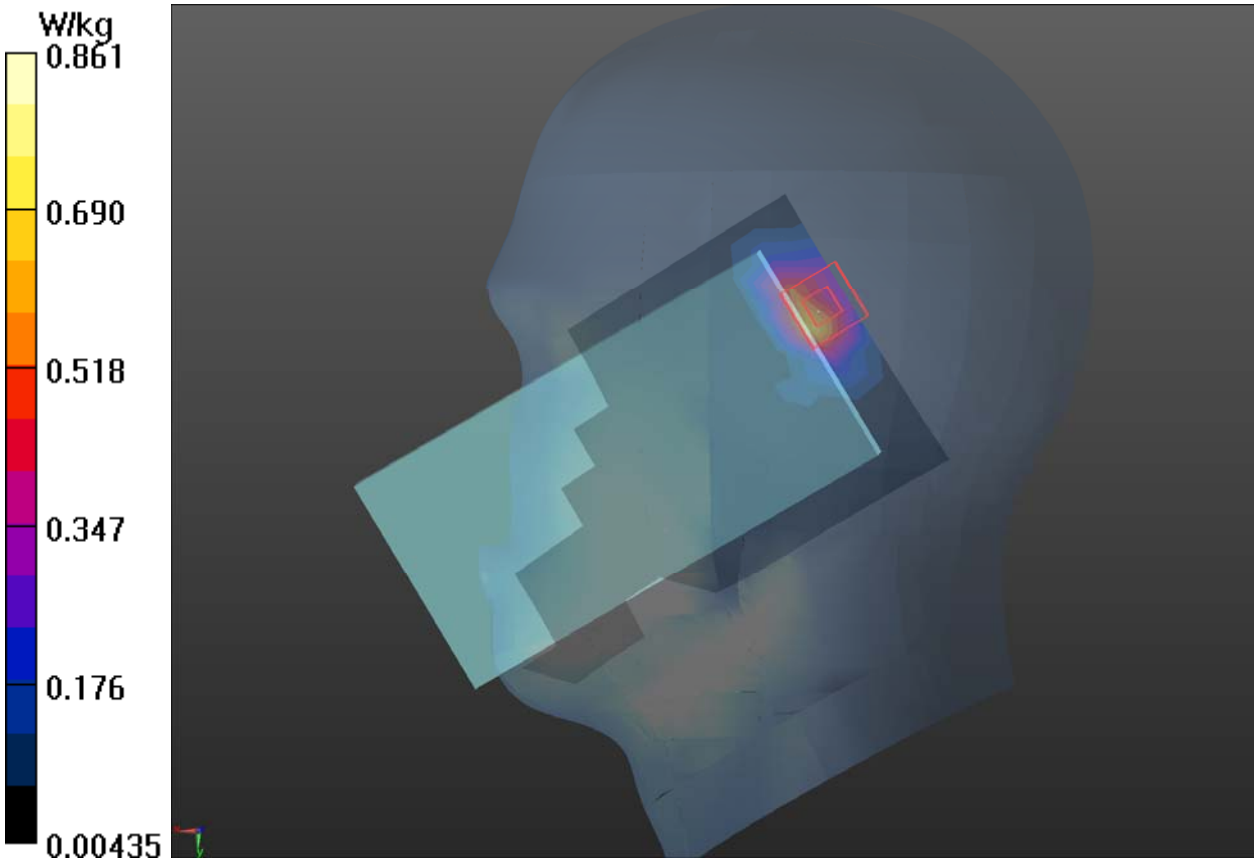
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.177 V/m; Power Drift = 0.114 dB

Peak SAR (extrapolated) = 2.28 W/kg

SAR(1 g) = 0.770 W/kg; SAR(10 g) = 0.374 W/kg

Maximum value of SAR (measured) = 0.861 W/kg



Plot 62 UMTS Band II Front Side Middle (Second-Antenna, Distance 15mm)

Date: 1/3/2021

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.602 W/kg

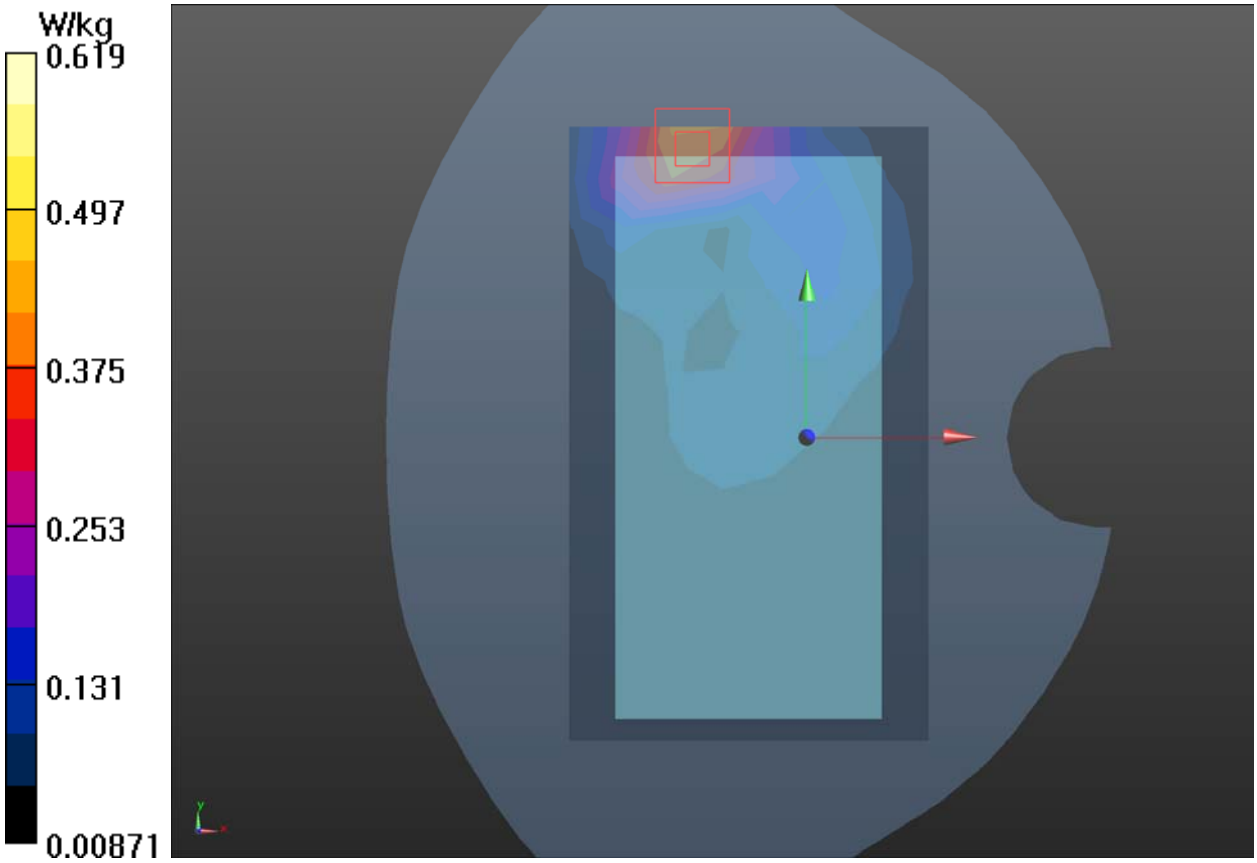
Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.893 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 1.854 W/kg

SAR(1 g) = 0.586 W/kg; SAR(10 g) = 0.306 W/kg

Maximum value of SAR (measured) = 0.619 W/kg



Plot 63 UMTS Band II Left Edge Middle (Second-Antenna, Distance 10mm)

Date: 1/3/2021

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;

Electronics: DAE4 SN1291; Calibrated: 2/24/2020

Phantom: SAM 2; Type: SAM

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Middle/Area Scan (4x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.205 W/kg

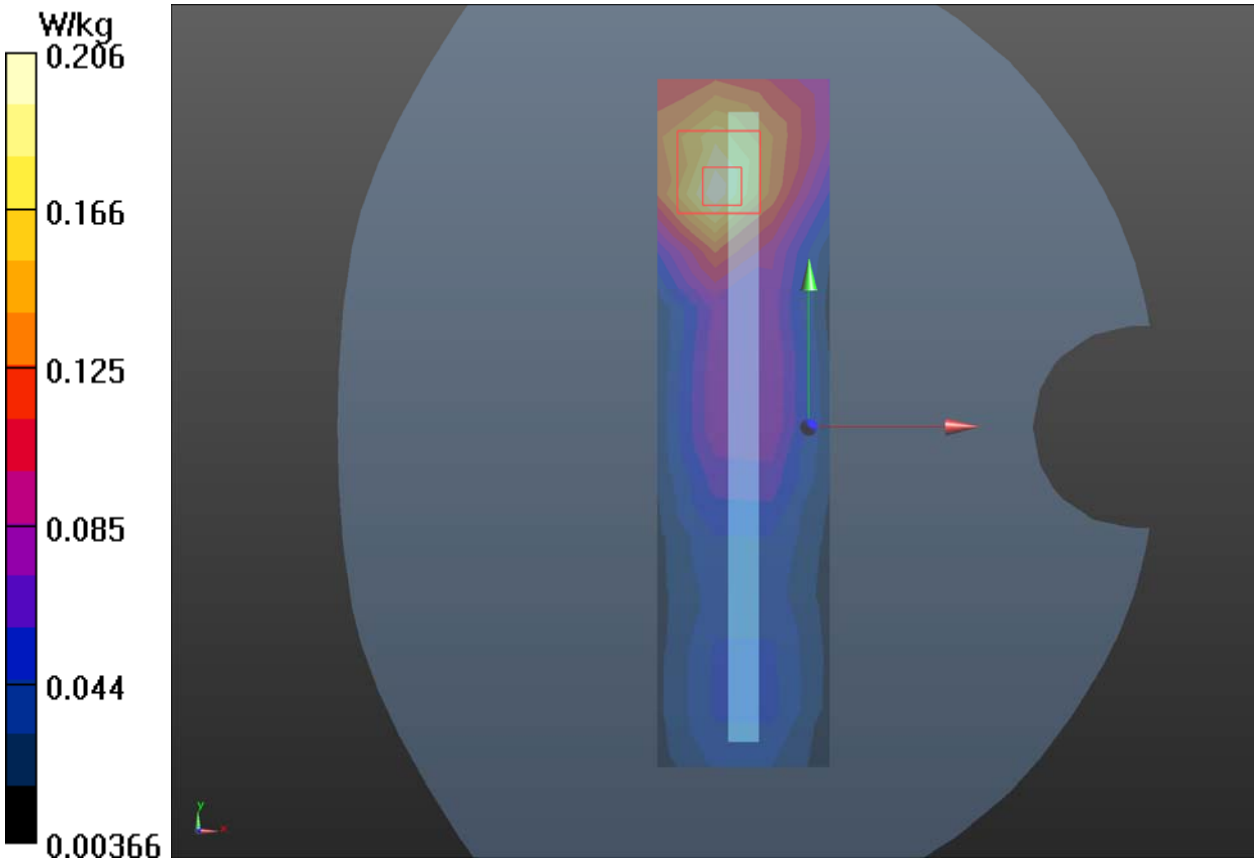
Left Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.410 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.194 W/kg; SAR(10 g) = 0.113 W/kg

Maximum value of SAR (measured) = 0.206 W/kg

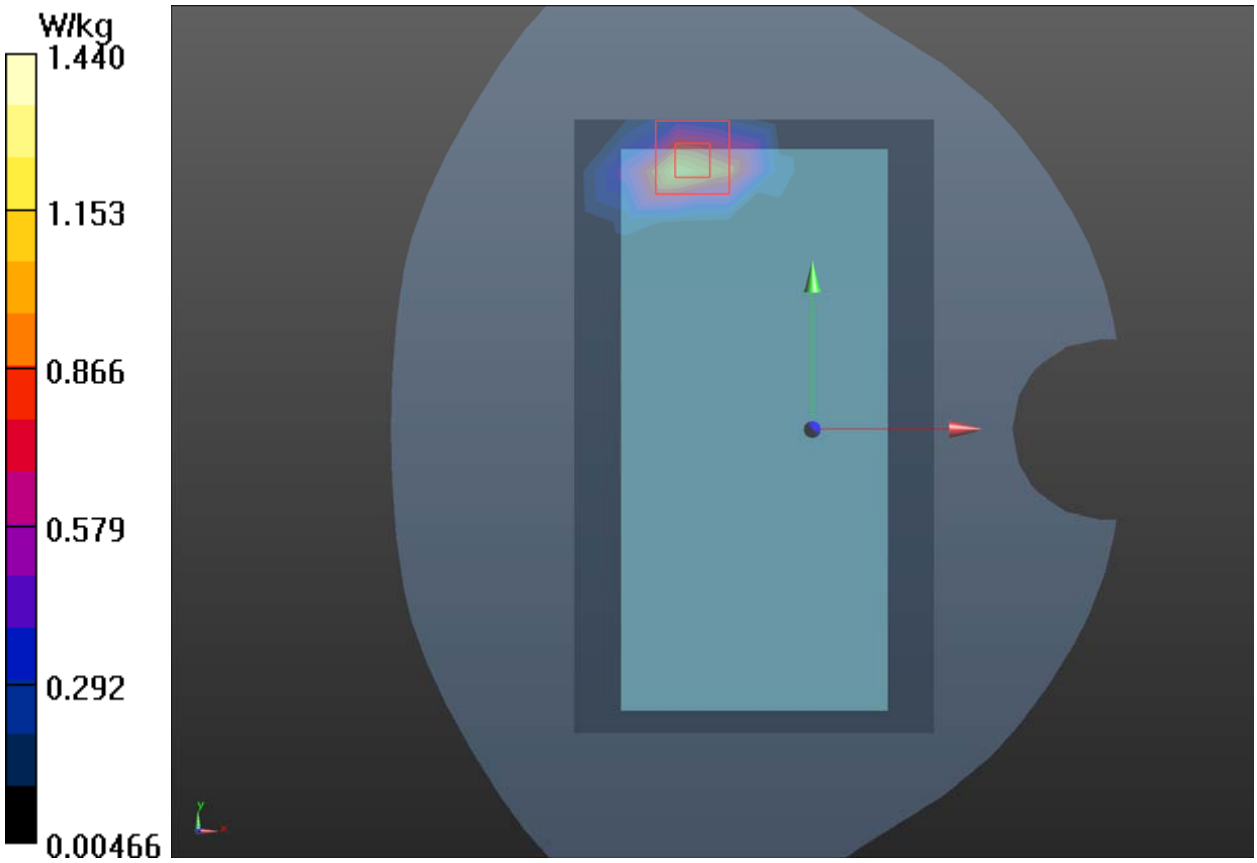


Plot 64 UMTS Band II Front Side Middle (Second-Antenna, Distance 0mm)

Date: 1/3/2021
Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.42 S/m; ε_r = 38.948; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.90, 7.90, 7.90); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 1.27 W/kg

Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0 V/m; Power Drift = 0.100 dB
Peak SAR (extrapolated) = 2.79 W/kg
SAR(1 g) = 1.150 W/kg; SAR(10 g) = 0.460 W/kg
Maximum value of SAR (measured) = 1.44 W/kg

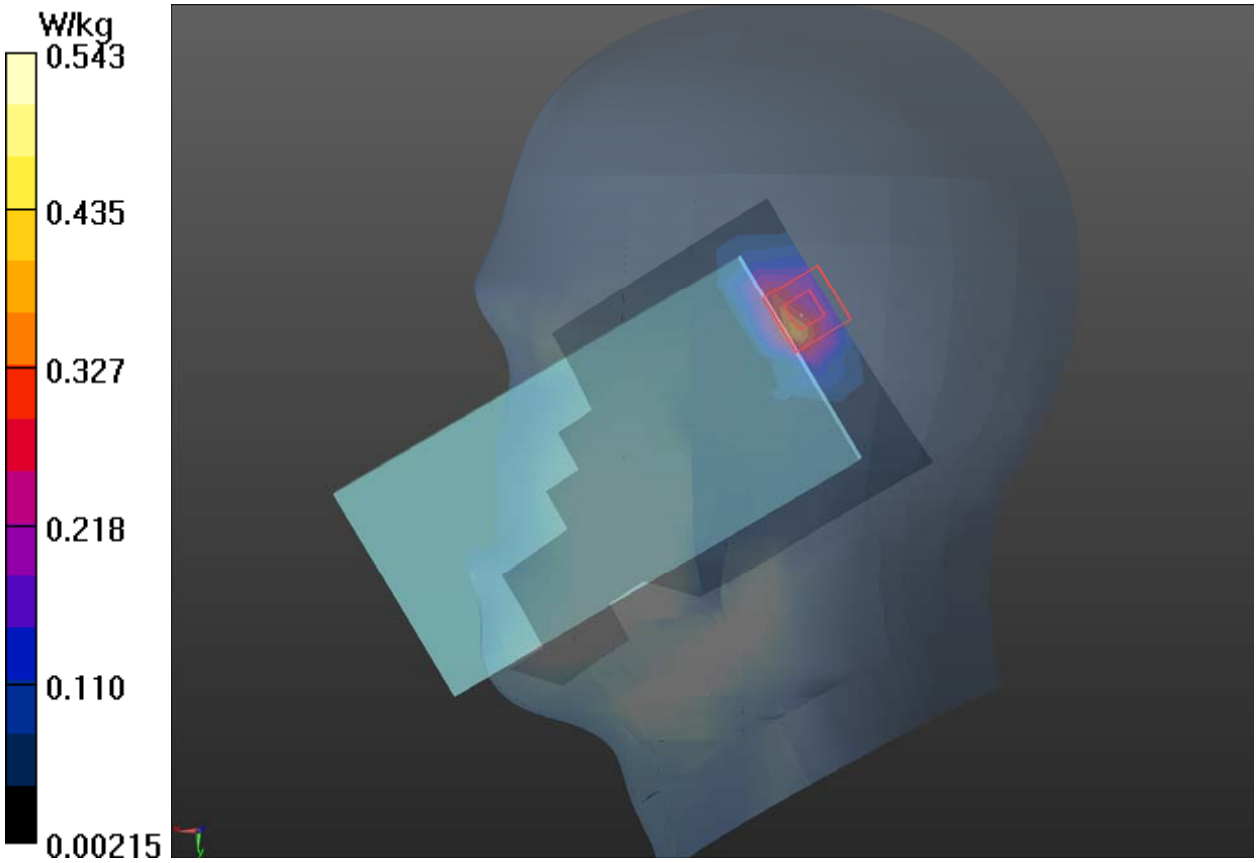


Plot 65 UMTS Band IV Right Tilt Middle (Second-Antenna)

Date: 1/10/2021
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Tilt Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.482 W/kg

Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.177 V/m; Power Drift = 0.103 dB
Peak SAR (extrapolated) = 1.987 W/kg
SAR(1 g) = 0.410 W/kg; SAR(10 g) = 0.199 W/kg
Maximum value of SAR (measured) = 0.543 W/kg

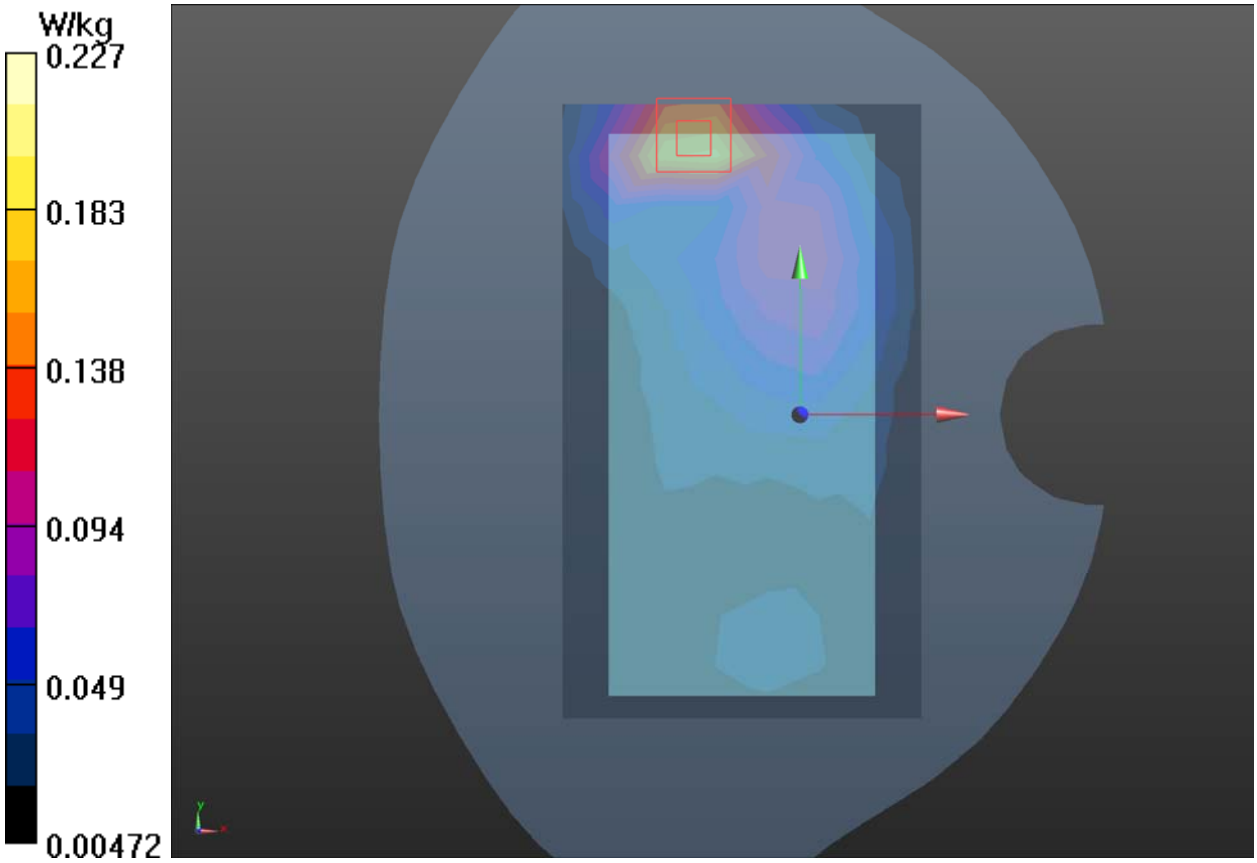


Plot 66 UMTS Band IV Front Side Middle (Second-Antenna, Distance 15mm)

Date: 1/10/2021
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (8x13x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.221 W/kg

Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.409 V/m; Power Drift = 0.126 dB
Peak SAR (extrapolated) = 0.639 W/kg
SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.116 W/kg
Maximum value of SAR (measured) = 0.227 W/kg



Plot 67 UMTS Band IV Top Edge Middle (Second-Antenna, Distance 10mm)

Date: 1/10/2021
Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.25, 8.25, 8.25); Calibrated: 7/6/2020;
Electronics: DAE4 SN1291; Calibrated: 2/24/2020
Phantom: SAM 2; Type: SAM
Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.131 W/kg

Top Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.821 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.340 W/kg
SAR(1 g) = 0.130 W/kg; SAR(10 g) = 0.063 W/kg
Maximum value of SAR (measured) = 0.149 W/kg