



SAR TEST REPORT

Applicant Xiaomi Communications Co., Ltd.
FCC ID 2AFZZJ20SG
Product Mobile Phone
Brand POCO
Model M2102J20SG
Report No. R2012A0844-S1V2
Issue Date January 25, 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.

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Version	Revision description	Issue Date
Rev.0	Initial issue of report.	January 19, 2021
Rev.1	Update data.	January 22, 2021
Rev.2	Update sensor operation description in page 25/26.	January 25, 2021
Note This revised report (Report No. R2012A0844-S1V2) supersedes and replaces the previously issued report (Report No. R2012A0844-S1V1). 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.
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1.4 Laboratory Environment

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

2 Statement of Compliance

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

Table 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	0.661	0.155	0.240	N/A
GSM 1900	0.788	0.472	0.490	N/A
WCDMA Band II	0.645	0.541	0.628	1.528
WCDMA Band IV	0.756	0.531	0.481	1.281
WCDMA Band V	0.362	0.135	0.219	N/A
LTE FDD 2	0.769	0.674	0.556	1.263
LTE FDD 4	0.807	0.593	0.388	1.035
LTE FDD 5	0.677	0.186	0.290	N/A
LTE FDD 7	0.581	0.497	0.779	1.272
LTE TDD 38	0.587	0.388	0.700	0.702
LTE TDD 41	0.717	0.335	0.688	0.598
Wi-Fi (2.4G)	0.878	0.130	0.350	N/A
Wi-Fi (5G)	0.995	0.230	0.564	1.009
BT	0.231	0.080	0.085	N/A
Date of Testing: December 20, 2020 ~ January 16, 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)	1.570	1.034	1.168	2.657
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	M2102J20SG
IMEI	IMEI 1: 864460050025361 IMEI 2: 864460050025379
Hardware Version	P1
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)	☐ Multi-slot Class:8-1UP ☐ Multi-slot Class:10-2UP ☐ Multi-slot Class:12-4UP	824 ~ 849
	1900	EGPRS(GMSK,8PSK)	☒ Multi-slot Class:33-4UP	1850 ~ 1910
	Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No			
UMTS	Band II	QPSK, 16QAM	HSDPA UE Category: 24 HSUPA UE Category: 6	1850 ~ 1910
	Band IV			1710 ~ 1755
	Band V			824 ~ 849
LTE	FDD 2	QPSK, 16QAM, 64QAM	Rel.15	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
		OFDM	802.11n HT40	2422 ~ 2452
	5G	OFDM	802.11a/n HT20/ HT40/ ac VHT20/ VHT40/ VHT80	5150 ~ 5350 5470 ~ 5850
			Does this device support MIMO ☒ Yes ☐ No	
NFC	13.56MHz			



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 $> 1.2 \text{ W/kg}$, 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 performed 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 ($\sim 10\%$ 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 (β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) 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 $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
Note 2: CM=1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$.
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 $\beta_c = 11/15$ and $\beta_d = 15/15$.

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	$\beta_{hs}^{(1)}$	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} , Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$.

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

Note 3: For subtest 1 the 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 $\beta_c = 10/15$ and $\beta_d = 15/15$.

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 $\beta_c = 14/15$ and $\beta_d = 15/15$.

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 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	11484	5.76
	4	4	10	SF4	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	QPSK, 16QAM, 64QAM		
Category 13	15	1	35280	259200			
Category 14	15	1	42192	259200			
Category 15	15	1	23370	345600	QPSK, 16QAM		
Category 16	15	1	27952	345600	QPSK, 16QAM		
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	QPSK, 16QAM, 64QAM		
Category 21	15	1	23370	345600	-	-	QPSK, 16QAM
Category 22	15	1	27952	345600			QPSK, 16QAM, 64QAM
Category 23	15	1	35280	518400			
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 $> \frac{1}{2}$ 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 $> \frac{1}{2}$ 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.

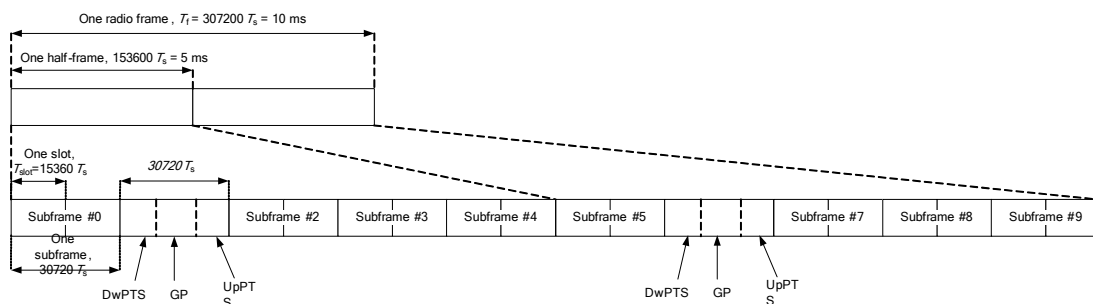


Figure 1: Frame structure type 2

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	$26336 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$			$20480 \cdot T_s$		
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:

$$\text{Duty cycle} = (30720\text{Ts} \cdot \text{Ups} + \text{Uplink Component} \cdot \text{Specials}) / (307200\text{Ts})$$

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

$$\text{Uplink Component} = \text{UpPTS}$$

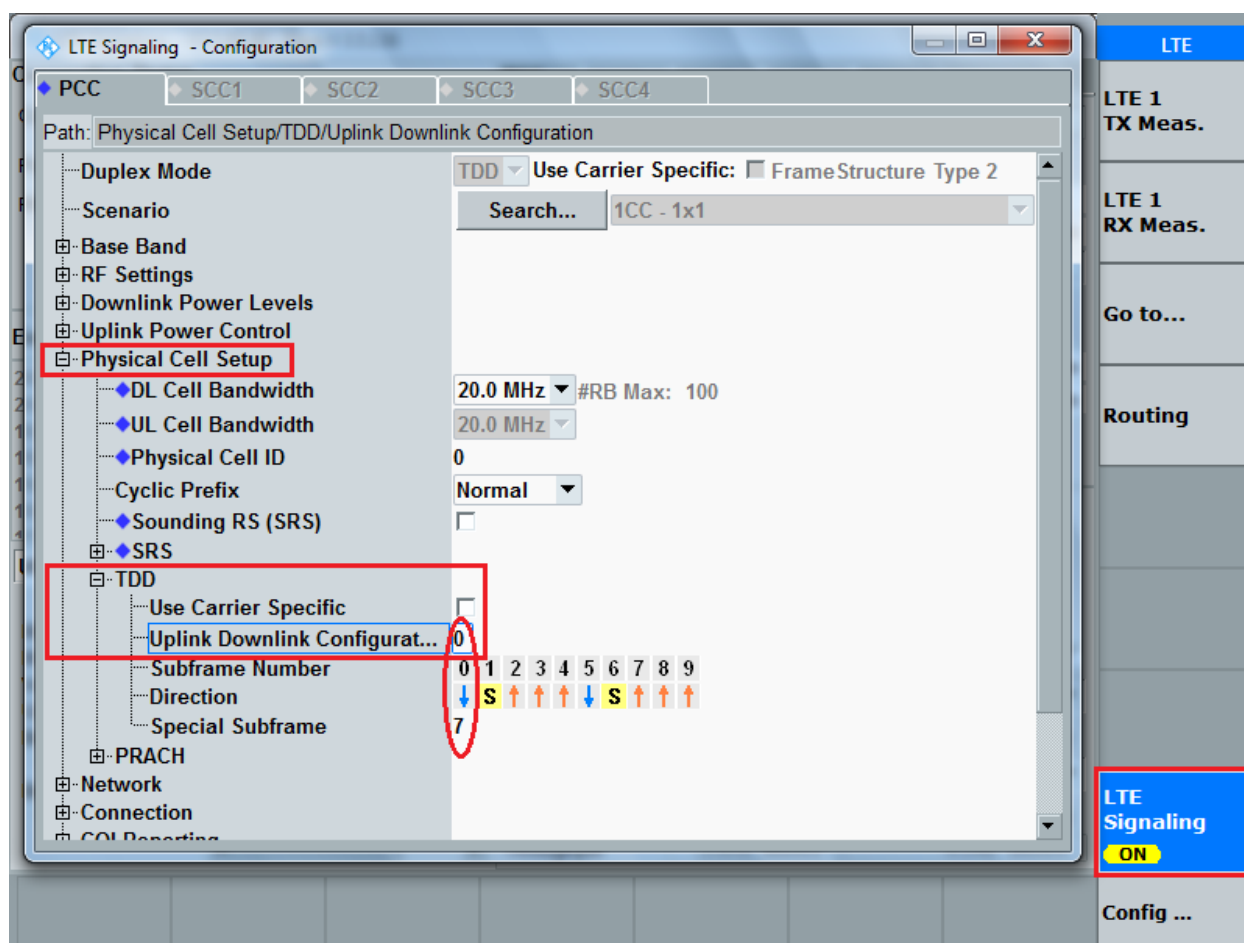
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

$$\text{Duty cycle} = [(30720\text{Ts} \cdot \text{Ups}) + \text{UpPTS} \cdot \text{Specials}] / (307200\text{Ts})$$

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.

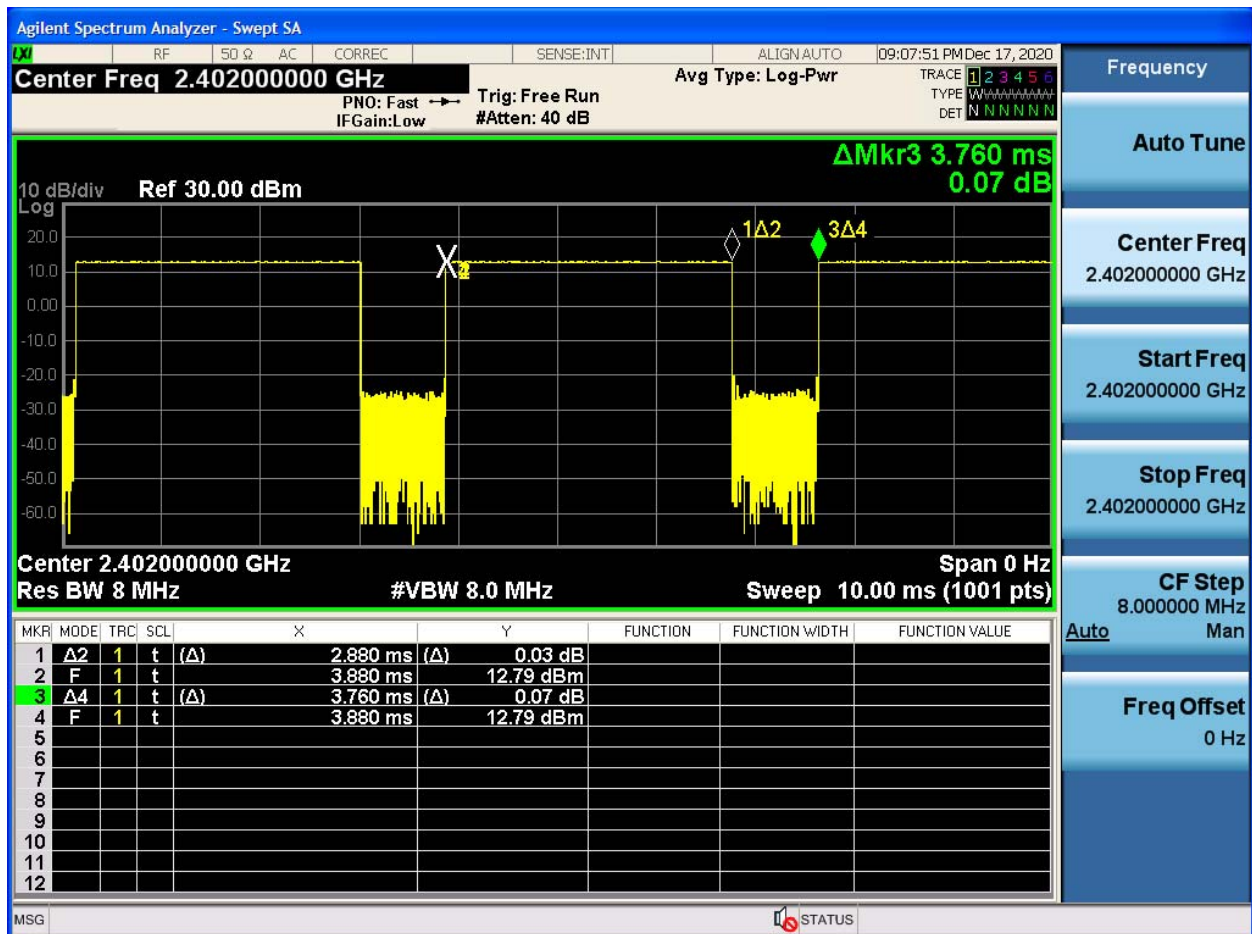
A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.



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 hopping 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.

- Audio receiver detection
- Capacitive proximity sensor
- Hotspot Mode detection

Sensor Bottom Distance definition

Sensor pad 1

Position	SAR sensor trigger	Trigger distance
Back	Y	16mm
front	Y	10mm
bottom	Y	16mm
top	/	/
right	/	/
left	/	/

Sensor pad 2

Position	SAR sensor trigger	Trigger distance
Back	Y	16mm
front	Y	10mm
bottom	/	/
top	Y	16mm
right	/	/
left	/	/

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

position	Audio Receiver	SAR sensor BOT	SAR sensor TOP	WIFI Hotspot & BT Hotspot	TX Power reduce
Body	Off	Near	Far	Off	DSI 2
	Off	/	Near	Off	DSI 3
	Off	Far	Far	Off	DSI 4
Head	On	/	/	Off	DSI 1
	/	/	/	On	DSI 5

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 required for additional SAR test at maximum power level with sensor off.

Receiver detection mechanism clarifications

The device supports the Audio receiver detection mechanism. The audio receiver is used to determine head. When operating in a call at the head, the relevant power levels are set for 2G&3G&4G accordingly, in order to comply 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			34.0	31.0	25.0	25.0	25.0	25.5	25.5	25.5	25.5	25.5	25.5
Receiver on (head)		D1(DSI1)	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 off		D2(DSI4)	0.0	0.0	2.0	1.0	0.0	2.5	1.5	0.0	1.5	1.0	1.0
Receiver off + Sensor on		D3(DSI2)	0.0	3.0	7.0	6.5	0.0	7.5	7.0	0.0	5.5	4.5	4.5
Hotspot on		D4(DSI5)	0.0	3.0	7.0	6.5	0.0	7.5	7.0	0.0	5.5	4.5	4.5

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			34.0	31.0	25.0	25.0	25.0	25.5	25.5	25.5	25.5	25.5	25.5
Receiver on (head)		D1(DSI1)	1.5	3.0	7.0	8.0	2.0	6.5	8.5	2.5	8.5	5.5	4.5
Receiver off + Sensor off		D2(DSI4)	0.0	0.0	2.0	2.0	0.0	2.5	2.5	0.0	0.0	0.0	0.0
Receiver off + Sensor on		D3(DSI3)	0.0	4.0	6.0	6.0	0.0	5.5	6.5	0.0	6.5	5.5	5.5
Hotspot on		D4(DSI5)	1.5	4.0	7.0	8.0	2.0	6.5	8.5	2.5	8.5	5.5	5.5

WIFI antenna 1							
Power Reduction Scenario			WiFi 2.4G 11b	WiFi 5G U-NII-1	WiFi 5G U-NII-2A	WiFi 5G U-NII-2C	WiFi 5G U-NII-3
Full Power			20	18.5	18.5	18.5	18.5
Receiver on (head)		D1	0	0	0	0	2
Receiver on (head) with WWAN with WLAN 5G ant1		D4	4	0	0	0	0
Receiver off (Body-Worn/Hotspot)		D2	0	0	0	0	0
Receiver on (head) with WWAN		D3	0	1	1	1	1

WIFI antenna 2							
Power Reduction Scenario			WiFi 2.4G 11b	WiFi 5G U-NII-1	WiFi 5G U-NII-2A	WiFi 5G U-NII-2C	WiFi 5G U-NII-3
Full Power			20	18.5	18.5	18.5	18.5
Receiver on (head)		D1	0	0	0	0	2
Receiver off (Body-Worn/Hotspot)		D2	0	0	0	0	0

WIFI MIMO							
Power Reduction Scenario			WiFi 2.4G 11b	WiFi 5G U-NII-1	WiFi 5G U-NII-2A	WiFi 5G U-NII-2C	WiFi 5G U-NII-3
Full Power			23	21.5	21.5	21.5	21.5
Receiver on (head)		D1	0	0	0	0	2
Receiver off (Body-Worn/Hotspot)		D2	0	0	0	0	0
Receiver on (head) with WWAN		D3	0	1	1	1	3



The proximity sensor triggering distance measurement method are as below:

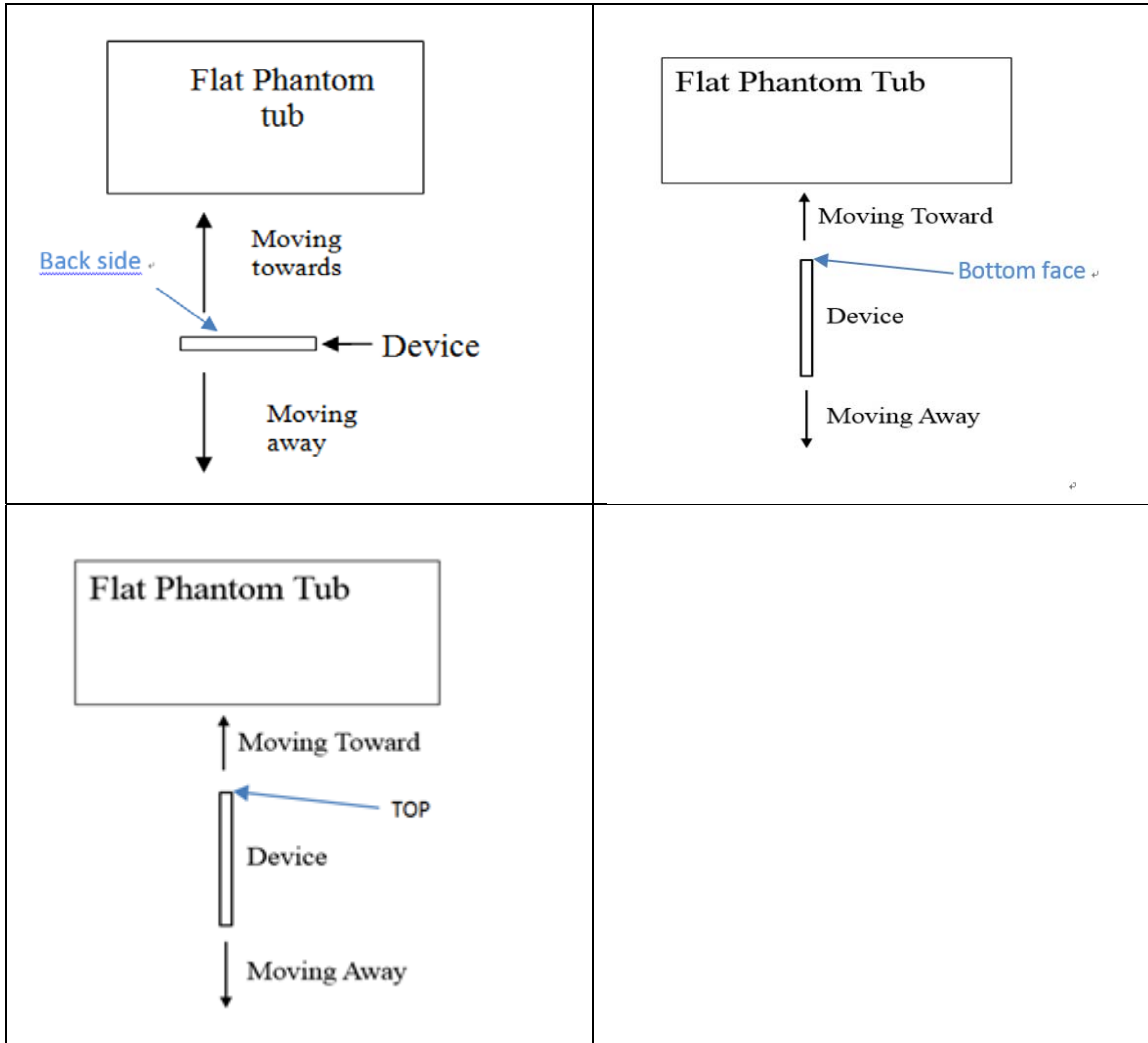


Table: Full power (Moving away from phantom)

Far away phantom																																		
Band	Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
GSX 1500	Top Edge	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	25.98	
UMTS Band 2	Top Edge	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	18.92	
UMTS Band 4	Top Edge	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	17.94	
LTE Band 2	Top Edge	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	19.04	
LTE Band 4	Top Edge	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	18.23	
LTE Band 7	Top Edge	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	17.96	
LTE Band 18	Top Edge	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	18.99	
LTE Band 40	Top Edge	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	18.97	
Power Reduction Status(dBm)																																		
Band	Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
GSX 1500	Bottom Edge	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	
UMTS Band 2	Bottom Edge	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	
UMTS Band 4	Bottom Edge	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	
LTE Band 2	Bottom Edge	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	
LTE Band 4	Bottom Edge	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	
LTE Band 7	Bottom Edge	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	
LTE Band 18	Bottom Edge	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	
LTE Band 40	Bottom Edge	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	
Power Reduction Status(dBm)																																		
Band	Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
GSX 1500	Back Side	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	
UMTS Band 2	Back Side	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	
UMTS Band 4	Back Side	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	
LTE Band 2	Back Side	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	17.10	
LTE Band 4	Back Side	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	
LTE Band 7	Back Side	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	18.96	
LTE Band 18	Back Side	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	
LTE Band 40	Back Side	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	



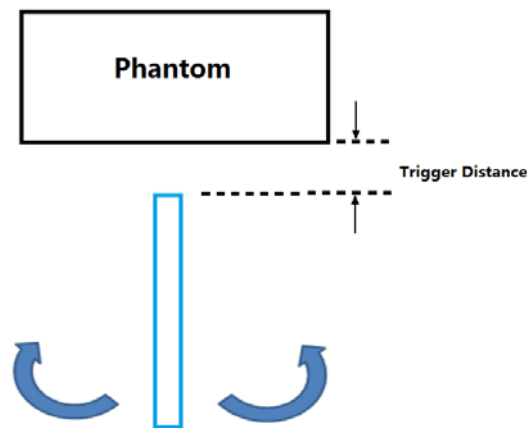
Table: Reduced power (Moving toward phantom)

Isar for phantom																																		
Band	Position	Power Reduction Status(dBm)																																
		32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
GSM 1900	Top Edge	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58	29.58
UMTS Band 2	Top Edge	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57	29.57
UMTS Band 4	Top Edge	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54	29.54
LTE Band 2	Top Edge	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11	22.11
LTE Band 4	Top Edge	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16	22.16
LTE Band 7	Top Edge	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34	24.34
LTE Band 18	Top Edge	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13	24.13
LTE Band 40	Top Edge	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63
Power Reduction Status(dBm)																																		
GSM 1900	Bottom Edge	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28
UMTS Band 2	Bottom Edge	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23
UMTS Band 4	Bottom Edge	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76
LTE Band 2	Bottom Edge	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10
LTE Band 4	Bottom Edge	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61
LTE Band 7	Bottom Edge	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98
LTE Band 18	Bottom Edge	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16
LTE Band 40	Bottom Edge	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51	20.51
Power Reduction Status(dBm)																																		
GSM 1900	Back Side	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28	27.28
UMTS Band 2	Back Side	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23	17.23
UMTS Band 4	Back Side	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76	17.76
LTE Band 2	Back Side	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10	19.10
LTE Band 4	Back Side	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61
LTE Band 7	Back Side	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98
LTE Band 18	Back Side	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.16	20.1		

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 $\pm 45^\circ$



Picture: Proximity sensor tilt angle assessment

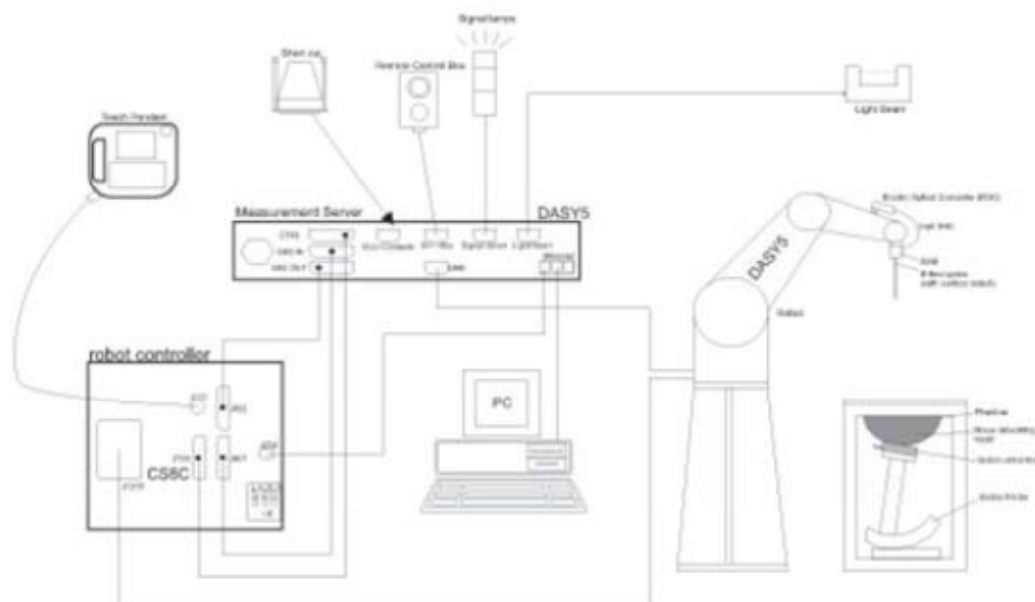
Summary of tablet Tilt angle Influence to Proximity Sensor Triggering (Top/Bottom Edge)

Band	Power reduction status										
	-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
GSM 850	on	on	on	on	on	on	on	on	on	on	on
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
WCDMA B5	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 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 B41	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 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/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 $\pm 10\%$. The spherical isotropy was evaluated and found to be better than ± 0.25 dB. 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 below 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.

$$\text{SAR} = C \Delta T / \Delta t$$

Where: Δt = Exposure time (30 seconds),
 C = Heat capacity of tissue (brain or muscle),
 ΔT = Temperature increase due to RF exposure.

Or

$$\text{SAR} = I E I^2 \sigma / \rho$$

Where: σ = Simulated tissue conductivity,
 ρ = Tissue density (kg/m^3).

6.3 SAR Measurement Procedure

Power Reference Measurement

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

Area Scan

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

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

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	$30^\circ \pm 1^\circ$	$20^\circ \pm 1^\circ$
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$	≤ 2 GHz: ≤ 15 mm $2 - 3$ GHz: ≤ 12 mm	$3 - 4$ GHz: ≤ 12 mm $4 - 6$ GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Zoom Scan

Zoom scans are used to 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 whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the zoom scan evaluates the averaged SAR for 1 gram and 10 gram and displays these values next to the job's label.

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

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

Volume Scan Procedures

The volume scan is used to 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 $\pm 2^\circ\text{C}$ 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	$\sigma(\text{s/m})$
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	$\sigma(\text{s/m})$
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

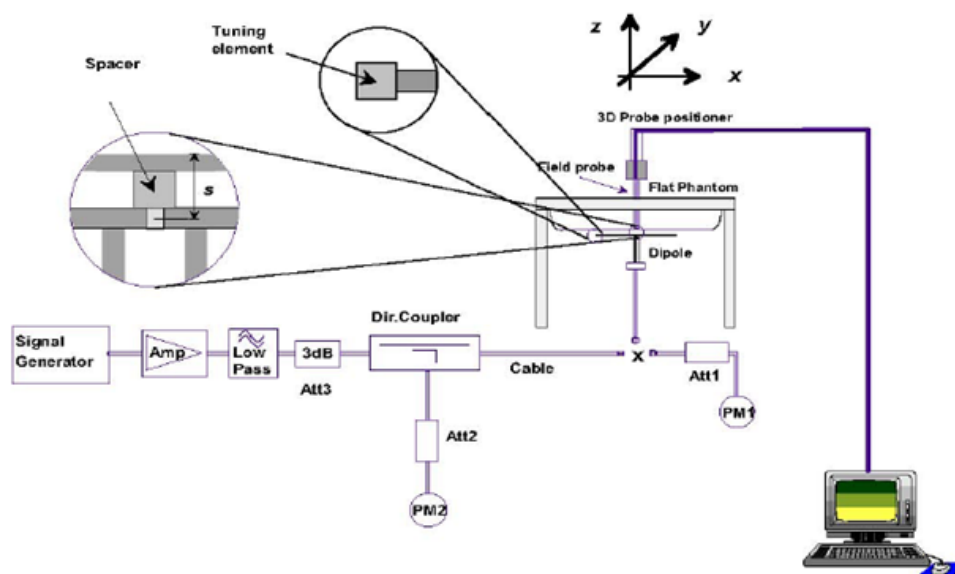
Measurements results

Frequency (MHz)	Test Date	Temp °C	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	1/4/2021	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	1/5/2021	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
1750	1/12/2021	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	1/13/2021	21.5	40.1	1.34	40.1	1.37	0.00	-2.19
1900	12/20/2020	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	12/21/2020	21.5	40.2	1.43	40.0	1.40	0.50	2.14
	12/22/2020	21.5	40.0	1.40	40.0	1.40	0.00	0.00
	12/23/2020	21.5	40.5	1.34	40.0	1.40	1.25	-4.29
2450	1/6/2021	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	12/25/2020	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	12/27/2020	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02
	12/28/2020	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
	12/29/2020	21.5	38.5	1.95	39.0	1.96	-1.28	-0.51
	12/30/2020	21.5	38.2	1.96	39.0	1.96	-2.05	0.00
5250	1/15/2021	21.5	35.5	4.80	35.9	4.71	-1.11	1.91
5600	1/14/2021	21.5	34.2	5.21	35.5	5.07	-3.66	2.76
5750	1/16/2021	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 1 System Performance Check setup



Picture 2 Setup Photo

**Justification for Extended SAR Dipole Calibrations**

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

Dipole		Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	$\Delta\Omega$
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 °C	250mW /100mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit $\pm 10\%$)	Plot No.
835	1/4/2021	21.5	2.44	9.76	9.65	1.14	1
	1/5/2021	21.5	2.46	9.84	9.65	1.97	2
1750	1/12/2021	21.5	8.95	35.80	35.90	-0.28	3
	1/13/2021	21.5	9.11	36.44	35.90	1.50	4
1900	12/20/2020	21.5	9.88	39.52	39.50	0.05	5
	12/21/2020	21.5	9.85	39.40	39.50	-0.25	6
	12/22/2020	21.5	10.55	42.20	39.50	6.84	7
	12/23/2020	21.5	10.50	42.00	39.50	6.33	8
2450	1/6/2021	21.5	13.70	54.80	52.30	4.78	9
2600	12/25/2020	21.5	13.90	55.60	54.10	2.77	10
	12/27/2020	21.5	13.88	55.52	54.10	2.62	11
	12/28/2020	21.5	13.94	55.76	54.10	3.07	12
	12/29/2020	21.5	13.90	55.60	54.10	2.77	13
	12/30/2020	21.5	13.90	55.60	54.10	2.77	14
5250	1/15/2021	21.5	7.87	78.70	78.00	0.90	15
5600	1/14/2021	21.5	7.67	76.70	80.50	-4.72	16
5750	1/16/2021	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 Full Power&D1&D2&D3 & D4		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	34.00	33.19	32.83	32.96	9.03	24.97	24.16	23.80	23.93
GPRS/ EGPRS (GMSK)	1 Tx Slot	34.00	33.25	32.81	32.90	9.03	24.97	24.22	23.78	23.87
	2 Tx Slots	31.00	29.98	29.67	29.76	6.02	24.98	23.96	23.65	23.74
	3 Tx Slots	29.20	28.31	27.98	27.83	4.26	24.94	24.05	23.72	23.57
	4 Tx Slots	28.00	26.71	26.47	26.11	3.01	24.99	23.70	23.46	23.10
EGPRS (8PSK)	1 Tx Slot	28.00	26.98	26.86	26.70	9.03	18.97	17.95	17.83	17.67
	2 Tx Slots	25.00	24.04	23.97	23.73	6.02	18.98	18.02	17.95	17.71
	3 Tx Slots	23.20	22.00	22.13	21.90	4.26	18.94	17.74	17.87	17.64
	4 Tx Slots	22.00	21.05	20.98	20.55	3.01	18.99	18.04	17.97	17.54
GSM 1900 Full Power&D1&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	31.00	30.23	30.18	30.25	9.03	21.97	21.20	21.15	21.22
GPRS/ EGPRS (GMSK)	1 Tx Slot	31.00	30.22	30.20	30.26	9.03	21.97	21.19	21.17	21.23
	2 Tx Slots	28.00	26.96	27.19	27.30	6.02	21.98	20.94	21.17	21.28
	3 Tx Slots	26.20	25.07	25.23	25.36	4.26	21.94	20.81	20.97	21.10
	4 Tx Slots	25.00	24.00	23.91	24.10	3.01	21.99	20.99	20.90	21.09
EGPRS (8PSK)	1 Tx Slot	27.00	25.93	26.09	26.23	9.03	17.97	16.90	17.06	17.20
	2 Tx Slots	24.00	22.97	22.87	23.01	6.02	17.98	16.95	16.85	16.99
	3 Tx Slots	22.20	21.26	21.38	21.54	4.26	17.94	17.00	17.12	17.28
	4 Tx Slots	21.00	20.09	19.90	20.19	3.01	17.99	17.08	16.89	17.18
GSM 1900 D3 & D4		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	27.09	27.28	27.37	9.03	18.97	18.06	18.25	18.34
GPRS/	1 Tx Slot	28.00	27.13	27.26	27.41	9.03	18.97	18.10	18.23	18.38



EGPRS (GMSK)	2 Tx Slots	25.00	24.01	24.12	24.31	6.02	18.98	17.99	18.10	18.29
	3 Tx Slots	23.20	21.89	22.01	22.29	4.26	18.94	17.63	17.75	18.03
	4 Tx Slots	22.00	21.25	21.47	21.55	3.01	18.99	18.24	18.46	18.54
EGPRS (8PSK)	1 Tx Slot	27.00	26.03	26.04	25.98	9.03	17.97	17.00	17.01	16.95
	2 Tx Slots	24.00	22.65	22.87	22.89	6.02	17.98	16.63	16.85	16.87
	3 Tx Slots	22.20	21.11	21.25	21.34	4.26	17.94	16.85	16.99	17.08
	4 Tx Slots	21.00	19.90	20.11	19.95	3.01	17.99	16.89	17.10	16.94

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 4 time slots for Max power, based on the output power measurements above..



Second – Antenna

GSM 850 Full Power&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	34.00	33.52	33.33	33.01	9.03	24.97	24.49	24.30	23.98
GPRS/ EGPRS (GMSK)	1 Tx Slot	34.00	33.50	33.21	32.93	9.03	24.97	24.47	24.18	23.90
	2 Tx Slots	31.00	30.07	30.12	29.70	6.02	24.98	24.05	24.10	23.68
	3 Tx Slots	29.20	28.21	28.20	27.81	4.26	24.94	23.95	23.94	23.55
	4 Tx Slots	28.00	26.61	26.63	26.29	3.01	24.99	23.60	23.62	23.28
EGPRS (8PSK)	1 Tx Slot	28.00	27.27	27.11	26.72	9.03	18.97	18.24	18.08	17.69
	2 Tx Slots	25.00	24.01	24.19	24.00	6.02	18.98	17.99	18.17	17.98
	3 Tx Slots	23.20	22.47	22.70	22.85	4.26	18.94	18.21	18.44	18.59
	4 Tx Slots	22.00	21.63	21.40	20.76	3.01	18.99	18.62	18.39	17.75
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	32.50	31.32	31.44	31.59	9.03	23.47	22.29	22.41	22.56
GPRS/ EGPRS (GMSK)	1 Tx Slot	32.50	31.34	31.52	31.61	9.03	23.47	22.31	22.49	22.58
	2 Tx Slots	29.50	28.80	28.98	28.86	6.02	23.48	22.78	22.96	22.84
	3 Tx Slots	27.70	26.63	26.81	27.06	4.26	23.44	22.37	22.55	22.80
	4 Tx Slots	26.50	25.62	25.78	25.86	3.01	23.49	22.61	22.77	22.85
EGPRS (8PSK)	1 Tx Slot	28.00	26.81	27.05	26.93	9.03	18.97	17.78	18.02	17.90
	2 Tx Slots	25.00	23.80	23.99	23.77	6.02	18.98	17.78	17.97	17.75
	3 Tx Slots	23.20	22.14	22.29	22.38	4.26	18.94	17.88	18.03	18.12
	4 Tx Slots	22.00	20.84	21.36	21.12	3.01	18.99	17.83	18.35	18.11
GSM 850 D4		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	32.50	31.56	31.79	31.69	9.03	23.47	22.53	22.76	22.66
GPRS/ EGPRS (GMSK)	1 Tx Slot	32.50	31.54	31.84	31.66	9.03	23.47	22.51	22.81	22.63
	2 Tx Slots	30.00	28.95	29.04	28.99	6.02	23.98	22.93	23.02	22.97
	3 Tx Slots	28.00	26.64	26.74	27.05	4.26	23.74	22.38	22.48	22.79
	4 Tx Slots	27.00	25.62	25.78	25.88	3.01	23.99	22.61	22.77	22.87
EGPRS (8PSK)	1 Tx Slot	28.00	26.93	27.00	27.05	9.03	18.97	17.90	17.97	18.02
	2 Tx Slots	25.00	23.98	23.85	23.80	6.02	18.98	17.96	17.83	17.78
	3 Tx Slots	23.20	22.35	22.08	22.16	4.26	18.94	18.09	17.82	17.90
	4 Tx Slots	22.00	21.07	21.15	20.95	3.01	18.99	18.06	18.14	17.94



GSM 1900 Full Power&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	31.00	29.61	29.58	29.91	9.03	21.97	20.58	20.55	20.88
GPRS/ EGPRS (GMSK)	1 Tx Slot	31.00	29.58	29.55	29.77	9.03	21.97	20.55	20.52	20.74
	2 Tx Slots	28.00	26.47	26.51	26.74	6.02	21.98	20.45	20.49	20.72
	3 Tx Slots	26.20	24.41	24.52	24.90	4.26	21.94	20.15	20.26	20.64
	4 Tx Slots	25.00	23.10	23.28	23.32	3.01	21.99	20.09	20.27	20.31
EGPRS (8PSK)	1 Tx Slot	27.00	25.72	25.77	25.81	9.03	17.97	16.69	16.74	16.78
	2 Tx Slots	24.00	22.37	22.55	22.84	6.02	17.98	16.35	16.53	16.82
	3 Tx Slots	22.20	20.79	21.50	21.48	4.26	17.94	16.53	17.24	17.22
	4 Tx Slots	21.00	19.39	19.90	19.89	3.01	17.99	16.38	16.89	16.88
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	26.80	26.97	27.00	9.03	18.97	17.77	17.94	17.97
GPRS/ EGPRS (GMSK)	1 Tx Slot	28.00	26.85	27.07	27.02	9.03	18.97	17.82	18.04	17.99
	2 Tx Slots	25.00	23.78	23.82	23.99	6.02	18.98	17.76	17.80	17.97
	3 Tx Slots	23.20	21.62	21.71	21.82	4.26	18.94	17.36	17.45	17.56
	4 Tx Slots	22.00	21.07	21.00	21.05	3.01	18.99	18.06	17.99	18.04
EGPRS (8PSK)	1 Tx Slot	27.00	25.87	25.96	26.05	9.03	17.97	16.84	16.93	17.02
	2 Tx Slots	24.00	22.71	22.65	22.84	6.02	17.98	16.69	16.63	16.82
	3 Tx Slots	22.20	21.16	21.21	21.32	4.26	17.94	16.90	16.95	17.06
	4 Tx Slots	21.00	19.82	19.90	19.74	3.01	17.99	16.81	16.89	16.73
GSM 1900 D3 & D4		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	27.00	25.88	25.98	26.19	9.03	17.97	16.85	16.95	17.16
GPRS/ EGPRS (GMSK)	1 Tx Slot	27.00	25.81	25.94	26.13	9.03	17.97	16.78	16.91	17.10
	2 Tx Slots	24.00	22.74	22.89	23.09	6.02	17.98	16.72	16.87	17.07
	3 Tx Slots	22.20	21.05	21.12	21.33	4.26	17.94	16.79	16.86	17.07
	4 Tx Slots	21.00	20.04	20.02	20.28	3.01	17.99	17.03	17.01	17.27
EGPRS (8PSK)	1 Tx Slot	27.00	25.71	25.77	25.68	9.03	17.97	16.68	16.74	16.65
	2 Tx Slots	24.00	22.63	22.56	22.71	6.02	17.98	16.61	16.54	16.69
	3 Tx Slots	22.20	21.09	21.21	21.18	4.26	17.94	16.83	16.95	16.92
	4 Tx Slots	21.00	20.01	19.95	20.30	3.01	17.99	17.00	16.94	17.29
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 4 time slots 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) Full Power & D1				Band IV(dBm) Full Power&D1				Band V(dBm) Full Power&D1&D2&D3& D4			
Tx Channel		9262	9400	9538	Tune-up	1312	1413	1513	Tune-up	4132	4183	4233	Tune-up
Frequency(MHz)		1852.4	1880	1907.6	Limit	1712.4	1732.6	1752.6	Limit	826.4	836.6	846.6	Limit
RMC	12.2kbps	24.18	24.16	24.10	25.00	24.36	24.28	24.06	25.00	24.27	24.38	24.22	25.00
AMR	12.2kbps	24.15	24.32	24.30	25.00	24.15	24.13	24.25	25.00	24.18	24.30	24.01	25.00
HSDPA	Sub 1	23.30	23.30	23.19	24.00	23.46	23.38	23.21	24.00	23.77	23.87	23.72	24.00
	Sub 2	23.31	23.26	23.14	24.00	23.46	23.37	23.22	24.00	23.74	23.81	23.73	24.00
	Sub 3	22.81	22.76	22.61	23.50	22.92	22.86	22.69	23.50	23.10	23.30	23.16	23.50
	Sub 4	22.76	22.74	22.61	23.50	22.96	22.87	22.68	23.50	23.21	23.32	23.17	23.50
HSUPA	Sub 1	23.30	23.30	23.20	24.00	23.43	23.38	23.27	24.00	23.77	23.86	23.73	24.00
	Sub 2	21.30	21.31	21.19	22.00	21.46	21.37	21.28	22.00	21.73	21.86	21.71	22.00
	Sub 3	22.29	22.31	22.18	23.00	22.45	22.38	22.24	23.00	22.76	22.84	22.70	23.00
	Sub 4	21.34	21.32	21.18	22.00	21.43	21.37	21.27	22.00	21.75	21.86	21.72	22.00
	Sub 5	23.31	23.27	23.19	24.00	23.45	23.38	23.25	24.00	23.77	23.85	23.74	24.00
DC-HSDPA	Sub 1	23.14	23.44	23.10	24.00	23.20	23.52	23.16	24.00	23.38	23.74	23.22	24.00
	Sub 2	22.89	23.05	22.90	24.00	22.91	23.13	22.94	24.00	23.06	23.43	23.11	24.00
	Sub 3	22.85	22.91	22.80	23.50	22.89	22.93	22.86	23.50	22.78	22.96	22.77	23.50
	Sub 4	22.79	22.90	22.72	23.50	22.85	23.00	22.80	23.50	22.60	22.92	22.70	23.50
HSPA+	16QAM	21.87	21.90	22.01	22.50	21.61	21.68	21.77	22.50	21.55	21.79	21.88	22.50

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			
Tx Channel		9262	9400	9538	Tune-up	1312	1413	1513	Tune-u
Frequency(MHz)		1852.4	1880	1907.6	Limit	1712.4	1732.6	1752.6	p Limit
RMC	12.2kbps	22.26	22.16	22.19	23.00	23.17	23.28	23.26	24.00
AMR	12.2kbps	22.16	22.13	22.06	23.00	23.07	23.16	23.13	24.00
HSDPA	Sub 1	21.68	21.64	21.61	22.00	23.39	23.47	23.48	24.00
	Sub 2	21.67	21.63	21.60	22.00	23.38	23.46	23.47	24.00
	Sub 3	21.16	21.12	21.09	21.50	22.87	22.95	22.96	24.00
	Sub 4	21.15	21.11	21.08	21.50	22.86	22.94	22.95	24.00
HSUPA	Sub 1	20.24	20.20	20.17	22.00	22.95	23.03	23.04	24.00
	Sub 2	19.83	19.79	19.76	20.00	22.54	22.62	22.63	24.00



	Sub 3	20.81	20.78	20.75	21.00	22.52	22.61	22.62	24.00
	Sub 4	19.20	19.17	19.14	20.00	22.91	23.00	23.01	24.00
	Sub 5	20.79	20.76	20.73	22.00	22.50	22.59	22.60	24.00
DC-HSDPA	Sub 1	21.60	21.58	21.53	22.00	23.31	23.41	23.40	24.00
	Sub 2	21.59	21.57	21.52	22.00	23.30	23.40	23.39	24.00
	Sub 3	21.17	21.06	21.03	21.50	22.88	22.89	22.90	24.00
	Sub 4	21.16	21.05	21.02	21.50	22.87	22.88	22.89	24.00
HSPA+	16QAM	20.35	20.33	20.30	20.50	22.06	22.16	22.17	24.00
WCDMA		Band II(dBm) D3 & D4				Band IV(dBm) D3 & D4			
Tx Channel		9262	9400	9538	Tune-up Limit	1312	1413	1513	Tune-u p Limit
Frequency(MHz)		1852.4	1880	1907.6		1712.4	1732.6	1752.6	
RMC	12.2kbps	17.26	17.23	17.21	18.00	17.70	17.76	17.74	18.50
AMR	12.2kbps	17.38	17.19	17.23	18.00	17.76	17.70	17.69	18.50
HSDPA	Sub 1	16.12	16.23	16.21	17.00	16.69	16.96	16.92	17.50
	Sub 2	16.34	16.39	16.29	17.00	16.64	16.85	16.81	17.50
	Sub 3	15.82	15.81	15.77	16.50	16.16	16.39	16.35	17.00
	Sub 4	15.78	15.89	15.67	16.50	16.14	16.42	16.37	17.00
HSUPA	Sub 1	16.26	16.39	16.33	17.00	16.61	16.77	16.73	17.50
	Sub 2	14.14	14.23	14.19	15.00	14.67	14.92	14.82	15.50
	Sub 3	15.22	15.13	15.23	16.00	15.77	15.90	15.84	16.50
	Sub 4	14.28	14.23	14.27	15.00	14.75	14.92	14.85	15.50
	Sub 5	16.12	16.29	16.29	17.00	16.72	16.98	16.86	17.50
DC-HSDPA	Sub 1	16.26	16.23	16.17	17.00	16.63	16.71	16.99	17.50
	Sub 2	16.38	16.29	16.07	17.00	16.43	16.45	16.63	17.50
	Sub 3	15.86	15.59	15.65	16.50	16.33	16.44	16.42	17.00
	Sub 4	15.64	15.89	15.59	16.50	16.30	16.39	16.54	17.00
HSPA+	16QAM	14.82	14.97	14.85	15.50	15.51	15.34	15.42	16.00
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 & D4				Band IV(dBm) Full Power				Band V(dBm) Full Power&D2&D3			
Tx Channel		9262	9400	9538	Tune-up	1312	1413	1513	Tune-up	4132	4183	4233	Tune-u
Frequency(MHz)		1852.4	1880	1907.6	Limit	1712.4	1732.6	1752.6	Limit	826.4	836.6	846.6	p Limit
RMC	12.2kbps	16.97	16.99	17.02	18.00	24.34	24.24	23.65	25.00	24.29	24.42	24.27	25.00
AMR	12.2kbps	16.99	17.15	17.00	18.00	24.01	24.30	23.98	25.00	24.33	24.38	24.20	25.00
HSDPA	Sub 1	15.93	16.13	16.12	17.00	23.02	23.01	22.81	24.00	23.59	23.69	23.50	24.00
	Sub 2	15.83	15.85	16.10	17.00	23.00	22.97	22.84	24.00	23.60	23.67	23.49	24.00
	Sub 3	15.33	15.41	15.38	16.50	22.45	22.50	22.35	23.50	23.06	23.18	22.97	23.50
	Sub 4	15.41	15.61	15.56	16.50	22.51	22.49	22.32	23.50	23.04	23.18	23.00	23.50
HSUPA	Sub 1	15.91	15.95	16.18	17.00	22.97	23.03	22.89	24.00	23.60	23.70	23.54	24.00
	Sub 2	13.81	13.87	14.04	15.00	21.00	21.00	20.87	22.00	21.58	21.72	21.56	22.00
	Sub 3	14.99	14.97	14.96	16.00	22.00	22.02	21.88	23.00	22.60	22.67	22.53	23.00
	Sub 4	13.95	13.89	13.86	15.00	21.00	21.02	20.88	22.00	21.60	21.71	21.55	22.00
	Sub 5	15.93	15.99	15.96	17.00	23.00	23.01	22.89	24.00	23.63	23.69	23.54	24.00
DC-HSDPA	Sub 1	15.89	16.03	15.92	17.00	23.24	23.60	23.21	24.00	23.58	23.66	23.46	24.00
	Sub 2	16.03	16.15	15.98	17.00	22.94	23.18	22.99	24.00	23.14	23.18	23.27	24.00
	Sub 3	15.45	15.51	15.36	16.50	22.64	22.69	22.63	23.50	23.02	23.04	23.09	23.50
	Sub 4	15.35	15.45	15.66	16.50	22.60	22.79	22.57	23.50	22.80	22.88	22.98	23.50
HSPA+	16QAM	14.41	14.43	14.78	15.50	21.66	21.77	21.84	22.50	21.61	21.79	21.91	22.50
WCDMA		Band II(dBm) D2				Band IV(dBm) D1 & D4				Band V(dBm) D1 & D4			
Tx Channel		9262	9400	9538	Tune-up	1312	1413	1513	Tune-up	4132	4183	4233	Tune-u
Frequency(MHz)		1852.4	1880	1907.6	Limit	1712.4	1732.6	1752.6	Limit	826.4	836.6	846.6	p Limit
RMC	12.2kbps	22.00	21.97	21.99	23.00	15.89	15.95	15.84	17.00	22.14	22.12	22.17	23.00
AMR	12.2kbps	21.92	21.91	21.85	23.00	15.83	15.95	15.96	17.00	22.26	22.12	22.29	23.00
HSDPA	Sub 1	21.14	20.87	20.89	22.00	14.73	14.89	14.70	16.00	21.10	21.10	21.09	22.00
	Sub 2	20.96	20.95	21.05	22.00	14.85	14.91	14.76	16.00	21.06	21.00	21.13	22.00
	Sub 3	20.34	20.37	20.51	21.50	14.39	14.29	14.32	15.50	20.70	20.50	20.55	21.50
	Sub 4	20.44	20.41	20.49	21.50	14.43	14.47	14.40	15.50	20.70	20.46	20.77	21.50
HSUPA	Sub 1	20.98	20.83	21.11	22.00	15.03	14.91	14.76	16.00	20.98	21.20	21.23	22.00
	Sub 2	19.00	19.09	19.03	20.00	13.05	12.89	12.74	14.00	19.26	19.12	19.23	20.00
	Sub 3	20.08	20.05	20.07	21.00	13.75	13.85	13.70	15.00	20.24	20.28	20.33	21.00
	Sub 4	19.02	19.05	18.83	20.00	12.99	12.99	12.70	14.00	19.10	19.02	19.29	20.00
	Sub 5	21.02	20.87	21.05	22.00	15.01	14.99	14.86	16.00	21.12	21.28	21.05	22.00
DC-HSDPA	Sub 1	21.00	20.95	20.89	22.00	14.97	14.81	14.96	16.00	21.16	21.16	21.13	22.00
	Sub 2	20.90	20.85	21.05	22.00	14.77	14.79	14.86	16.00	21.20	21.02	21.31	22.00
	Sub 3	20.52	20.37	20.57	21.50	14.47	14.41	14.42	15.50	20.62	20.70	20.83	21.50
	Sub 4	20.44	20.41	20.55	21.50	14.41	14.47	14.18	15.50	20.64	20.52	20.63	21.50



HSPA+	16QAM	19.44	19.73	19.67	20.50	13.39	13.39	13.56	14.50	19.90	19.64	19.69	20.50
WCDMA		Band II(dBm) D3				Band IV(dBm) D2				Band IV(dBm) D3			
Tx Channel		9262	9400	9538	Tune-up	1312	1413	1513	Tune-up	1312	1413	1513	Tune-u
Frequency(MHz)		1852.4	1880	1907.6	Limit	1712.4	1732.6	1752.6	Limit	1712.4	1732.6	1752.6	p Limit
RMC	12.2kbps	18.96	18.92	18.95	20.00	21.90	21.94	21.87	23.00	17.91	17.94	17.89	19.00
AMR	12.2kbps	19.08	18.80	18.99	20.00	21.90	22.08	21.85	23.00	17.87	17.90	17.73	19.00
HSDPA	Sub 1	17.96	18.00	17.81	19.00	20.96	21.02	20.93	22.00	17.07	16.98	16.79	18.00
	Sub 2	17.98	17.84	17.97	19.00	20.74	20.98	20.79	22.00	17.07	16.96	16.77	18.00
	Sub 3	17.46	17.36	17.41	18.50	20.26	20.48	20.41	21.50	16.29	16.48	16.41	17.50
	Sub 4	17.42	17.26	17.29	18.50	20.30	20.54	20.35	21.50	16.41	16.48	16.25	17.50
HSUPA	Sub 1	18.10	17.82	18.11	19.00	21.00	20.78	20.93	22.00	16.95	16.92	16.99	18.00
	Sub 2	15.92	16.02	15.81	17.00	18.96	18.90	18.89	20.00	14.93	14.88	14.85	16.00
	Sub 3	16.98	16.76	16.99	18.00	19.80	19.88	19.75	21.00	15.99	16.04	16.01	17.00
	Sub 4	15.92	15.92	16.07	17.00	18.90	18.80	18.97	20.00	14.79	15.02	14.99	16.00
	Sub 5	17.82	17.98	17.81	19.00	20.80	21.08	20.97	22.00	16.99	16.80	16.81	18.00
DC-HSDPA	Sub 1	17.96	18.04	17.79	19.00	20.74	21.00	20.95	22.00	16.77	16.92	16.93	18.00
	Sub 2	17.88	17.90	18.03	19.00	20.80	21.04	20.83	22.00	16.79	16.86	16.95	18.00
	Sub 3	17.32	17.44	17.31	18.50	20.50	20.50	20.33	21.50	16.25	16.50	16.47	17.50
	Sub 4	17.44	17.26	17.41	18.50	20.36	20.54	20.27	21.50	16.25	16.56	16.41	17.50
HSPA+	16QAM	16.56	16.48	16.69	17.50	19.42	19.44	19.45	20.50	15.37	15.50	15.59	16.50

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 Full Power&D1				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	24.09	24.05	24.13	25.50
		1	2	24.29	24.25	24.30	25.50
		1	5	24.20	24.19	24.25	25.50
		3	0	24.08	24.03	24.12	25.50
		3	2	24.18	24.14	24.23	25.50
		3	3	24.10	24.05	24.13	25.50
		6	0	23.25	23.20	23.29	24.50
	16QAM	1	0	23.38	23.34	23.40	24.50
		1	2	23.47	23.45	23.50	24.50
		1	5	23.34	23.31	23.38	24.50
		3	0	23.33	23.29	23.35	24.50
		3	2	23.37	23.35	23.42	24.50
		3	3	23.32	23.27	23.36	24.50
		6	0	22.40	22.36	22.45	23.50
	64QAM	1	0	23.41	23.37	23.43	24.00
		1	2	23.43	23.41	23.46	24.00
		1	5	23.43	23.37	23.44	24.00
		3	0	23.36	23.28	23.34	24.00
		3	2	23.45	23.41	23.48	24.00
		3	3	23.25	23.20	23.29	24.00
		6	0	22.27	22.23	22.32	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	24.24	24.32	24.17	25.50



		1	7	24.17	24.16	24.08	25.50
		1	14	24.23	24.34	23.84	25.50
		8	0	23.36	23.49	23.42	24.50
		8	4	23.38	23.55	23.45	24.50
		8	7	23.41	23.50	23.35	24.50
		15	0	23.34	23.54	23.43	24.50
		1	0	23.62	23.56	23.62	24.50
	16QAM	1	7	23.60	23.47	23.53	24.50
		1	14	23.63	23.57	23.58	24.50
		8	0	22.57	22.49	22.51	23.50
		8	4	22.66	22.56	22.60	23.50
		8	7	22.68	22.61	22.62	23.50
		15	0	22.54	22.47	22.50	23.50
		1	0	23.57	23.43	23.49	24.00
	64QAM	1	7	23.74	23.61	23.67	24.00
		1	14	23.48	23.38	23.39	24.00
		8	0	22.64	22.52	22.58	23.00
		8	4	22.73	22.60	22.64	23.00
		8	7	22.64	22.57	22.58	23.00
		15	0	22.71	22.64	22.67	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	24.21	24.30	24.13	25.50
		1	13	24.15	24.12	24.05	25.50
		1	24	24.20	24.29	23.80	25.50
		12	0	23.33	23.44	23.38	24.50
		12	6	23.36	23.51	23.40	24.50
		12	13	23.39	23.48	23.31	24.50
		25	0	23.34	23.53	23.41	24.50
	16QAM	1	0	23.59	23.52	23.59	24.50
		1	13	23.57	23.45	23.50	24.50
		1	24	23.60	23.55	23.54	24.50
		12	0	22.55	22.45	22.48	23.50
		12	6	22.63	22.51	22.56	23.50
		12	13	22.65	22.56	22.58	23.50
		25	0	22.52	22.43	22.45	23.50
	64QAM	1	0	23.54	23.43	23.46	24.00
		1	13	23.71	23.63	23.64	24.00
		1	24	23.49	23.36	23.35	24.00
		12	0	22.62	22.48	22.59	23.00
		12	6	22.70	22.55	22.60	23.00
		12	13	22.61	22.52	22.54	23.00
		25	0	22.69	22.60	22.62	23.00



Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	24.23	24.31	24.16	25.50
		1	25	24.18	24.17	24.09	25.50
		1	49	24.22	24.33	23.83	25.50
		25	0	23.36	23.49	23.42	24.50
		25	13	23.39	23.56	23.44	24.50
		25	25	23.41	23.52	23.36	24.50
		50	0	23.38	23.55	23.45	24.50
	16QAM	1	0	23.61	23.55	23.61	24.50
		1	25	23.60	23.49	23.53	24.50
		1	49	23.63	23.57	23.57	24.50
		25	0	22.58	22.50	22.52	23.50
		25	13	22.65	22.55	22.59	23.50
		25	25	22.68	22.61	22.62	23.50
		50	0	22.55	22.48	22.49	23.50
	64QAM	1	0	23.56	23.42	23.48	24.00
		1	25	23.74	23.63	23.67	24.00
		1	49	23.48	23.38	23.38	24.00
		25	0	22.65	22.53	22.59	23.00
		25	13	22.72	22.59	22.63	23.00
		25	25	22.64	22.57	22.58	23.00
		50	0	22.72	22.65	22.66	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	24.22	24.27	24.14	25.50
		1	38	24.16	24.16	24.06	25.50
		1	74	24.19	24.28	23.79	25.50
		36	0	23.34	23.45	23.39	24.50
		36	18	23.36	23.51	23.40	24.50
		36	39	23.38	23.49	23.32	24.50
		75	0	23.36	23.51	23.40	24.50
	16QAM	1	0	23.56	23.53	23.59	24.50
		1	38	23.58	23.46	23.51	24.50
		1	74	23.60	23.53	23.54	24.50
		36	0	22.55	22.48	22.49	23.50
		36	18	22.62	22.50	22.55	23.50
		36	39	22.66	22.57	22.59	23.50
		75	0	22.52	22.43	22.45	23.50
	64QAM	1	0	23.51	23.40	23.46	24.00
		1	38	23.72	23.60	23.65	24.00
		1	74	23.49	23.37	23.39	24.00
		36	0	22.64	22.55	22.60	23.00



		36	18	22.70	22.56	22.62	23.00
		36	39	22.62	22.53	22.55	23.00
		75	0	22.69	22.60	22.62	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	24.19	24.23	24.11	25.50
		1	50	24.15	24.12	24.04	25.50
		1	99	24.17	24.27	23.76	25.50
		50	0	23.31	23.40	23.35	24.50
		50	25	23.34	23.47	23.37	24.50
		50	50	23.35	23.44	23.28	24.50
		100	0	23.33	23.46	23.36	24.50
	16QAM	1	0	23.62	23.49	23.54	24.50
		1	50	23.54	23.44	23.47	24.50
		1	99	23.58	23.50	23.52	24.50
		50	0	22.52	22.44	22.46	23.50
		50	25	22.59	22.48	22.52	23.50
		50	50	22.63	22.52	22.55	23.50
		100	0	22.50	22.39	22.42	23.50
	64QAM	1	0	23.49	23.36	23.41	24.00
		1	50	23.68	23.58	23.61	24.00
		1	99	23.43	23.31	23.33	24.00
		50	0	22.59	22.47	22.53	23.00
		50	25	22.66	22.52	22.56	23.00
		50	50	22.59	22.48	22.51	23.00
		100	0	22.67	22.56	22.59	23.00

LTE FDD Band 2 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	22.06	21.99	22.10	23.00
		1	2	21.96	22.11	22.00	23.00
		1	5	22.03	21.97	22.18	23.00
		3	0	22.50	22.48	22.43	23.00
		3	2	22.38	22.48	22.46	23.00
		3	3	22.43	22.43	22.46	23.00
		6	0	22.15	22.17	22.12	23.00
	16QAM	1	0	22.08	22.19	22.25	23.00
		1	2	22.06	22.04	22.08	23.00
		1	5	22.34	22.31	22.38	23.00
		3	0	22.46	22.40	22.47	23.00
		3	2	22.49	22.46	22.54	23.00



		3	3	22.46	22.43	22.49	23.00
		6	0	22.13	22.12	22.22	23.00
	64QAM	1	0	22.23	22.19	22.25	23.00
		1	2	21.91	21.89	21.95	23.00
		1	5	22.02	22.01	22.03	23.00
		3	0	22.98	22.88	22.95	23.00
		3	2	22.55	22.50	22.58	23.00
		3	3	22.44	22.41	22.47	23.00
		6	0	21.98	21.97	22.07	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	22.08	22.03	22.13	23.00
		1	7	21.94	22.14	22.04	23.00
		1	14	22.06	22.02	22.22	23.00
		8	0	22.20	22.20	22.16	23.00
		8	4	22.10	22.18	22.18	23.00
		8	7	22.13	22.14	22.16	23.00
		15	0	22.15	22.21	22.15	23.00
	16QAM	1	0	22.11	22.21	22.28	23.00
		1	7	22.09	22.04	22.12	23.00
		1	14	22.36	22.35	22.41	23.00
		8	0	22.17	22.13	22.19	23.00
		8	4	22.20	22.19	22.26	23.00
		8	7	22.16	22.15	22.22	23.00
		15	0	22.16	22.16	22.25	23.00
	64QAM	1	0	22.26	22.21	22.28	23.00
		1	7	21.94	21.89	21.97	23.00
		1	14	22.04	22.00	22.06	23.00
		8	0	22.09	22.01	22.07	23.00
		8	4	22.26	22.23	22.30	23.00
		8	7	22.14	22.13	22.20	23.00
		15	0	22.01	22.01	22.10	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	22.05	22.01	22.09	23.00
		1	13	21.92	22.10	22.01	23.00
		1	24	22.03	21.97	22.18	23.00
		12	0	22.17	22.15	22.12	23.00
		12	6	22.08	22.14	22.13	23.00
		12	13	22.11	22.12	22.12	23.00
		25	0	22.15	22.20	22.13	23.00
	16QAM	1	0	22.08	22.17	22.25	23.00
		1	13	22.06	22.02	22.09	23.00



		1	24	22.33	22.33	22.37	23.00
		12	0	22.15	22.09	22.16	23.00
		12	6	22.17	22.14	22.22	23.00
		12	13	22.13	22.10	22.18	23.00
		25	0	22.14	22.12	22.20	23.00
	64QAM	1	0	22.23	22.21	22.25	23.00
		1	13	21.91	21.91	21.94	23.00
		1	24	22.05	21.98	22.02	23.00
		12	0	22.07	21.97	22.08	23.00
		12	6	22.23	22.18	22.26	23.00
		12	13	22.11	22.08	22.16	23.00
		25	0	21.99	21.97	22.05	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	22.07	22.02	22.12	23.00
		1	25	21.95	22.15	22.05	23.00
		1	49	22.05	22.01	22.21	23.00
		25	0	22.20	22.20	22.16	23.00
		25	13	22.11	22.19	22.17	23.00
		25	25	22.13	22.16	22.17	23.00
		50	0	22.19	22.22	22.17	23.00
	16QAM	1	0	22.10	22.20	22.27	23.00
		1	25	22.09	22.06	22.12	23.00
		1	49	22.36	22.35	22.40	23.00
		25	0	22.18	22.14	22.20	23.00
		25	13	22.19	22.18	22.25	23.00
		25	25	22.16	22.15	22.22	23.00
		50	0	22.17	22.17	22.24	23.00
	64QAM	1	0	22.25	22.20	22.27	23.00
		1	25	21.94	21.91	21.97	23.00
		1	49	22.04	22.00	22.05	23.00
		25	0	22.10	22.02	22.08	23.00
		25	13	22.25	22.22	22.29	23.00
		25	25	22.14	22.13	22.20	23.00
		50	0	22.02	22.02	22.09	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	22.06	21.98	22.10	23.00
		1	38	21.93	22.14	22.02	23.00
		1	74	22.02	21.96	22.17	23.00
		36	0	22.18	22.16	22.13	23.00
		36	18	22.08	22.14	22.13	23.00
		36	39	22.10	22.13	22.13	23.00



	16QAM	75	0	22.17	22.18	22.12	23.00
		1	0	22.05	22.18	22.25	23.00
		1	38	22.07	22.03	22.10	23.00
		1	74	22.33	22.31	22.37	23.00
		36	0	22.15	22.12	22.17	23.00
		36	18	22.16	22.13	22.21	23.00
		36	39	22.14	22.11	22.19	23.00
		75	0	22.14	22.12	22.20	23.00
	64QAM	1	0	22.20	22.18	22.25	23.00
		1	38	21.92	21.88	21.95	23.00
		1	74	22.05	21.99	22.06	23.00
		36	0	22.09	22.04	22.09	23.00
		36	18	22.23	22.19	22.28	23.00
		36	39	22.12	22.09	22.17	23.00
		75	0	21.99	21.97	22.05	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	21.69	21.45	21.61	23.00
		1	50	21.52	21.60	21.49	23.00
		1	99	21.59	21.77	21.57	23.00
		50	0	21.31	21.42	21.62	23.00
		50	25	21.54	21.97	21.85	23.00
		50	50	21.85	21.58	21.64	23.00
		100	0	21.31	21.83	21.62	23.00
	16QAM	1	0	22.09	22.22	22.30	23.00
		1	50	22.11	22.05	22.14	23.00
		1	99	22.35	22.34	22.39	23.00
		50	0	22.18	22.16	22.20	23.00
		50	25	22.19	22.15	22.24	23.00
		50	50	22.17	22.16	22.23	23.00
		100	0	22.16	22.16	22.23	23.00
	64QAM	1	0	22.22	22.22	22.30	23.00
		1	50	21.96	21.90	21.99	23.00
		1	99	22.11	22.05	22.12	23.00
		50	0	22.14	22.12	22.16	23.00
		50	25	22.27	22.23	22.34	23.00
		50	50	22.15	22.14	22.21	23.00
		100	0	22.01	22.01	22.08	23.00



LTE FDD Band 2 D3 & D4				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	17.13	17.15	17.10	18.00
		1	2	17.18	17.21	17.18	18.00
		1	5	17.14	17.08	17.16	18.00
		3	0	17.19	17.23	17.22	18.00
		3	2	17.20	17.15	17.19	18.00
		3	3	17.25	17.24	17.27	18.00
		6	0	17.24	17.26	17.24	18.00
	16QAM	1	0	17.10	17.11	17.26	18.00
		1	2	17.26	17.11	17.32	18.00
		1	5	17.29	17.28	17.31	18.00
		3	0	17.16	17.23	17.24	18.00
		3	2	17.11	17.19	17.22	18.00
		3	3	17.19	17.19	17.25	18.00
		6	0	17.21	17.26	17.23	18.00
	64QAM	1	0	17.29	17.26	17.18	18.00
		1	2	17.22	17.26	17.28	18.00
		1	5	17.25	17.24	17.20	18.00
		3	0	17.20	17.16	17.26	18.00
		3	2	17.24	17.20	17.28	18.00
		3	3	17.26	17.25	17.20	18.00
		6	0	17.23	17.25	17.24	18.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	17.15	17.19	17.13	18.00
		1	7	17.18	17.23	17.22	18.00
		1	14	17.17	17.13	17.20	18.00
		8	0	17.23	17.30	17.29	18.00
		8	4	17.23	17.23	17.25	18.00
		8	7	17.29	17.29	17.31	18.00
		15	0	17.26	17.30	17.27	18.00
	16QAM	1	0	17.13	17.13	17.29	18.00
		1	7	17.29	17.13	17.36	18.00
		1	14	17.31	17.32	17.34	18.00
		8	0	17.21	17.27	17.27	18.00
		8	4	17.16	17.26	17.28	18.00
		8	7	17.23	17.25	17.32	18.00
		15	0	17.24	17.30	17.26	18.00
	64QAM	1	0	17.32	17.28	17.21	18.00
1		7	17.25	17.28	17.32	18.00	



		1	14	17.27	17.28	17.23	18.00
		8	0	17.25	17.20	17.29	18.00
		8	4	17.29	17.27	17.34	18.00
		8	7	17.30	17.31	17.27	18.00
		15	0	17.25	17.31	17.29	18.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	17.12	17.17	17.09	18.00
		1	13	17.16	17.19	17.19	18.00
		1	24	17.14	17.08	17.16	18.00
		12	0	17.20	17.25	17.25	18.00
		12	6	17.21	17.19	17.20	18.00
		12	13	17.27	17.27	17.27	18.00
		25	0	17.24	17.29	17.25	18.00
	16QAM	1	0	17.10	17.09	17.26	18.00
		1	13	17.26	17.11	17.33	18.00
		1	24	17.28	17.30	17.30	18.00
		12	0	17.19	17.23	17.24	18.00
		12	6	17.13	17.21	17.24	18.00
		12	13	17.20	17.20	17.28	18.00
		25	0	17.22	17.26	17.21	18.00
	64QAM	1	0	17.29	17.24	17.18	18.00
		1	13	17.22	17.26	17.29	18.00
		1	24	17.24	17.26	17.19	18.00
		12	0	17.23	17.16	17.26	18.00
		12	6	17.26	17.22	17.30	18.00
		12	13	17.27	17.26	17.23	18.00
		25	0	17.23	17.27	17.24	18.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	17.13	17.16	17.11	18.00
		1	25	17.17	17.23	17.21	18.00
		1	49	17.15	17.10	17.18	18.00
		25	0	17.21	17.29	17.27	18.00
		25	13	17.23	17.22	17.23	18.00
		25	25	17.27	17.27	17.31	18.00
		50	0	17.24	17.30	17.26	18.00
	16QAM	1	0	17.09	17.07	17.26	18.00
		1	25	17.28	17.14	17.31	18.00
		1	49	17.29	17.28	17.32	18.00
		25	0	17.17	17.27	17.25	18.00
		25	13	17.12	17.20	17.25	18.00
		25	25	17.22	17.24	17.27	18.00



	64QAM	50	0	17.21	17.28	17.21	18.00
		1	0	17.29	17.23	17.19	18.00
		1	25	17.24	17.28	17.29	18.00
		1	49	17.24	17.23	17.20	18.00
		25	0	17.25	17.20	17.25	18.00
		25	13	17.24	17.23	17.29	18.00
		25	25	17.28	17.27	17.26	18.00
		50	0	17.25	17.30	17.25	18.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	17.13	17.14	17.10	18.00
		1	38	17.17	17.23	17.20	18.00
		1	74	17.13	17.07	17.15	18.00
		36	0	17.21	17.26	17.26	18.00
		36	18	17.21	17.19	17.20	18.00
		36	39	17.26	17.28	17.28	18.00
		75	0	17.27	17.27	17.24	18.00
	16QAM	1	0	17.07	17.10	17.26	18.00
		1	38	17.27	17.12	17.34	18.00
		1	74	17.28	17.28	17.30	18.00
		36	0	17.19	17.26	17.25	18.00
		36	18	17.12	17.20	17.23	18.00
		36	39	17.21	17.21	17.29	18.00
		75	0	17.22	17.26	17.21	18.00
	64QAM	1	0	17.26	17.25	17.18	18.00
		1	38	17.23	17.27	17.30	18.00
		1	74	17.24	17.24	17.19	18.00
		36	0	17.23	17.19	17.27	18.00
		36	18	17.25	17.21	17.29	18.00
		36	39	17.28	17.27	17.24	18.00
		75	0	17.23	17.27	17.24	18.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	17.10	17.10	17.07	18.00
		1	50	17.16	17.19	17.18	18.00
		1	99	17.11	17.06	17.12	18.00
		50	0	17.18	17.21	17.22	18.00
		50	25	17.19	17.15	17.17	18.00
		50	50	17.23	17.23	17.24	18.00
		100	0	17.24	17.22	17.20	18.00
	16QAM	1	0	17.05	17.06	17.21	18.00
		1	50	17.23	17.10	17.30	18.00
		1	99	17.26	17.25	17.28	18.00



		50	0	17.16	17.22	17.22	18.00
		50	25	17.09	17.18	17.20	18.00
		50	50	17.18	17.16	17.25	18.00
		100	0	17.20	17.22	17.18	18.00
	64QAM	1	0	17.24	17.21	17.13	18.00
		1	50	17.19	17.25	17.26	18.00
		1	99	17.22	17.21	17.17	18.00
		50	0	17.20	17.15	17.24	18.00
		50	25	17.22	17.19	17.26	18.00
		50	50	17.25	17.22	17.20	18.00
		100	0	17.21	17.23	17.21	18.00

LTE FDD Band 4 Full Power&D1				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	24.54	24.50	24.59	25.50
		1	2	24.43	24.39	24.43	25.50
		1	5	24.49	24.48	24.55	25.50
		3	0	24.59	24.54	24.63	25.50
		3	2	24.44	24.40	24.48	25.50
		3	3	24.58	24.53	24.59	25.50
		6	0	23.71	23.66	23.74	24.50
	16QAM	1	0	23.81	23.77	23.84	24.50
		1	2	23.84	23.82	23.85	24.50
		1	5	23.78	23.75	23.82	24.50
		3	0	23.85	23.81	23.86	24.50
		3	2	23.85	23.83	23.91	24.50
		3	3	23.85	23.80	23.89	24.50
		6	0	22.73	22.69	22.77	23.50
	64QAM	1	0	23.84	23.80	23.87	24.00
		1	2	23.80	23.78	23.81	24.00
		1	5	23.82	23.76	23.83	24.00
		3	0	23.90	23.82	23.87	24.00
		3	2	23.86	23.82	23.90	24.00
		3	3	23.86	23.81	23.90	24.00
		6	0	22.75	22.71	22.79	23.00
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	24.46	24.55	24.39	25.50
		1	7	24.37	24.39	24.29	25.50
		1	14	24.44	24.54	24.06	25.50
		8	0	23.58	23.73	23.65	24.50



		8	4	23.59	23.78	23.67	24.50
		8	7	23.63	23.74	23.58	24.50
		15	0	23.56	23.78	23.66	24.50
	16QAM	1	0	23.85	23.79	23.86	24.50
		1	7	23.83	23.68	23.76	24.50
		1	14	23.84	23.79	23.79	24.50
		8	0	22.79	22.72	22.73	23.50
		8	4	22.88	22.77	22.82	23.50
		8	7	22.90	22.85	22.85	23.50
		15	0	22.75	22.70	22.72	23.50
	64QAM	1	0	23.78	23.66	23.73	24.00
		1	7	23.97	23.82	23.90	24.00
		1	14	23.73	23.63	23.64	24.00
		8	0	22.88	22.79	22.84	23.00
		8	4	22.96	22.83	22.89	23.00
		8	7	22.86	22.81	22.81	23.00
		15	0	22.92	22.87	22.89	23.00
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	24.43	24.53	24.35	25.50
		1	13	24.35	24.35	24.26	25.50
		1	24	24.41	24.49	24.02	25.50
		12	0	23.55	23.68	23.61	24.50
		12	6	23.57	23.74	23.62	24.50
		12	13	23.61	23.72	23.54	24.50
		25	0	23.56	23.77	23.64	24.50
	16QAM	1	0	23.82	23.75	23.83	24.50
		1	13	23.80	23.66	23.73	24.50
		1	24	23.81	23.77	23.75	24.50
		12	0	22.77	22.68	22.70	23.50
		12	6	22.85	22.72	22.78	23.50
		12	13	22.87	22.80	22.81	23.50
		25	0	22.73	22.66	22.67	23.50
	64QAM	1	0	23.75	23.66	23.70	24.00
		1	13	23.94	23.84	23.87	24.00
		1	24	23.74	23.61	23.60	24.00
		12	0	22.86	22.75	22.85	23.00
		12	6	22.93	22.78	22.85	23.00
		12	13	22.83	22.76	22.77	23.00
		25	0	22.90	22.83	22.84	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	24.45	24.54	24.38	25.50



		1	25	24.38	24.40	24.30	25.50
		1	49	24.43	24.53	24.05	25.50
		25	0	23.58	23.73	23.65	24.50
		25	13	23.60	23.79	23.66	24.50
		25	25	23.63	23.76	23.59	24.50
		50	0	23.60	23.79	23.68	24.50
	16QAM	1	0	23.84	23.78	23.85	24.50
		1	25	23.83	23.70	23.76	24.50
		1	49	23.84	23.79	23.78	24.50
		25	0	22.80	22.73	22.74	23.50
		25	13	22.87	22.76	22.81	23.50
		25	25	22.90	22.85	22.85	23.50
		50	0	22.76	22.71	22.71	23.50
	64QAM	1	0	23.77	23.65	23.72	24.00
		1	25	23.97	23.84	23.90	24.00
		1	49	23.73	23.63	23.63	24.00
		25	0	22.89	22.80	22.85	23.00
		25	13	22.95	22.82	22.88	23.00
		25	25	22.86	22.81	22.81	23.00
		50	0	22.93	22.88	22.88	23.00
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	24.44	24.50	24.36	25.50
		1	38	24.36	24.39	24.27	25.50
		1	74	24.40	24.48	24.01	25.50
		36	0	23.56	23.69	23.62	24.50
		36	18	23.57	23.74	23.62	24.50
		36	39	23.60	23.73	23.55	24.50
		75	0	23.58	23.75	23.63	24.50
	16QAM	1	0	23.79	23.76	23.83	24.50
		1	38	23.81	23.67	23.74	24.50
		1	74	23.81	23.75	23.75	24.50
		36	0	22.77	22.71	22.71	23.50
		36	18	22.84	22.71	22.77	23.50
		36	39	22.88	22.81	22.82	23.50
		75	0	22.73	22.66	22.67	23.50
	64QAM	1	0	23.72	23.63	23.70	24.00
		1	38	23.95	23.81	23.88	24.00
		1	74	23.74	23.62	23.64	24.00
		36	0	22.88	22.82	22.86	23.00
		36	18	22.93	22.79	22.87	23.00
		36	39	22.84	22.77	22.78	23.00
		75	0	22.90	22.83	22.84	23.00



Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	24.41	24.46	24.33	25.50
		1	50	24.35	24.35	24.25	25.50
		1	99	24.38	24.47	23.98	25.50
		50	0	23.53	23.64	23.58	24.50
		50	25	23.55	23.70	23.59	24.50
		50	50	23.57	23.68	23.51	24.50
		100	0	23.55	23.70	23.59	24.50
	16QAM	1	0	23.75	23.72	23.78	24.50
		1	50	23.77	23.65	23.70	24.50
		1	99	23.79	23.72	23.73	24.50
		50	0	22.74	22.67	22.68	23.50
		50	25	22.81	22.69	22.74	23.50
		50	50	22.85	22.76	22.78	23.50
		100	0	22.71	22.62	22.64	23.50
	64QAM	1	0	23.70	23.59	23.65	24.00
		1	50	23.91	23.79	23.84	24.00
		1	99	23.68	23.56	23.58	24.00
		50	0	22.83	22.74	22.79	23.00
		50	25	22.89	22.75	22.81	23.00
		50	50	22.81	22.72	22.74	23.00
		100	0	22.88	22.79	22.81	23.00

LTE FDD Band 4 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	23.05	23.24	23.14	24.00
		1	2	23.13	23.17	23.12	24.00
		1	5	22.87	22.91	22.88	24.00
		3	0	23.12	23.18	23.06	24.00
		3	2	23.02	23.12	23.05	24.00
		3	3	22.97	23.08	23.01	24.00
		6	0	22.99	23.15	23.06	24.00
	16QAM	1	0	23.31	23.43	23.32	24.00
		1	2	23.29	23.33	23.34	24.00
		1	5	23.22	23.30	23.28	24.00
		3	0	23.58	23.67	23.63	24.00
		3	2	23.55	23.59	23.50	24.00
		3	3	23.61	23.53	23.62	24.00
		6	0	22.42	22.63	22.42	23.00
	64QAM	1	0	23.22	23.32	23.36	24.00



		1	2	23.23	23.21	23.31	24.00
		1	5	23.29	23.04	23.13	24.00
		3	0	23.43	23.60	23.48	24.00
		3	2	23.53	23.60	23.45	24.00
		3	3	23.55	23.50	23.56	24.00
		6	0	22.57	22.65	22.38	23.00
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	23.07	23.28	23.17	24.00
		1	7	23.11	23.20	23.16	24.00
		1	14	22.90	22.96	22.92	24.00
		8	0	23.12	23.30	23.19	24.00
		8	4	23.04	23.25	23.17	24.00
		8	7	22.99	23.19	23.11	24.00
		15	0	22.99	23.19	23.09	24.00
	16QAM	1	0	23.34	23.45	23.35	24.00
		1	7	23.32	23.33	23.38	24.00
		1	14	23.24	23.34	23.31	24.00
		8	0	22.69	22.80	22.75	23.00
		8	4	22.66	22.72	22.62	23.00
		8	7	22.71	22.65	22.75	23.00
		15	0	22.45	22.67	22.45	23.00
	64QAM	1	0	23.25	23.34	23.39	24.00
		1	7	23.26	23.21	23.33	24.00
		1	14	23.31	23.03	23.16	24.00
		8	0	22.54	22.73	22.60	23.00
		8	4	22.64	22.73	22.57	23.00
		8	7	22.65	22.62	22.69	23.00
		15	0	22.60	22.69	22.41	23.00
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	23.04	23.26	23.13	24.00
		1	13	23.09	23.16	23.13	24.00
		1	24	22.87	22.91	22.88	24.00
		12	0	23.09	23.25	23.15	24.00
		12	6	23.02	23.21	23.12	24.00
		12	13	22.97	23.17	23.07	24.00
		25	0	22.99	23.18	23.07	24.00
	16QAM	1	0	23.31	23.41	23.32	24.00
		1	13	23.29	23.31	23.35	24.00
		1	24	23.21	23.32	23.27	24.00
		12	0	22.67	22.76	22.72	23.00
		12	6	22.63	22.67	22.58	23.00



		12	13	22.68	22.60	22.71	23.00
		25	0	22.43	22.63	22.40	23.00
	64QAM	1	0	23.22	23.34	23.36	24.00
		1	13	23.23	23.23	23.30	24.00
		1	24	23.32	23.01	23.12	24.00
		12	0	22.52	22.69	22.61	23.00
		12	6	22.61	22.68	22.53	23.00
		12	13	22.62	22.57	22.65	23.00
		25	0	22.58	22.65	22.36	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	23.06	23.27	23.16	24.00
		1	25	23.12	23.21	23.17	24.00
		1	49	22.89	22.95	22.91	24.00
		25	0	23.12	23.30	23.19	24.00
		25	13	23.05	23.26	23.16	24.00
		25	25	22.99	23.21	23.12	24.00
		50	0	23.03	23.20	23.11	24.00
	16QAM	1	0	23.33	23.44	23.34	24.00
		1	25	23.32	23.35	23.38	24.00
		1	49	23.24	23.34	23.30	24.00
		25	0	22.70	22.81	22.76	23.00
		25	13	22.65	22.71	22.61	23.00
		25	25	22.71	22.65	22.75	23.00
		50	0	22.46	22.68	22.44	23.00
	64QAM	1	0	23.24	23.33	23.38	24.00
		1	25	23.26	23.23	23.33	24.00
		1	49	23.31	23.03	23.15	24.00
		25	0	22.55	22.74	22.61	23.00
		25	13	22.63	22.72	22.56	23.00
		25	25	22.65	22.62	22.69	23.00
		50	0	22.61	22.70	22.40	23.00
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	23.05	23.23	23.14	24.00
		1	38	23.10	23.20	23.14	24.00
		1	74	22.86	22.90	22.87	24.00
		36	0	23.10	23.26	23.16	24.00
		36	18	23.02	23.21	23.12	24.00
		36	39	22.96	23.18	23.08	24.00
		75	0	23.01	23.16	23.06	24.00
	16QAM	1	0	23.28	23.42	23.32	24.00
		1	38	23.30	23.32	23.36	24.00



		1	74	23.21	23.30	23.27	24.00
		36	0	22.67	22.79	22.73	23.00
		36	18	22.62	22.66	22.57	23.00
		36	39	22.69	22.61	22.72	23.00
		75	0	22.43	22.63	22.40	23.00
	64QAM	1	0	23.19	23.31	23.36	24.00
		1	38	23.24	23.20	23.31	24.00
		1	74	23.32	23.02	23.16	24.00
		36	0	22.54	22.76	22.62	23.00
		36	18	22.61	22.69	22.55	23.00
		36	39	22.63	22.58	22.66	23.00
		75	0	22.58	22.65	22.36	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	23.02	23.19	23.11	24.00
		1	50	23.09	23.16	23.12	24.00
		1	99	22.84	22.89	22.84	24.00
		50	0	23.07	23.21	23.12	24.00
		50	25	23.00	23.17	23.09	24.00
		50	50	22.93	23.13	23.04	24.00
		100	0	22.98	23.11	23.02	24.00
	16QAM	1	0	23.30	23.38	23.27	24.00
		1	50	23.26	23.30	23.32	24.00
		1	99	23.19	23.27	23.25	24.00
		50	0	22.64	22.75	22.70	23.00
		50	25	22.59	22.64	22.54	23.00
		50	50	22.66	22.56	22.68	23.00
		100	0	22.41	22.59	22.37	23.00
	64QAM	1	0	23.17	23.27	23.31	24.00
		1	50	23.20	23.18	23.27	24.00
		1	99	23.26	22.96	23.10	24.00
		50	0	22.49	22.68	22.55	23.00
		50	25	22.57	22.65	22.49	23.00
		50	50	22.60	22.53	22.62	23.00
		100	0	22.56	22.61	22.33	23.00

LTE FDD Band 4 D3 & D4				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	17.62	17.66	17.69	18.50
		1	2	17.48	17.53	17.57	18.50
		1	5	17.56	17.59	17.63	18.50



		3	0	17.69	17.77	17.64	18.50
		3	2	17.66	17.66	17.71	18.50
		3	3	17.59	17.61	17.74	18.50
		6	0	17.63	17.69	17.74	18.50
	16QAM	1	0	17.75	17.79	17.69	18.50
		1	2	17.59	17.63	17.67	18.50
		1	5	17.65	17.61	17.58	18.50
		3	0	17.71	17.74	17.57	18.50
		3	2	17.60	17.77	17.98	18.50
		3	3	17.61	17.70	17.55	18.50
		6	0	17.52	17.65	17.69	18.50
	64QAM	1	0	17.74	17.71	17.53	18.50
		1	2	17.74	17.70	17.51	18.50
		1	5	17.65	17.75	17.43	18.50
		3	0	17.53	17.69	17.71	18.50
		3	2	17.73	17.73	17.90	18.50
		3	3	17.61	17.66	17.87	18.50
		6	0	17.64	17.67	17.58	18.50
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	17.64	17.70	17.72	18.50
		1	7	17.48	17.55	17.61	18.50
		1	14	17.59	17.64	17.67	18.50
		8	0	17.73	17.84	17.71	18.50
		8	4	17.69	17.74	17.77	18.50
		8	7	17.63	17.66	17.78	18.50
		15	0	17.65	17.73	17.77	18.50
	16QAM	1	0	17.78	17.81	17.72	18.50
		1	7	17.62	17.65	17.71	18.50
		1	14	17.67	17.65	17.61	18.50
		8	0	17.76	17.78	17.60	18.50
		8	4	17.65	17.84	18.04	18.50
		8	7	17.65	17.76	17.62	18.50
		15	0	17.55	17.69	17.72	18.50
	64QAM	1	0	17.77	17.73	17.56	18.50
		1	7	17.77	17.72	17.55	18.50
		1	14	17.67	17.79	17.46	18.50
		8	0	17.58	17.73	17.74	18.50
		8	4	17.78	17.80	17.96	18.50
		8	7	17.65	17.72	17.94	18.50
		15	0	17.66	17.73	17.63	18.50
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	17.61	17.68	17.68	18.50
		1	13	17.46	17.51	17.58	18.50
		1	24	17.56	17.59	17.63	18.50
		12	0	17.70	17.79	17.67	18.50
		12	6	17.67	17.70	17.72	18.50
		12	13	17.61	17.64	17.74	18.50
		25	0	17.63	17.72	17.75	18.50
	16QAM	1	0	17.75	17.77	17.69	18.50
		1	13	17.59	17.63	17.68	18.50
		1	24	17.64	17.63	17.57	18.50
		12	0	17.74	17.74	17.57	18.50
		12	6	17.62	17.79	18.00	18.50
		12	13	17.62	17.71	17.58	18.50
		25	0	17.53	17.65	17.67	18.50
	64QAM	1	0	17.74	17.69	17.53	18.50
		1	13	17.74	17.70	17.52	18.50
		1	24	17.64	17.77	17.42	18.50
		12	0	17.56	17.69	17.71	18.50
		12	6	17.75	17.75	17.92	18.50
		12	13	17.62	17.67	17.90	18.50
		25	0	17.64	17.69	17.58	18.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	17.62	17.67	17.70	18.50
		1	25	17.47	17.55	17.60	18.50
		1	49	17.57	17.61	17.65	18.50
		25	0	17.71	17.83	17.69	18.50
		25	13	17.69	17.73	17.75	18.50
		25	25	17.61	17.64	17.78	18.50
		50	0	17.63	17.73	17.76	18.50
	16QAM	1	0	17.74	17.75	17.69	18.50
		1	25	17.61	17.66	17.66	18.50
		1	49	17.65	17.61	17.59	18.50
		25	0	17.72	17.78	17.58	18.50
		25	13	17.61	17.78	18.01	18.50
		25	25	17.64	17.75	17.57	18.50
		50	0	17.52	17.67	17.67	18.50
	64QAM	1	0	17.74	17.68	17.54	18.50
		1	25	17.76	17.72	17.52	18.50
		1	49	17.64	17.74	17.43	18.50
		25	0	17.58	17.73	17.70	18.50
		25	13	17.73	17.76	17.91	18.50
		25	25	17.63	17.68	17.93	18.50



		50	0	17.66	17.72	17.59	18.50
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	17.62	17.65	17.69	18.50
		1	38	17.47	17.55	17.59	18.50
		1	74	17.55	17.58	17.62	18.50
		36	0	17.71	17.80	17.68	18.50
		36	18	17.67	17.70	17.72	18.50
		36	39	17.60	17.65	17.75	18.50
		75	0	17.66	17.70	17.74	18.50
	16QAM	1	0	17.72	17.78	17.69	18.50
		1	38	17.60	17.64	17.69	18.50
		1	74	17.64	17.61	17.57	18.50
		36	0	17.74	17.77	17.58	18.50
		36	18	17.61	17.78	17.99	18.50
		36	39	17.63	17.72	17.59	18.50
		75	0	17.53	17.65	17.67	18.50
	64QAM	1	0	17.71	17.70	17.53	18.50
		1	38	17.75	17.71	17.53	18.50
		1	74	17.64	17.75	17.42	18.50
		36	0	17.56	17.72	17.72	18.50
		36	18	17.74	17.74	17.91	18.50
		36	39	17.63	17.68	17.91	18.50
		75	0	17.64	17.69	17.58	18.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	17.59	17.61	17.66	18.50
		1	50	17.46	17.51	17.57	18.50
		1	99	17.53	17.57	17.59	18.50
		50	0	17.68	17.75	17.64	18.50
		50	25	17.65	17.66	17.69	18.50
		50	50	17.57	17.60	17.71	18.50
		100	0	17.63	17.65	17.70	18.50
	16QAM	1	0	17.70	17.74	17.64	18.50
		1	50	17.56	17.62	17.65	18.50
		1	99	17.62	17.58	17.55	18.50
		50	0	17.71	17.73	17.55	18.50
		50	25	17.58	17.76	17.96	18.50
		50	50	17.60	17.67	17.55	18.50
		100	0	17.51	17.61	17.64	18.50
	64QAM	1	0	17.69	17.66	17.48	18.50
		1	50	17.71	17.69	17.49	18.50
		1	99	17.62	17.72	17.40	18.50



		50	0	17.53	17.68	17.69	18.50
		50	25	17.71	17.72	17.88	18.50
		50	50	17.60	17.63	17.87	18.50
		100	0	17.62	17.65	17.55	18.50

LTE FDD Band 5 Full Power&D1&D2&D3 & D4				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	24.49	24.39	24.44	25.50
		1	2	24.35	24.37	24.28	25.50
		1	5	24.27	24.37	24.31	25.50
		3	0	24.40	24.45	24.35	25.50
		3	2	24.41	24.47	24.36	25.50
		3	3	24.40	24.50	24.29	25.50
		6	0	23.38	23.58	23.51	24.50
	16QAM	1	0	23.17	23.36	23.28	24.50
		1	2	23.15	23.33	23.29	24.50
		1	5	22.96	23.28	23.15	24.50
		3	0	23.08	23.36	23.22	24.50
		3	2	23.03	23.34	23.20	24.50
		3	3	23.02	23.31	23.21	24.50
		6	0	22.16	22.41	22.35	23.50
	64QAM	1	0	22.97	23.29	23.23	24.00
		1	2	22.96	23.25	23.18	24.00
		1	5	23.12	23.46	23.13	24.00
		3	0	23.27	23.47	23.29	24.00
		3	2	23.34	23.58	23.38	24.00
		3	3	23.27	23.45	23.26	24.00
		6	0	22.30	22.47	22.36	23.00
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	24.48	24.41	24.43	25.50
		1	7	24.31	24.36	24.29	25.50
		1	14	24.27	24.37	24.31	25.50
		8	0	23.47	23.52	23.44	24.50
		8	4	23.51	23.53	23.43	24.50
		8	7	23.48	23.59	23.35	24.50
		15	0	23.38	23.61	23.52	24.50
	16QAM	1	0	23.17	23.34	23.28	24.50
		1	7	23.15	23.31	23.30	24.50
		1	14	22.95	23.30	23.14	24.50
		8	0	22.17	22.45	22.31	23.50



		8	4	22.11	22.42	22.28	23.50
		8	7	22.09	22.38	22.30	23.50
		15	0	22.17	22.41	22.33	23.50
	64QAM	1	0	22.97	23.31	23.23	24.00
		1	7	22.96	23.27	23.17	24.00
		1	14	23.15	23.43	23.12	24.00
		8	0	22.36	22.56	22.42	23.00
		8	4	22.42	22.66	22.46	23.00
		8	7	22.34	22.52	22.35	23.00
		15	0	22.31	22.47	22.34	23.00
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	24.49	24.38	24.44	25.50
		1	13	24.32	24.40	24.30	25.50
		1	24	24.26	24.36	24.30	25.50
		12	0	23.48	23.53	23.45	24.50
		12	6	23.51	23.53	23.43	24.50
		12	13	23.47	23.60	23.36	24.50
		25	0	23.40	23.59	23.51	24.50
	16QAM	1	0	23.14	23.35	23.28	24.50
		1	13	23.16	23.32	23.31	24.50
		1	24	22.95	23.28	23.14	24.50
		12	0	22.17	22.48	22.32	23.50
		12	6	22.10	22.41	22.27	23.50
		12	13	22.10	22.39	22.31	23.50
		25	0	22.17	22.41	22.33	23.50
	64QAM	1	0	22.94	23.28	23.23	24.00
		1	13	22.97	23.24	23.18	24.00
		1	24	23.15	23.44	23.16	24.00
		12	0	22.38	22.63	22.43	23.00
		12	6	22.42	22.67	22.48	23.00
		12	13	22.35	22.53	22.36	23.00
		25	0	22.31	22.47	22.34	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	24.46	24.34	24.41	25.50
		1	25	24.31	24.36	24.28	25.50
		1	49	24.24	24.35	24.27	25.50
		25	0	23.45	23.48	23.41	24.50
		25	13	23.49	23.49	23.40	24.50
		25	25	23.44	23.55	23.32	24.50
		50	0	23.37	23.54	23.47	24.50
	16QAM	1	0	23.09	23.31	23.23	24.50



		1	25	23.12	23.30	23.27	24.50
		1	49	22.93	23.25	23.12	24.50
		25	0	22.14	22.44	22.29	23.50
		25	13	22.07	22.39	22.24	23.50
		25	25	22.07	22.34	22.27	23.50
		50	0	22.15	22.37	22.30	23.50
	64QAM	1	0	22.92	23.24	23.18	24.00
		1	25	22.93	23.22	23.14	24.00
		1	49	23.09	23.38	23.10	24.00
		25	0	22.33	22.55	22.36	23.00
		25	13	22.38	22.63	22.42	23.00
		25	25	22.32	22.48	22.32	23.00
		50	0	22.29	22.43	22.31	23.00

LTE FDD Band 7 Full Power&D1				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	24.35	24.37	24.61	25.50
		1	13	24.30	24.32	24.55	25.50
		1	24	24.57	24.38	24.57	25.50
		12	0	23.49	23.66	23.72	24.50
		12	6	23.60	23.69	23.83	24.50
		12	13	23.67	23.68	23.73	24.50
		25	0	23.62	23.79	23.73	24.50
	16QAM	1	0	23.49	23.50	23.68	24.50
		1	13	23.47	23.52	23.58	24.50
		1	24	23.51	23.63	23.70	24.50
		12	0	22.71	22.78	22.93	23.50
		12	6	22.79	22.91	23.00	23.50
		12	13	22.65	22.75	22.84	23.50
		25	0	22.57	22.76	22.79	23.50
	64QAM	1	0	23.61	23.72	23.81	24.00
		1	13	23.57	23.65	23.69	24.00
		1	24	23.53	23.59	23.68	24.00
		12	0	22.74	22.78	22.93	23.00
		12	6	22.82	22.89	22.92	23.00
		12	13	22.66	22.77	22.90	23.00
		25	0	22.62	22.77	22.84	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	24.37	24.38	24.64	25.50
		1	25	24.33	24.37	24.59	25.50



		1	49	24.59	24.42	24.60	25.50
		25	0	23.52	23.71	23.76	24.50
		25	13	23.63	23.74	23.87	24.50
		25	25	23.69	23.72	23.78	24.50
		50	0	23.66	23.81	23.77	24.50
	16QAM	1	0	23.51	23.53	23.70	24.50
		1	25	23.50	23.56	23.61	24.50
		1	49	23.54	23.65	23.73	24.50
		25	0	22.74	22.83	22.97	23.50
		25	13	22.81	22.95	23.03	23.50
		25	25	22.68	22.80	22.88	23.50
		50	0	22.60	22.81	22.83	23.50
	64QAM	1	0	23.63	23.71	23.83	24.00
		1	25	23.60	23.65	23.72	24.00
		1	49	23.52	23.61	23.71	24.00
		25	0	22.77	22.83	22.93	23.00
		25	13	22.84	22.93	22.80	23.00
		25	25	22.69	22.82	22.94	23.00
		50	0	22.65	22.82	22.88	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	24.36	24.34	24.62	25.50
		1	38	24.31	24.36	24.56	25.50
		1	74	24.56	24.37	24.56	25.50
		36	0	23.50	23.67	23.73	24.50
		36	18	23.60	23.69	23.83	24.50
		36	39	23.66	23.69	23.74	24.50
		75	0	23.64	23.77	23.72	24.50
	16QAM	1	0	23.46	23.51	23.68	24.50
		1	38	23.48	23.53	23.59	24.50
		1	74	23.51	23.61	23.70	24.50
		36	0	22.71	22.81	22.94	23.50
		36	18	22.78	22.90	22.99	23.50
		36	39	22.66	22.76	22.85	23.50
		75	0	22.57	22.76	22.79	23.50
	64QAM	1	0	23.58	23.69	23.81	24.00
		1	38	23.58	23.62	23.70	24.00
		1	74	23.53	23.60	23.72	24.00
		36	0	22.76	22.85	22.94	23.00
		36	18	22.82	22.90	22.86	23.00
		36	39	22.67	22.78	22.91	23.00
		75	0	22.62	22.77	22.84	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up



				20850/2510	21100/2535	21350/2560	Limit
20MHz	QPSK	1	0	24.33	24.30	24.59	25.50
		1	50	24.30	24.32	24.54	25.50
		1	99	24.54	24.36	24.53	25.50
		50	0	23.47	23.62	23.69	24.50
		50	25	23.58	23.65	23.80	24.50
		50	50	23.63	23.64	23.70	24.50
		100	0	23.61	23.72	23.68	24.50
	16QAM	1	0	23.41	23.47	23.63	24.50
		1	50	23.44	23.51	23.55	24.50
		1	99	23.49	23.58	23.68	24.50
		50	0	22.68	22.77	22.91	23.50
		50	25	22.75	22.88	22.96	23.50
		50	50	22.63	22.71	22.81	23.50
		100	0	22.55	22.72	22.76	23.50
	64QAM	1	0	23.56	23.65	23.76	24.00
		1	50	23.54	23.60	23.66	24.00
		1	99	23.47	23.54	23.66	24.00
		50	0	22.71	22.77	22.87	23.00
		50	25	22.78	22.86	22.90	23.00
		50	50	22.64	22.73	22.87	23.00
		100	0	22.60	22.73	22.81	23.00

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	22.81	22.93	22.83	24.00
		1	13	22.84	22.79	22.87	24.00
		1	24	22.71	22.91	22.79	24.00
		12	0	22.32	22.99	22.52	24.00
		12	6	22.77	23.13	23.06	24.00
		12	13	22.96	22.78	22.98	24.00
		25	0	22.61	22.90	22.58	24.00
	16QAM	1	0	22.94	23.07	23.02	24.00
		1	13	22.92	23.13	23.05	24.00
		1	24	22.80	22.92	22.92	24.00
		12	0	22.05	22.09	22.17	23.50
		12	6	22.24	22.30	22.40	23.50
		12	13	22.18	22.07	22.23	23.50
		25	0	22.23	22.12	22.14	23.50
	64QAM	1	0	22.97	22.90	22.84	24.00
		1	13	22.82	23.00	22.85	24.00



		1	24	22.68	22.79	22.69	24.00
		12	0	22.03	22.10	22.08	23.50
		12	6	22.39	22.34	22.17	23.50
		12	13	21.92	22.03	22.04	23.50
		25	0	22.23	22.08	22.17	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	22.83	22.94	22.86	24.00
		1	25	22.87	22.84	22.91	24.00
		1	49	22.73	22.95	22.82	24.00
		25	0	22.35	23.04	22.56	24.00
		25	13	22.80	23.18	23.10	24.00
		25	25	22.98	22.82	23.03	24.00
		50	0	22.65	22.92	22.62	24.00
	16QAM	1	0	22.96	23.10	23.04	24.00
		1	25	22.95	23.17	23.08	24.00
		1	49	22.83	22.94	22.95	24.00
		25	0	22.08	22.14	22.21	23.50
		25	13	22.26	22.34	22.43	23.50
		25	25	22.21	22.12	22.27	23.50
		50	0	22.26	22.17	22.18	23.50
	64QAM	1	0	22.99	22.89	22.86	24.00
		1	25	22.85	23.00	22.88	24.00
		1	49	22.67	22.81	22.72	24.00
		25	0	22.06	22.15	22.08	23.50
		25	13	22.41	22.38	22.20	23.50
		25	25	21.95	22.08	22.08	23.50
		50	0	22.26	22.13	22.21	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	22.82	22.90	22.84	24.00
		1	38	22.85	22.83	22.88	24.00
		1	74	22.70	22.90	22.78	24.00
		36	0	22.33	23.00	22.53	24.00
		36	18	22.77	23.13	23.06	24.00
		36	39	22.95	22.79	22.99	24.00
		75	0	22.63	22.88	22.57	24.00
	16QAM	1	0	22.91	23.08	23.02	24.00
		1	38	22.93	23.14	23.06	24.00
		1	74	22.80	22.90	22.92	24.00
		36	0	22.05	22.12	22.18	23.50
		36	18	22.23	22.29	22.39	23.50
		36	39	22.19	22.08	22.24	23.50



	64QAM	75	0	22.23	22.12	22.14	23.50
		1	0	22.94	22.87	22.84	24.00
		1	38	22.83	22.97	22.86	24.00
		1	74	22.68	22.80	22.73	24.00
		36	0	22.05	22.17	22.09	23.50
		36	18	22.39	22.35	22.19	23.50
		36	39	21.93	22.04	22.05	23.50
		75	0	22.23	22.08	22.17	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	22.79	22.86	22.81	24.00
		1	50	22.84	22.79	22.86	24.00
		1	99	22.68	22.89	22.75	24.00
		50	0	22.30	22.95	22.49	24.00
		50	25	22.75	23.09	23.03	24.00
		50	50	22.92	22.74	22.95	24.00
		100	0	22.60	22.83	22.53	24.00
	16QAM	1	0	22.92	23.04	22.97	24.00
		1	50	22.89	23.12	23.02	24.00
		1	99	22.78	22.87	22.90	24.00
		50	0	22.02	22.08	22.15	23.50
		50	25	22.20	22.27	22.36	23.50
		50	50	22.16	22.03	22.20	23.50
		100	0	22.21	22.08	22.11	23.50
	64QAM	1	0	22.92	22.83	22.79	24.00
		1	50	22.79	22.95	22.82	24.00
		1	99	22.62	22.74	22.67	24.00
		50	0	22.00	22.09	22.02	23.50
		50	25	22.35	22.31	22.13	23.50
		50	50	21.90	21.99	22.01	23.50
		100	0	22.21	22.04	22.14	23.50

LTE FDD Band 7 D3 & D4				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	19.06	19.05	19.05	20.00
		1	13	19.08	19.10	19.14	20.00
		1	24	19.06	19.11	19.28	20.00
		12	0	19.12	19.21	19.31	20.00
		12	6	19.20	19.27	19.36	20.00
		12	13	19.21	19.22	19.25	20.00
		25	0	19.12	19.19	19.31	20.00



	16QAM	1	0	19.27	19.31	19.37	20.00
		1	13	19.33	19.32	19.25	20.00
		1	24	19.34	19.44	19.17	20.00
		12	0	19.28	19.26	19.13	20.00
		12	6	19.29	19.31	19.30	20.00
		12	13	19.35	19.26	19.24	20.00
		25	0	19.15	19.23	19.19	20.00
	64QAM	1	0	19.20	19.15	19.21	20.00
		1	13	19.35	19.28	19.29	20.00
		1	24	19.24	19.39	19.37	20.00
		12	0	19.19	19.32	19.33	20.00
		12	6	19.20	19.28	19.53	20.00
		12	13	19.34	19.24	19.32	20.00
		25	0	19.23	19.30	19.38	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	19.07	19.04	19.07	20.00
		1	25	19.09	19.14	19.16	20.00
		1	49	19.07	19.13	19.30	20.00
		25	0	19.13	19.25	19.33	20.00
		25	13	19.22	19.30	19.39	20.00
		25	25	19.21	19.22	19.29	20.00
		50	0	19.12	19.20	19.32	20.00
	16QAM	1	0	19.26	19.29	19.37	20.00
		1	25	19.35	19.35	19.23	20.00
		1	49	19.35	19.42	19.19	20.00
		25	0	19.26	19.30	19.14	20.00
		25	13	19.28	19.30	19.31	20.00
		25	25	19.37	19.30	19.23	20.00
		50	0	19.14	19.25	19.19	20.00
	64QAM	1	0	19.20	19.14	19.22	20.00
		1	25	19.37	19.30	19.29	20.00
		1	49	19.24	19.36	19.38	20.00
		25	0	19.21	19.36	19.32	20.00
		25	13	19.18	19.29	19.52	20.00
		25	25	19.35	19.25	19.35	20.00
		50	0	19.25	19.33	19.39	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	19.07	19.02	19.06	20.00
		1	38	19.09	19.14	19.15	20.00
		1	74	19.05	19.10	19.27	20.00
		36	0	19.13	19.22	19.32	20.00



		36	18	19.20	19.27	19.36	20.00
		36	39	19.20	19.23	19.26	20.00
		75	0	19.15	19.17	19.30	20.00
	16QAM	1	0	19.24	19.32	19.37	20.00
		1	38	19.34	19.33	19.26	20.00
		1	74	19.34	19.42	19.17	20.00
		36	0	19.28	19.29	19.14	20.00
		36	18	19.28	19.30	19.29	20.00
		36	39	19.36	19.27	19.25	20.00
		75	0	19.15	19.23	19.19	20.00
	64QAM	1	0	19.17	19.16	19.21	20.00
		1	38	19.36	19.29	19.30	20.00
		1	74	19.24	19.37	19.37	20.00
		36	0	19.19	19.35	19.34	20.00
		36	18	19.19	19.27	19.52	20.00
		36	39	19.35	19.25	19.33	20.00
		75	0	19.23	19.30	19.38	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	19.04	18.98	19.03	20.00
		1	50	19.08	19.10	19.13	20.00
		1	99	19.03	19.09	19.24	20.00
		50	0	19.10	19.17	19.28	20.00
		50	25	19.18	19.23	19.33	20.00
		50	50	19.17	19.18	19.22	20.00
		100	0	19.12	19.12	19.26	20.00
	16QAM	1	0	19.22	19.28	19.32	20.00
		1	50	19.30	19.31	19.22	20.00
		1	99	19.32	19.39	19.15	20.00
		50	0	19.25	19.25	19.11	20.00
		50	25	19.25	19.28	19.26	20.00
		50	50	19.33	19.22	19.21	20.00
		100	0	19.13	19.19	19.16	20.00
	64QAM	1	0	19.15	19.12	19.16	20.00
		1	50	19.32	19.27	19.26	20.00
		1	99	19.22	19.34	19.35	20.00
		50	0	19.16	19.31	19.31	20.00
		50	25	19.16	19.25	19.49	20.00
		50	50	19.32	19.20	19.29	20.00
		100	0	19.21	19.26	19.35	20.00



LTE TDD Band 38 Full Power & D1				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	24.54	24.47	24.50	25.50
		1	13	24.34	24.42	24.58	25.50
		1	24	24.41	24.35	24.46	25.50
		12	0	23.46	23.63	23.68	24.50
		12	6	23.49	23.71	23.74	24.50
		12	13	23.65	23.70	23.61	24.50
		25	0	23.65	23.63	23.74	24.50
	16QAM	1	0	23.61	23.94	23.72	24.50
		1	13	23.59	23.58	23.53	24.50
		1	24	23.73	23.94	23.64	24.50
		12	0	22.69	22.76	22.55	23.50
		12	6	22.49	22.54	22.40	23.50
		12	13	22.61	22.79	22.50	23.50
		25	0	22.64	22.60	22.61	23.50
	64QAM	1	0	23.60	23.75	23.71	24.00
		1	13	23.50	23.75	23.43	24.00
		1	24	23.64	23.75	23.48	24.00
		12	0	22.67	22.79	22.59	23.00
		12	6	22.64	22.84	22.51	23.00
		12	13	22.62	22.73	22.50	23.00
		25	0	22.55	22.63	22.47	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	24.56	24.48	24.53	25.50
		1	25	24.37	24.47	24.62	25.50
		1	49	24.43	24.39	24.49	25.50
		25	0	23.49	23.68	23.72	24.50
		25	13	23.52	23.76	23.78	24.50
		25	25	23.67	23.74	23.66	24.50
		50	0	23.69	23.65	23.78	24.50
	16QAM	1	0	23.63	23.97	23.74	24.50
		1	25	23.62	23.62	23.56	24.50
		1	49	23.76	23.96	23.67	24.50
		25	0	22.72	22.81	22.59	23.50
		25	13	22.51	22.58	22.43	23.50
		25	25	22.64	22.84	22.54	23.50
		50	0	22.67	22.65	22.65	23.50
	64QAM	1	0	23.62	23.74	23.73	24.00
		1	25	23.53	23.75	23.46	24.00



		1	49	23.63	23.77	23.51	24.00
		25	0	22.70	22.84	22.59	23.00
		25	13	22.66	22.88	22.54	23.00
		25	25	22.65	22.78	22.54	23.00
		50	0	22.58	22.68	22.51	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	24.55	24.44	24.51	25.50
		1	38	24.35	24.46	24.59	25.50
		1	74	24.40	24.34	24.45	25.50
		36	0	23.47	23.64	23.69	24.50
		36	18	23.49	23.71	23.74	24.50
		36	39	23.64	23.71	23.62	24.50
		75	0	23.67	23.61	23.73	24.50
	16QAM	1	0	23.58	23.95	23.72	24.50
		1	38	23.60	23.59	23.54	24.50
		1	74	23.73	23.92	23.64	24.50
		36	0	22.69	22.79	22.56	23.50
		36	18	22.48	22.53	22.39	23.50
		36	39	22.62	22.80	22.51	23.50
		75	0	22.64	22.60	22.61	23.50
	64QAM	1	0	23.57	23.72	23.71	24.00
		1	38	23.51	23.72	23.44	24.00
		1	74	23.64	23.76	23.52	24.00
		36	0	22.69	22.86	22.60	23.00
		36	18	22.64	22.85	22.53	23.00
		36	39	22.63	22.74	22.51	23.00
		75	0	22.55	22.63	22.47	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	24.52	24.40	24.48	25.50
		1	50	24.34	24.42	24.57	25.50
		1	99	24.38	24.33	24.42	25.50
		50	0	23.44	23.59	23.65	24.50
		50	25	23.47	23.67	23.71	24.50
		50	50	23.61	23.66	23.58	24.50
		100	0	23.64	23.56	23.69	24.50
	16QAM	1	0	23.81	23.91	23.67	24.50
		1	50	23.56	23.57	23.50	24.50
		1	99	23.71	23.89	23.62	24.50
		50	0	22.66	22.75	22.53	23.50
		50	25	22.45	22.51	22.36	23.50
		50	50	22.59	22.75	22.47	23.50



		100	0	22.62	22.56	22.58	23.50
	64QAM	1	0	23.55	23.68	23.66	24.00
		1	50	23.47	23.70	23.40	24.00
		1	99	23.58	23.70	23.46	24.00
		50	0	22.64	22.78	22.53	23.00
		50	25	22.60	22.81	22.47	23.00
		50	50	22.60	22.69	22.47	23.00
		100	0	22.53	22.59	22.44	23.00

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	23.42	23.57	23.39	24.50
		1	13	23.44	23.44	23.44	24.50
		1	24	23.53	23.39	23.30	24.50
		12	0	23.60	23.66	23.61	24.50
		12	6	23.53	23.60	23.67	24.50
		12	13	23.67	23.76	23.55	24.50
		25	0	23.43	23.67	23.62	24.50
	16QAM	1	0	23.66	23.59	23.54	24.50
		1	13	23.64	23.58	23.39	24.50
		1	24	23.32	23.47	23.23	24.50
		12	0	22.48	22.61	22.52	23.50
		12	6	22.64	22.74	22.63	23.50
		12	13	22.49	22.69	22.64	23.50
		25	0	22.38	22.60	22.51	23.50
	64QAM	1	0	23.45	23.53	23.57	24.50
		1	13	23.66	23.59	23.64	24.50
		1	24	23.35	23.54	23.41	24.50
		12	0	22.35	22.58	22.52	23.50
		12	6	22.47	22.71	22.55	23.50
		12	13	22.54	22.63	22.63	23.50
		25	0	22.72	22.76	22.57	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	23.44	23.58	23.42	24.50
		1	25	23.47	23.49	23.48	24.50
		1	49	23.55	23.43	23.33	24.50
		25	0	23.63	23.71	23.65	24.50
		25	13	23.56	23.65	23.71	24.50
		25	25	23.69	23.80	23.60	24.50
		50	0	23.47	23.69	23.66	24.50



	16QAM	1	0	23.68	23.62	23.56	24.50
		1	25	23.67	23.62	23.42	24.50
		1	49	23.35	23.49	23.26	24.50
		25	0	22.51	22.66	22.56	23.50
		25	13	22.66	22.78	22.66	23.50
		25	25	22.52	22.74	22.68	23.50
		50	0	22.41	22.65	22.55	23.50
	64QAM	1	0	23.47	23.52	23.59	24.50
		1	25	23.69	23.59	23.67	24.50
		1	49	23.34	23.56	23.44	24.50
		25	0	22.38	22.63	22.52	23.50
		25	13	22.49	22.75	22.58	23.50
		25	25	22.57	22.68	22.67	23.50
		50	0	22.75	22.81	22.61	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	23.43	23.54	23.40	24.50
		1	38	23.45	23.48	23.45	24.50
		1	74	23.52	23.38	23.29	24.50
		36	0	23.61	23.67	23.62	24.50
		36	18	23.53	23.60	23.67	24.50
		36	39	23.66	23.77	23.56	24.50
		75	0	23.45	23.65	23.61	24.50
	16QAM	1	0	23.63	23.60	23.54	24.50
		1	38	23.65	23.59	23.40	24.50
		1	74	23.32	23.45	23.23	24.50
		36	0	22.48	22.64	22.53	23.50
		36	18	22.63	22.73	22.62	23.50
		36	39	22.50	22.70	22.65	23.50
		75	0	22.38	22.60	22.51	23.50
	64QAM	1	0	23.42	23.50	23.57	24.50
		1	38	23.67	23.56	23.65	24.50
		1	74	23.35	23.55	23.45	24.50
		36	0	22.37	22.65	22.53	23.50
		36	18	22.47	22.72	22.57	23.50
		36	39	22.55	22.64	22.64	23.50
		75	0	22.72	22.76	22.57	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	23.40	23.50	23.37	24.50
		1	50	23.44	23.44	23.43	24.50
		1	99	23.50	23.37	23.26	24.50
		50	0	23.58	23.62	23.58	24.50



		50	25	23.51	23.56	23.64	24.50
		50	50	23.63	23.72	23.52	24.50
		100	0	23.42	23.60	23.57	24.50
	16QAM	1	0	23.42	23.56	23.49	24.50
		1	50	23.61	23.57	23.36	24.50
		1	99	23.30	23.42	23.21	24.50
		50	0	22.45	22.60	22.50	23.50
		50	25	22.60	22.71	22.59	23.50
		50	50	22.47	22.65	22.61	23.50
		100	0	22.36	22.56	22.48	23.50
	64QAM	1	0	23.40	23.46	23.52	24.50
		1	50	23.63	23.54	23.61	24.50
		1	99	23.29	23.49	23.39	24.50
		50	0	22.32	22.57	22.46	23.50
		50	25	22.43	22.68	22.51	23.50
		50	50	22.52	22.59	22.60	23.50
		100	0	22.70	22.72	22.54	23.50

LTE TDD Band 38 D3 & D4				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	20.24	20.23	20.22	21.00
		1	13	20.24	20.22	20.28	21.00
		1	24	20.22	20.14	20.15	21.00
		12	0	20.35	20.31	20.31	21.00
		12	6	20.40	20.33	20.28	21.00
		12	13	20.43	20.37	20.33	21.00
		25	0	20.38	20.35	20.37	21.00
	16QAM	1	0	20.16	20.42	20.37	21.00
		1	13	20.58	20.43	20.47	21.00
		1	24	20.65	20.37	20.41	21.00
		12	0	20.38	20.48	20.44	21.00
		12	6	20.50	20.41	20.37	21.00
		12	13	20.24	20.46	20.45	21.00
		25	0	20.38	20.44	20.66	21.00
	64QAM	1	0	20.31	20.40	20.47	21.00
		1	13	20.69	20.26	20.22	21.00
		1	24	20.18	20.34	20.27	21.00
		12	0	20.19	20.35	20.44	21.00
		12	6	20.37	20.44	20.49	21.00
		12	13	20.37	20.43	20.36	21.00
		25	0	20.37	20.32	20.38	21.00



Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	20.25	20.22	20.24	21.00
		1	25	20.25	20.26	20.30	21.00
		1	49	20.23	20.16	20.17	21.00
		25	0	20.36	20.35	20.33	21.00
		25	13	20.42	20.36	20.31	21.00
		25	25	20.43	20.37	20.37	21.00
		50	0	20.38	20.36	20.38	21.00
	16QAM	1	0	20.15	20.40	20.37	21.00
		1	25	20.60	20.46	20.45	21.00
		1	49	20.66	20.35	20.43	21.00
		25	0	20.36	20.52	20.45	21.00
		25	13	20.49	20.40	20.38	21.00
		25	25	20.26	20.50	20.44	21.00
		50	0	20.37	20.46	20.66	21.00
	64QAM	1	0	20.31	20.39	20.48	21.00
		1	25	20.71	20.28	20.22	21.00
		1	49	20.18	20.31	20.28	21.00
		25	0	20.21	20.39	20.43	21.00
		25	13	20.35	20.45	20.48	21.00
		25	25	20.38	20.44	20.39	21.00
		50	0	20.39	20.35	20.39	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	20.25	20.20	20.23	21.00
		1	38	20.25	20.26	20.29	21.00
		1	74	20.21	20.13	20.14	21.00
		36	0	20.36	20.32	20.32	21.00
		36	18	20.40	20.33	20.28	21.00
		36	39	20.42	20.38	20.34	21.00
		75	0	20.41	20.33	20.36	21.00
	16QAM	1	0	20.13	20.43	20.37	21.00
		1	38	20.59	20.44	20.48	21.00
		1	74	20.65	20.35	20.41	21.00
		36	0	20.38	20.51	20.45	21.00
		36	18	20.49	20.40	20.36	21.00
		36	39	20.25	20.47	20.46	21.00
		75	0	20.38	20.44	20.66	21.00
	64QAM	1	0	20.28	20.41	20.47	21.00
		1	38	20.70	20.27	20.23	21.00
		1	74	20.18	20.32	20.27	21.00
		36	0	20.19	20.38	20.45	21.00



		36	18	20.36	20.43	20.48	21.00
		36	39	20.38	20.44	20.37	21.00
		75	0	20.37	20.32	20.38	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	20.22	20.16	20.20	21.00
		1	50	20.24	20.22	20.27	21.00
		1	99	20.19	20.12	20.11	21.00
		50	0	20.33	20.27	20.28	21.00
		50	25	20.38	20.29	20.25	21.00
		50	50	20.39	20.33	20.30	21.00
		100	0	20.38	20.28	20.32	21.00
	16QAM	1	0	20.11	20.39	20.32	21.00
		1	50	20.55	20.42	20.44	21.00
		1	99	20.63	20.32	20.39	21.00
		50	0	20.35	20.47	20.42	21.00
		50	25	20.46	20.38	20.33	21.00
		50	50	20.22	20.42	20.42	21.00
		100	0	20.36	20.40	20.63	21.00
	64QAM	1	0	20.26	20.37	20.42	21.00
		1	50	20.66	20.25	20.19	21.00
		1	99	20.16	20.29	20.25	21.00
		50	0	20.16	20.34	20.42	21.00
		50	25	20.33	20.41	20.45	21.00
		50	50	20.35	20.39	20.33	21.00
		100	0	20.35	20.28	20.35	21.00

LTE TDD Band 41 Full Power & D1				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	24.21	24.27	24.06	24.11	25.50
		1	13	24.56	24.23	24.35	24.08	25.50
		1	24	24.35	24.40	24.22	24.29	25.50
		12	0	23.41	23.57	23.27	23.45	24.50
		12	6	23.43	23.58	23.28	23.45	24.50
		12	13	23.40	23.50	23.25	23.35	24.50
		25	0	23.40	23.57	23.25	23.43	24.50
	16QAM	1	0	23.45	23.34	23.33	23.23	24.50
		1	13	23.43	23.37	23.29	23.22	24.50
		1	24	23.67	23.68	23.52	23.52	24.50
		12	0	22.53	22.48	22.37	22.34	23.50
		12	6	22.56	22.52	22.43	22.41	23.50



		12	13	22.63	22.62	22.49	22.50	23.50
		25	0	22.58	22.58	22.43	22.45	23.50
	64QAM	1	0	23.32	23.32	23.20	23.17	24.00
		1	13	23.18	23.16	23.04	22.97	24.00
		1	24	23.29	23.22	23.10	23.06	24.00
		12	0	22.62	22.55	22.50	22.45	23.00
		12	6	22.51	22.46	22.38	22.35	23.00
		12	13	22.58	22.57	22.44	22.45	23.00
		25	0	22.60	22.60	22.45	22.47	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit	
				40090/2540	40390/2570	40690/2600		
10MHz	QPSK	1	0	24.23	24.28	24.09	24.14	25.50
		1	25	24.59	24.28	24.39	24.12	25.50
		1	49	24.37	24.44	24.25	24.32	25.50
		25	0	23.44	23.62	23.31	23.49	24.50
		25	13	23.46	23.63	23.32	23.49	24.50
		25	25	23.42	23.54	23.30	23.40	24.50
		50	0	23.44	23.59	23.29	23.47	24.50
	16QAM	1	0	23.47	23.37	23.35	23.25	24.50
		1	25	23.46	23.41	23.32	23.25	24.50
		1	49	23.70	23.70	23.55	23.55	24.50
		25	0	22.56	22.53	22.41	22.38	23.50
		25	13	22.58	22.56	22.46	22.44	23.50
		25	25	22.66	22.67	22.53	22.54	23.50
		50	0	22.61	22.63	22.47	22.49	23.50
	64QAM	1	0	23.34	23.31	23.22	23.19	24.00
		1	25	23.21	23.16	23.07	23.00	24.00
		1	49	23.28	23.24	23.13	23.09	24.00
		25	0	22.65	22.60	22.50	22.45	23.00
		25	13	22.53	22.50	22.41	22.38	23.00
		25	25	22.61	22.62	22.48	22.49	23.00
		50	0	22.63	22.65	22.49	22.51	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit	
				40115/2542.5	40395/2570.5	40685/2599.5		
15MHz	QPSK	1	0	24.22	24.24	24.07	24.12	25.50
		1	38	24.57	24.27	24.36	24.09	25.50
		1	74	24.34	24.39	24.21	24.28	25.50
		36	0	23.42	23.58	23.28	23.46	24.50
		36	18	23.43	23.58	23.28	23.45	24.50
		36	39	23.39	23.51	23.26	23.36	24.50
		75	0	23.42	23.55	23.24	23.42	24.50
	16QAM	1	0	23.42	23.35	23.33	23.23	24.50
		1	38	23.44	23.38	23.30	23.23	24.50



		1	74	23.67	23.66	23.52	23.52	24.50
		36	0	22.53	22.51	22.38	22.35	23.50
		36	18	22.55	22.51	22.42	22.40	23.50
		36	39	22.64	22.63	22.50	22.51	23.50
		75	0	22.58	22.58	22.43	22.45	23.50
	64QAM	1	0	23.29	23.29	23.20	23.17	24.00
		1	38	23.19	23.13	23.05	22.98	24.00
		1	74	23.29	23.23	23.14	23.10	24.00
		36	0	22.64	22.62	22.51	22.46	23.00
		36	18	22.51	22.47	22.40	22.37	23.00
		36	39	22.59	22.58	22.45	22.46	23.00
		75	0	22.60	22.60	22.45	22.47	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	24.19	24.20	24.04	24.09	25.50
		1	50	24.56	24.23	24.34	24.07	25.50
		1	99	24.32	24.38	24.18	24.25	25.50
		50	0	23.39	23.53	23.24	23.42	24.50
		50	25	23.41	23.54	23.25	23.42	24.50
		50	50	23.36	23.46	23.22	23.32	24.50
		100	0	23.39	23.50	23.20	23.38	24.50
	16QAM	1	0	23.38	23.31	23.28	23.18	24.50
		1	50	23.40	23.36	23.26	23.19	24.50
		1	99	23.65	23.63	23.50	23.50	24.50
		50	0	22.50	22.47	22.35	22.32	23.50
		50	25	22.52	22.49	22.39	22.37	23.50
		50	50	22.61	22.58	22.46	22.47	23.50
		100	0	22.56	22.54	22.40	22.42	23.50
	64QAM	1	0	23.27	23.25	23.15	23.12	24.00
		1	50	23.15	23.11	23.01	22.94	24.00
		1	99	23.23	23.17	23.08	23.04	24.00
		50	0	22.59	22.54	22.44	22.39	23.00
		50	25	22.47	22.43	22.34	22.31	23.00
		50	50	22.56	22.53	22.41	22.42	23.00
		100	0	22.58	22.56	22.42	22.44	23.00

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	23.39	23.47	23.57	23.44	24.50
		1	13	23.40	23.37	23.40	23.37	24.50
		1	24	23.41	23.83	23.63	23.87	24.50



		12	0	23.67	23.57	23.69	23.58	24.50
		12	6	23.63	23.66	23.71	23.67	24.50
		12	13	23.59	23.77	23.73	23.76	24.50
		25	0	23.64	23.75	23.66	23.72	24.50
	16QAM	1	0	23.56	23.57	23.53	23.50	24.50
		1	13	23.54	23.44	23.32	23.48	24.50
		1	24	23.43	23.65	23.43	23.62	24.50
		12	0	22.67	22.41	22.53	22.44	23.50
		12	6	22.70	22.57	22.41	22.58	23.50
		12	13	22.62	22.57	22.35	22.58	23.50
		25	0	22.48	22.67	22.47	22.67	23.50
	64QAM	1	0	23.56	23.47	23.64	23.43	24.50
		1	13	23.64	23.55	23.74	23.54	24.50
		1	24	23.64	23.70	23.75	23.70	24.50
		12	0	22.60	22.52	22.48	22.55	23.50
		12	6	22.65	22.43	22.53	22.46	23.50
		12	13	22.65	22.59	22.30	22.57	23.50
		25	0	22.59	22.71	22.83	22.72	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/2540	40390/2570	40690/2600	41190/2650	
10MHz	QPSK	1	0	23.41	23.48	23.60	23.46	24.50
		1	25	23.43	23.42	23.44	23.40	24.50
		1	49	23.43	23.87	23.66	23.89	24.50
		25	0	23.70	23.62	23.73	23.61	24.50
		25	13	23.66	23.71	23.75	23.70	24.50
		25	25	23.61	23.81	23.78	23.78	24.50
		50	0	23.68	23.77	23.70	23.76	24.50
	16QAM	1	0	23.58	23.60	23.55	23.52	24.50
		1	25	23.57	23.48	23.35	23.51	24.50
		1	49	23.46	23.67	23.46	23.65	24.50
		25	0	22.70	22.46	22.57	22.47	23.50
		25	13	22.72	22.61	22.44	22.60	23.50
		25	25	22.65	22.62	22.39	22.61	23.50
		50	0	22.51	22.72	22.51	22.70	23.50
	64QAM	1	0	23.58	23.46	23.66	23.45	24.50
		1	25	23.67	23.55	23.77	23.57	24.50
		1	49	23.63	23.72	23.78	23.69	24.50
		25	0	22.63	22.57	22.48	22.58	23.50
		25	13	22.67	22.47	22.56	22.48	23.50
		25	25	22.68	22.64	22.34	22.60	23.50
		50	0	22.62	22.76	22.87	22.75	23.50
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	23.40	23.44	23.58	23.45	24.50
		1	38	23.41	23.41	23.41	23.38	24.50
		1	74	23.40	23.82	23.62	23.86	24.50
		36	0	23.68	23.58	23.70	23.59	24.50
		36	18	23.63	23.66	23.71	23.67	24.50
		36	39	23.58	23.78	23.74	23.75	24.50
		75	0	23.66	23.73	23.65	23.74	24.50
	16QAM	1	0	23.53	23.58	23.53	23.47	24.50
		1	38	23.55	23.45	23.33	23.49	24.50
		1	74	23.43	23.63	23.43	23.62	24.50
		36	0	22.67	22.44	22.54	22.44	23.50
		36	18	22.69	22.56	22.40	22.57	23.50
		36	39	22.63	22.58	22.36	22.59	23.50
		75	0	22.48	22.67	22.47	22.67	23.50
	64QAM	1	0	23.53	23.44	23.64	23.40	24.50
		1	38	23.65	23.52	23.75	23.55	24.50
		1	74	23.64	23.71	23.79	23.70	24.50
		36	0	22.62	22.59	22.49	22.57	23.50
		36	18	22.65	22.44	22.55	22.46	23.50
		36	39	22.66	22.60	22.31	22.58	23.50
		75	0	22.59	22.71	22.83	22.72	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	23.37	23.40	23.55	23.42	24.50
		1	50	23.40	23.37	23.39	23.37	24.50
		1	99	23.38	23.81	23.59	23.84	24.50
		50	0	23.65	23.53	23.66	23.56	24.50
		50	25	23.61	23.62	23.68	23.65	24.50
		50	50	23.55	23.73	23.70	23.72	24.50
		100	0	23.63	23.68	23.61	23.71	24.50
	16QAM	1	0	23.58	23.54	23.48	23.51	24.50
		1	50	23.51	23.43	23.29	23.45	24.50
		1	99	23.41	23.60	23.41	23.60	24.50
		50	0	22.64	22.40	22.51	22.41	23.50
		50	25	22.66	22.54	22.37	22.54	23.50
		50	50	22.60	22.53	22.32	22.56	23.50
		100	0	22.46	22.63	22.44	22.65	23.50
	64QAM	1	0	23.51	23.40	23.59	23.38	24.50
		1	50	23.61	23.50	23.71	23.51	24.50
		1	99	23.58	23.65	23.73	23.64	24.50
		50	0	22.57	22.51	22.42	22.52	23.50
		50	25	22.61	22.40	22.49	22.42	23.50
		50	50	22.63	22.55	22.27	22.55	23.50



		100	0	22.57	22.67	22.80	22.70	23.50
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LTE TDD Band 41 D3 & D4				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	20.49	20.58	20.50	20.63	21.00
		1	13	20.51	20.58	20.73	20.67	21.00
		1	24	20.55	20.59	20.73	20.69	21.00
		12	0	20.68	20.65	20.73	20.92	21.00
		12	6	20.71	20.82	20.84	20.88	21.00
		12	13	20.69	20.85	20.88	20.70	21.00
		25	0	20.62	20.83	20.84	20.90	21.00
	16QAM	1	0	20.37	20.38	20.36	20.36	21.00
		1	13	20.35	20.43	20.57	20.34	21.00
		1	24	20.36	20.43	20.54	20.37	21.00
		12	0	20.52	20.47	20.56	20.51	21.00
		12	6	20.55	20.65	20.68	20.55	21.00
		12	13	20.50	20.70	20.72	20.51	21.00
		25	0	20.46	20.65	20.66	20.43	21.00
	64QAM	1	0	20.35	20.44	20.37	20.43	21.00
		1	13	20.35	20.47	20.58	20.41	21.00
		1	24	20.42	20.46	20.57	20.45	21.00
		12	0	20.52	20.50	20.61	20.48	21.00
		12	6	20.57	20.68	20.71	20.66	21.00
		12	13	20.51	20.69	20.75	20.67	21.00
		25	0	20.43	20.68	20.68	20.65	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/2540	40390/2570	40690/2600		
10MHz	QPSK	1	0	20.51	20.59	20.53	20.65	21.00
		1	25	20.54	20.63	20.77	20.70	21.00
		1	49	20.57	20.63	20.76	20.71	21.00
		25	0	20.71	20.70	20.77	20.95	21.00
		25	13	20.74	20.87	20.88	20.91	21.00
		25	25	20.71	20.89	20.93	20.72	21.00
		50	0	20.66	20.85	20.88	20.94	21.00
	16QAM	1	0	20.39	20.41	20.38	20.38	21.00
		1	25	20.38	20.47	20.60	20.37	21.00
		1	49	20.39	20.45	20.57	20.40	21.00
		25	0	20.55	20.52	20.60	20.54	21.00
		25	13	20.57	20.69	20.71	20.57	21.00
		25	25	20.53	20.75	20.76	20.54	21.00
		50	0	20.49	20.70	20.70	20.46	21.00



	64QAM	1	0	20.37	20.43	20.39	20.45	21.00
		1	25	20.38	20.47	20.61	20.44	21.00
		1	49	20.41	20.48	20.60	20.44	21.00
		25	0	20.55	20.55	20.61	20.51	21.00
		25	13	20.59	20.72	20.74	20.68	21.00
		25	25	20.54	20.74	20.79	20.70	21.00
		50	0	20.46	20.73	20.72	20.68	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	20.50	20.55	20.51	20.64	21.00
		1	38	20.52	20.62	20.74	20.68	21.00
		1	74	20.54	20.58	20.72	20.68	21.00
		36	0	20.69	20.66	20.74	20.93	21.00
		36	18	20.71	20.82	20.84	20.88	21.00
		36	39	20.68	20.86	20.89	20.69	21.00
		75	0	20.64	20.81	20.83	20.92	21.00
	16QAM	1	0	20.34	20.39	20.36	20.33	21.00
		1	38	20.36	20.44	20.58	20.35	21.00
		1	74	20.36	20.41	20.54	20.37	21.00
		36	0	20.52	20.50	20.57	20.51	21.00
		36	18	20.54	20.64	20.67	20.54	21.00
		36	39	20.51	20.71	20.73	20.52	21.00
		75	0	20.46	20.65	20.66	20.43	21.00
	64QAM	1	0	20.32	20.41	20.37	20.40	21.00
		1	38	20.36	20.44	20.59	20.42	21.00
		1	74	20.42	20.47	20.61	20.45	21.00
		36	0	20.54	20.57	20.62	20.50	21.00
		36	18	20.57	20.69	20.73	20.66	21.00
		36	39	20.52	20.70	20.76	20.68	21.00
		75	0	20.43	20.68	20.68	20.65	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	20.47	20.51	20.48	20.61	21.00
		1	50	20.51	20.58	20.72	20.67	21.00
		1	99	20.52	20.57	20.69	20.66	21.00
		50	0	20.66	20.61	20.70	20.90	21.00
		50	25	20.69	20.78	20.81	20.86	21.00
		50	50	20.65	20.81	20.85	20.66	21.00
		100	0	20.61	20.76	20.79	20.89	21.00
	16QAM	1	0	20.30	20.35	20.31	20.29	21.00
		1	50	20.32	20.42	20.54	20.31	21.00
		1	99	20.34	20.38	20.52	20.35	21.00
		50	0	20.49	20.46	20.54	20.48	21.00



		50	25	20.51	20.62	20.64	20.51	21.00
		50	50	20.48	20.66	20.69	20.49	21.00
		100	0	20.44	20.61	20.63	20.41	21.00
	64QAM	1	0	20.30	20.37	20.32	20.38	21.00
		1	50	20.32	20.42	20.55	20.38	21.00
		1	99	20.36	20.41	20.55	20.39	21.00
		50	0	20.49	20.49	20.55	20.45	21.00
		50	25	20.53	20.65	20.67	20.62	21.00
		50	50	20.49	20.65	20.72	20.65	21.00
		100	0	20.41	20.64	20.65	20.63	21.00



Second - Antenna

LTE FDD Band 2 D1 & D4				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	17.98	18.11	17.95	19.00
		1	2	18.05	17.90	17.86	19.00
		1	5	17.99	17.95	17.78	19.00
		3	0	18.10	18.16	18.10	19.00
		3	2	18.11	18.08	18.13	19.00
		3	3	18.08	18.07	18.09	19.00
		6	0	18.10	18.15	18.17	19.00
	16QAM	1	0	18.14	18.15	18.13	19.00
		1	2	18.21	18.19	18.17	19.00
		1	5	18.29	18.28	18.29	19.00
		3	0	18.01	18.18	18.01	19.00
		3	2	17.96	18.10	17.98	19.00
		3	3	18.02	18.25	17.97	19.00
		6	0	17.94	18.11	17.94	19.00
	64QAM	1	0	17.96	18.16	17.95	19.00
		1	2	17.97	18.11	17.95	19.00
		1	5	17.92	18.08	17.89	19.00
		3	0	18.07	18.08	17.97	19.00
		3	2	17.96	18.10	17.95	19.00
		3	3	17.93	18.16	17.93	19.00
		6	0	18.04	18.17	18.02	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	17.98	18.10	17.94	19.00
		1	7	18.06	17.88	17.83	19.00
		1	14	17.98	17.93	17.76	19.00
		8	0	18.08	18.10	18.05	19.00
		8	4	18.08	18.01	18.09	19.00
		8	7	18.06	18.04	18.05	19.00
		15	0	18.10	18.11	18.15	19.00
	16QAM	1	0	18.15	18.19	18.13	19.00
		1	7	18.19	18.16	18.18	19.00
		1	14	18.29	18.28	18.28	19.00
		8	0	18.00	18.14	18.00	19.00
		8	4	17.95	18.09	17.95	19.00
		8	7	17.99	18.20	17.95	19.00
		15	0	17.94	18.09	17.96	19.00
	64QAM	1	0	17.96	18.19	17.94	19.00



		1	7	17.95	18.09	17.94	19.00
		1	14	17.93	18.09	17.89	19.00
		8	0	18.02	18.04	17.98	19.00
		8	4	17.96	18.07	17.94	19.00
		8	7	17.91	18.14	17.87	19.00
		15	0	18.02	18.12	18.01	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	18.00	18.14	17.97	19.00
		1	13	18.06	17.90	17.87	19.00
		1	24	18.01	17.98	17.80	19.00
		12	0	18.12	18.17	18.12	19.00
		12	6	18.11	18.09	18.15	19.00
		12	13	18.10	18.09	18.09	19.00
		25	0	18.12	18.15	18.18	19.00
	16QAM	1	0	18.18	18.21	18.16	19.00
		1	13	18.22	18.18	18.22	19.00
		1	24	18.31	18.32	18.31	19.00
		12	0	18.05	18.18	18.03	19.00
		12	6	18.00	18.16	18.01	19.00
		12	13	18.03	18.26	18.02	19.00
		25	0	17.97	18.13	17.99	19.00
	64QAM	1	0	17.99	18.21	17.97	19.00
		1	13	17.98	18.11	17.98	19.00
		1	24	17.95	18.13	17.92	19.00
		12	0	18.07	18.08	18.01	19.00
		12	6	18.01	18.14	18.00	19.00
		12	13	17.95	18.20	17.94	19.00
		25	0	18.04	18.18	18.06	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	17.97	18.12	17.93	19.00
		1	25	18.04	17.86	17.84	19.00
		1	49	17.98	17.93	17.76	19.00
		25	0	18.09	18.12	18.08	19.00
		25	13	18.09	18.05	18.10	19.00
		25	25	18.08	18.07	18.05	19.00
		50	0	18.10	18.14	18.16	19.00
	16QAM	1	0	18.15	18.17	18.13	19.00
		1	25	18.19	18.16	18.19	19.00
		1	49	18.28	18.30	18.27	19.00
		25	0	18.03	18.14	18.00	19.00
		25	13	17.97	18.11	17.97	19.00



		25	25	18.00	18.21	17.98	19.00
		50	0	17.95	18.09	17.94	19.00
	64QAM	1	0	17.96	18.17	17.94	19.00
		1	25	17.95	18.09	17.95	19.00
		1	49	17.92	18.11	17.88	19.00
		25	0	18.05	18.04	17.98	19.00
		25	13	17.98	18.09	17.96	19.00
		25	25	17.92	18.15	17.90	19.00
		50	0	18.02	18.14	18.01	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	17.98	18.09	17.94	19.00
		1	38	18.05	17.90	17.85	19.00
		1	74	17.97	17.92	17.75	19.00
		36	0	18.10	18.13	18.09	19.00
		36	18	18.09	18.05	18.10	19.00
		36	39	18.07	18.08	18.06	19.00
		75	0	18.13	18.12	18.15	19.00
	16QAM	1	0	18.12	18.18	18.13	19.00
		1	38	18.20	18.17	18.20	19.00
		1	74	18.28	18.28	18.27	19.00
		36	0	18.03	18.17	18.01	19.00
		36	18	17.96	18.10	17.96	19.00
		36	39	18.01	18.22	17.99	19.00
		75	0	17.95	18.09	17.94	19.00
	64QAM	1	0	17.93	18.18	17.94	19.00
		1	38	17.96	18.10	17.96	19.00
		1	74	17.92	18.09	17.88	19.00
		36	0	18.05	18.07	17.99	19.00
		36	18	17.97	18.08	17.95	19.00
		36	39	17.93	18.16	17.91	19.00
		75	0	18.02	18.14	18.01	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	17.95	18.05	17.91	19.00
		1	50	18.04	17.86	17.83	19.00
		1	99	17.95	17.91	17.72	19.00
		50	0	18.07	18.08	18.05	19.00
		50	25	18.07	18.01	18.07	19.00
		50	50	18.04	18.03	18.02	19.00
		100	0	18.10	18.07	18.11	19.00
	16QAM	1	0	18.10	18.14	18.08	19.00
		1	50	18.16	18.15	18.16	19.00



		1	99	18.26	18.25	18.25	19.00
		50	0	18.00	18.13	17.98	19.00
		50	25	17.93	18.08	17.93	19.00
		50	50	17.98	18.17	17.95	19.00
		100	0	17.93	18.05	17.91	19.00
	64QAM	1	0	17.91	18.14	17.89	19.00
		1	50	17.92	18.08	17.92	19.00
		1	99	17.90	18.06	17.86	19.00
		50	0	18.02	18.03	17.96	19.00
		50	25	17.94	18.06	17.92	19.00
		50	50	17.90	18.11	17.87	19.00
		100	0	18.00	18.10	17.98	19.00

LTE FDD Band 2 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	22.09	22.16	22.02	23.00
		1	2	21.94	22.04	22.00	23.00
		1	5	21.98	21.98	21.95	23.00
		3	0	22.00	22.07	22.06	23.00
		3	2	22.08	22.01	22.15	23.00
		3	3	22.05	22.05	22.13	23.00
		6	0	22.10	22.15	22.12	23.00
	16QAM	1	0	22.26	22.28	22.11	23.00
		1	2	22.33	22.16	22.23	23.00
		1	5	22.05	22.15	22.12	23.00
		3	0	22.17	22.04	22.32	23.00
		3	2	22.10	22.19	22.07	23.00
		3	3	22.11	22.15	22.08	23.00
		6	0	22.23	22.05	22.09	23.00
	64QAM	1	0	22.03	22.25	21.96	23.00
		1	2	22.28	22.13	22.28	23.00
		1	5	22.18	22.24	22.16	23.00
		3	0	22.17	22.21	21.99	23.00
		3	2	22.13	22.18	21.84	23.00
		3	3	21.97	22.08	22.00	23.00
		6	0	22.25	22.12	21.88	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	22.11	22.20	22.05	23.00
		1	7	21.94	22.06	22.04	23.00
		1	14	22.01	22.03	21.99	23.00



		8	0	22.04	22.14	22.13	23.00
		8	4	22.11	22.09	22.21	23.00
		8	7	22.09	22.10	22.17	23.00
		15	0	22.12	22.19	22.15	23.00
	16QAM	1	0	22.29	22.30	22.14	23.00
		1	7	22.36	22.18	22.27	23.00
		1	14	22.07	22.19	22.15	23.00
		8	0	22.22	22.08	22.35	23.00
		8	4	22.15	22.26	22.13	23.00
		8	7	22.15	22.21	22.15	23.00
		15	0	22.26	22.09	22.12	23.00
	64QAM	1	0	22.06	22.27	21.99	23.00
		1	7	22.31	22.15	22.32	23.00
		1	14	22.20	22.28	22.19	23.00
		8	0	22.22	22.25	22.02	23.00
		8	4	22.18	22.25	21.90	23.00
		8	7	22.01	22.14	22.07	23.00
		15	0	22.27	22.18	21.93	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	22.08	22.18	22.01	23.00
		1	13	21.92	22.02	22.01	23.00
		1	24	21.98	21.98	21.95	23.00
		12	0	22.01	22.09	22.09	23.00
		12	6	22.09	22.05	22.16	23.00
		12	13	22.07	22.08	22.13	23.00
		25	0	22.10	22.18	22.13	23.00
	16QAM	1	0	22.26	22.26	22.11	23.00
		1	13	22.33	22.16	22.24	23.00
		1	24	22.04	22.17	22.11	23.00
		12	0	22.20	22.04	22.32	23.00
		12	6	22.12	22.21	22.09	23.00
		12	13	22.12	22.16	22.11	23.00
		25	0	22.24	22.05	22.07	23.00
	64QAM	1	0	22.03	22.23	21.96	23.00
		1	13	22.28	22.13	22.29	23.00
		1	24	22.17	22.26	22.15	23.00
		12	0	22.20	22.21	21.99	23.00
		12	6	22.15	22.20	21.86	23.00
		12	13	21.98	22.09	22.03	23.00
		25	0	22.25	22.14	21.88	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	



10MHz	QPSK	1	0	22.09	22.17	22.03	23.00
		1	25	21.93	22.06	22.03	23.00
		1	49	21.99	22.00	21.97	23.00
		25	0	22.02	22.13	22.11	23.00
		25	13	22.11	22.08	22.19	23.00
		25	25	22.07	22.08	22.17	23.00
		50	0	22.10	22.19	22.14	23.00
	16QAM	1	0	22.25	22.24	22.11	23.00
		1	25	22.35	22.19	22.22	23.00
		1	49	22.05	22.15	22.13	23.00
		25	0	22.18	22.08	22.33	23.00
		25	13	22.11	22.20	22.10	23.00
		25	25	22.14	22.20	22.10	23.00
		50	0	22.23	22.07	22.07	23.00
	64QAM	1	0	22.03	22.22	21.97	23.00
		1	25	22.30	22.15	22.29	23.00
		1	49	22.17	22.23	22.16	23.00
		25	0	22.22	22.25	21.98	23.00
		25	13	22.13	22.21	21.85	23.00
		25	25	21.99	22.10	22.06	23.00
		50	0	22.27	22.17	21.89	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	22.09	22.15	22.02	23.00
		1	38	21.93	22.06	22.02	23.00
		1	74	21.97	21.97	21.94	23.00
		36	0	22.02	22.10	22.10	23.00
		36	18	22.09	22.05	22.16	23.00
		36	39	22.06	22.09	22.14	23.00
		75	0	22.13	22.16	22.12	23.00
	16QAM	1	0	22.23	22.27	22.11	23.00
		1	38	22.34	22.17	22.25	23.00
		1	74	22.04	22.15	22.11	23.00
		36	0	22.20	22.07	22.33	23.00
		36	18	22.11	22.20	22.08	23.00
		36	39	22.13	22.17	22.12	23.00
		75	0	22.24	22.05	22.07	23.00
	64QAM	1	0	22.00	22.24	21.96	23.00
		1	38	22.29	22.14	22.30	23.00
		1	74	22.17	22.24	22.15	23.00
		36	0	22.20	22.24	22.00	23.00
		36	18	22.14	22.19	21.85	23.00
		36	39	21.99	22.10	22.04	23.00



		75	0	22.25	22.14	21.88	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	22.06	22.11	21.99	23.00
		1	50	21.92	22.02	22.00	23.00
		1	99	21.95	21.96	21.91	23.00
		50	0	21.99	22.05	22.06	23.00
		50	25	22.07	22.01	22.13	23.00
		50	50	22.03	22.04	22.10	23.00
		100	0	22.10	22.11	22.08	23.00
	16QAM	1	0	22.21	22.23	22.06	23.00
		1	50	22.30	22.15	22.21	23.00
		1	99	22.02	22.12	22.09	23.00
		50	0	22.17	22.03	22.30	23.00
		50	25	22.08	22.18	22.05	23.00
		50	50	22.10	22.12	22.08	23.00
		100	0	22.22	22.01	22.04	23.00
	64QAM	1	0	21.98	22.20	21.91	23.00
		1	50	22.25	22.12	22.26	23.00
		1	99	22.15	22.21	22.13	23.00
		50	0	22.17	22.20	21.97	23.00
		50	25	22.11	22.17	21.82	23.00
		50	50	21.96	22.05	22.00	23.00
		100	0	22.23	22.10	21.85	23.00

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	19.04	19.09	18.94	20.00
		1	2	18.97	19.00	18.70	20.00
		1	5	18.94	19.03	19.00	20.00
		3	0	19.04	19.07	19.10	20.00
		3	2	19.03	19.09	19.14	20.00
		3	3	19.13	19.05	19.17	20.00
		6	0	19.08	19.10	19.21	20.00
	16QAM	1	0	19.17	19.16	19.28	20.00
		1	2	19.08	19.19	19.27	20.00
		1	5	19.05	19.23	19.42	20.00
		3	0	19.06	19.13	19.25	20.00
		3	2	19.06	19.18	19.38	20.00
		3	3	19.02	19.18	19.42	20.00
		6	0	19.04	19.13	19.45	20.00



	64QAM	1	0	19.09	19.19	19.39	20.00
		1	2	19.09	19.23	19.34	20.00
		1	5	19.25	19.33	19.23	20.00
		3	0	19.04	19.18	19.34	20.00
		3	2	19.08	19.11	19.21	20.00
		3	3	19.01	19.15	19.21	20.00
		6	0	19.03	19.20	19.34	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	19.06	19.13	18.97	20.00
		1	7	18.97	19.02	18.74	20.00
		1	14	18.97	19.08	19.04	20.00
		8	0	19.08	19.14	19.17	20.00
		8	4	19.06	19.17	19.20	20.00
		8	7	19.17	19.10	19.21	20.00
		15	0	19.10	19.14	19.24	20.00
	16QAM	1	0	19.20	19.18	19.31	20.00
		1	7	19.11	19.21	19.31	20.00
		1	14	19.07	19.27	19.45	20.00
		8	0	19.11	19.17	19.28	20.00
		8	4	19.11	19.25	19.44	20.00
		8	7	19.06	19.24	19.49	20.00
		15	0	19.07	19.17	19.48	20.00
	64QAM	1	0	19.12	19.21	19.42	20.00
		1	7	19.12	19.25	19.38	20.00
		1	14	19.27	19.37	19.26	20.00
		8	0	19.09	19.22	19.37	20.00
		8	4	19.13	19.18	19.27	20.00
		8	7	19.05	19.21	19.28	20.00
		15	0	19.05	19.26	19.39	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	19.03	19.11	18.93	20.00
		1	13	18.95	18.98	18.71	20.00
		1	24	18.94	19.03	19.00	20.00
		12	0	19.05	19.09	19.13	20.00
		12	6	19.04	19.13	19.15	20.00
		12	13	19.15	19.08	19.17	20.00
		25	0	19.08	19.13	19.22	20.00
	16QAM	1	0	19.17	19.14	19.28	20.00
		1	13	19.08	19.19	19.28	20.00
		1	24	19.04	19.25	19.41	20.00
		12	0	19.09	19.13	19.25	20.00



		12	6	19.08	19.20	19.40	20.00
		12	13	19.03	19.19	19.45	20.00
		25	0	19.05	19.13	19.43	20.00
	64QAM	1	0	19.09	19.17	19.39	20.00
		1	13	19.09	19.23	19.35	20.00
		1	24	19.24	19.35	19.22	20.00
		12	0	19.07	19.18	19.34	20.00
		12	6	19.10	19.13	19.23	20.00
		12	13	19.02	19.16	19.24	20.00
		25	0	19.03	19.22	19.34	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	19.04	19.10	18.95	20.00
		1	25	18.96	19.02	18.73	20.00
		1	49	18.95	19.05	19.02	20.00
		25	0	19.06	19.13	19.15	20.00
		25	13	19.06	19.16	19.18	20.00
		25	25	19.15	19.08	19.21	20.00
		50	0	19.08	19.14	19.23	20.00
	16QAM	1	0	19.16	19.12	19.28	20.00
		1	25	19.10	19.22	19.26	20.00
		1	49	19.05	19.23	19.43	20.00
		25	0	19.07	19.17	19.26	20.00
		25	13	19.07	19.19	19.41	20.00
		25	25	19.05	19.23	19.44	20.00
		50	0	19.04	19.15	19.43	20.00
	64QAM	1	0	19.09	19.16	19.40	20.00
		1	25	19.11	19.25	19.35	20.00
		1	49	19.24	19.32	19.23	20.00
		25	0	19.09	19.22	19.33	20.00
		25	13	19.08	19.14	19.22	20.00
		25	25	19.03	19.17	19.27	20.00
		50	0	19.05	19.25	19.35	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	19.04	19.08	18.94	20.00
		1	38	18.96	19.02	18.72	20.00
		1	74	18.93	19.02	18.99	20.00
		36	0	19.06	19.10	19.14	20.00
		36	18	19.04	19.13	19.15	20.00
		36	39	19.14	19.09	19.18	20.00
		75	0	19.11	19.11	19.21	20.00
	16QAM	1	0	19.14	19.15	19.28	20.00



		1	38	19.09	19.20	19.29	20.00
		1	74	19.04	19.23	19.41	20.00
		36	0	19.09	19.16	19.26	20.00
		36	18	19.07	19.19	19.39	20.00
		36	39	19.04	19.20	19.46	20.00
		75	0	19.05	19.13	19.43	20.00
		1	0	19.06	19.18	19.39	20.00
	64QAM	1	38	19.10	19.24	19.36	20.00
		1	74	19.24	19.33	19.22	20.00
		36	0	19.07	19.21	19.35	20.00
		36	18	19.09	19.12	19.22	20.00
		36	39	19.03	19.17	19.25	20.00
		75	0	19.03	19.22	19.34	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	19.01	19.04	18.91	20.00
		1	50	18.95	18.98	18.70	20.00
		1	99	18.91	19.01	18.96	20.00
		50	0	19.03	19.05	19.10	20.00
		50	25	19.02	19.09	19.12	20.00
		50	50	19.11	19.04	19.14	20.00
		100	0	19.08	19.06	19.17	20.00
	16QAM	1	0	19.12	19.11	19.23	20.00
		1	50	19.05	19.18	19.25	20.00
		1	99	19.02	19.20	19.39	20.00
		50	0	19.06	19.12	19.23	20.00
		50	25	19.04	19.17	19.36	20.00
		50	50	19.01	19.15	19.42	20.00
		100	0	19.03	19.09	19.40	20.00
	64QAM	1	0	19.04	19.14	19.34	20.00
		1	50	19.06	19.22	19.32	20.00
		1	99	19.22	19.30	19.20	20.00
		50	0	19.04	19.17	19.32	20.00
		50	25	19.06	19.10	19.19	20.00
		50	50	19.00	19.12	19.21	20.00
		100	0	19.01	19.18	19.31	20.00

LTE FDD Band 4 D1 & D4				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	16.13	16.23	16.14	17.00
		1	2	16.09	16.11	16.04	17.00



		1	5	16.07	16.08	16.06	17.00
		3	0	16.18	16.15	16.09	17.00
		3	2	16.16	16.11	16.10	17.00
		3	3	16.05	16.15	16.07	17.00
		6	0	16.07	16.19	16.17	17.00
	16QAM	1	0	16.08	16.34	16.21	17.00
		1	2	16.05	16.34	16.13	17.00
		1	5	15.96	16.30	16.16	17.00
		3	0	16.11	16.24	16.11	17.00
		3	2	16.10	16.21	16.09	17.00
		3	3	16.06	16.20	16.10	17.00
		6	0	16.05	16.18	16.09	17.00
	64QAM	1	0	16.35	16.18	16.19	17.00
		1	2	16.39	16.20	16.12	17.00
		1	5	16.49	16.14	16.08	17.00
		3	0	16.22	16.14	16.18	17.00
		3	2	16.20	16.16	16.20	17.00
		3	3	16.23	16.17	16.13	17.00
		6	0	16.20	16.19	16.14	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	16.15	16.27	16.17	17.00
		1	7	16.09	16.13	16.08	17.00
		1	14	16.10	16.13	16.10	17.00
		8	0	16.22	16.22	16.16	17.00
		8	4	16.19	16.19	16.16	17.00
		8	7	16.09	16.20	16.11	17.00
		15	0	16.09	16.23	16.20	17.00
	16QAM	1	0	16.11	16.36	16.24	17.00
		1	7	16.08	16.36	16.17	17.00
		1	14	15.98	16.34	16.19	17.00
		8	0	16.16	16.28	16.14	17.00
		8	4	16.15	16.28	16.15	17.00
		8	7	16.10	16.26	16.17	17.00
		15	0	16.08	16.22	16.12	17.00
	64QAM	1	0	16.38	16.20	16.22	17.00
		1	7	16.42	16.22	16.16	17.00
		1	14	16.51	16.18	16.11	17.00
		8	0	16.27	16.18	16.21	17.00
		8	4	16.25	16.23	16.26	17.00
		8	7	16.27	16.23	16.20	17.00
		15	0	16.22	16.25	16.19	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up



				19975/1712.5	20175/1732.5	20375/1752.5	Limit
5MHz	QPSK	1	0	16.12	16.25	16.13	17.00
		1	13	16.07	16.09	16.05	17.00
		1	24	16.07	16.08	16.06	17.00
		12	0	16.19	16.17	16.12	17.00
		12	6	16.17	16.15	16.11	17.00
		12	13	16.07	16.18	16.07	17.00
		25	0	16.07	16.22	16.18	17.00
	16QAM	1	0	16.08	16.32	16.21	17.00
		1	13	16.05	16.34	16.14	17.00
		1	24	15.95	16.32	16.15	17.00
		12	0	16.14	16.24	16.11	17.00
		12	6	16.12	16.23	16.11	17.00
		12	13	16.07	16.21	16.13	17.00
		25	0	16.06	16.18	16.07	17.00
	64QAM	1	0	16.35	16.16	16.19	17.00
		1	13	16.39	16.20	16.13	17.00
		1	24	16.48	16.16	16.07	17.00
		12	0	16.25	16.14	16.18	17.00
		12	6	16.22	16.18	16.22	17.00
		12	13	16.24	16.18	16.16	17.00
		25	0	16.20	16.21	16.14	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	16.13	16.24	16.15	17.00
		1	25	16.08	16.13	16.07	17.00
		1	49	16.08	16.10	16.08	17.00
		25	0	16.20	16.21	16.14	17.00
		25	13	16.19	16.18	16.14	17.00
		25	25	16.07	16.18	16.11	17.00
		50	0	16.07	16.23	16.19	17.00
	16QAM	1	0	16.07	16.30	16.21	17.00
		1	25	16.07	16.37	16.12	17.00
		1	49	15.96	16.30	16.17	17.00
		25	0	16.12	16.28	16.12	17.00
		25	13	16.11	16.22	16.12	17.00
		25	25	16.09	16.25	16.12	17.00
		50	0	16.05	16.20	16.07	17.00
	64QAM	1	0	16.35	16.15	16.20	17.00
		1	25	16.41	16.22	16.13	17.00
		1	49	16.48	16.13	16.08	17.00
		25	0	16.27	16.18	16.17	17.00
		25	13	16.20	16.19	16.21	17.00



		25	25	16.25	16.19	16.19	17.00
		50	0	16.22	16.24	16.15	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	16.13	16.22	16.14	17.00
		1	38	16.08	16.13	16.06	17.00
		1	74	16.06	16.07	16.05	17.00
		36	0	16.20	16.18	16.13	17.00
		36	18	16.17	16.15	16.11	17.00
		36	39	16.06	16.19	16.08	17.00
		75	0	16.10	16.20	16.17	17.00
	16QAM	1	0	16.05	16.33	16.21	17.00
		1	38	16.06	16.35	16.15	17.00
		1	74	15.95	16.30	16.15	17.00
		36	0	16.14	16.27	16.12	17.00
		36	18	16.11	16.22	16.10	17.00
		36	39	16.08	16.22	16.14	17.00
		75	0	16.06	16.18	16.07	17.00
	64QAM	1	0	16.32	16.17	16.19	17.00
		1	38	16.40	16.21	16.14	17.00
		1	74	16.48	16.14	16.07	17.00
		36	0	16.25	16.17	16.19	17.00
		36	18	16.21	16.17	16.21	17.00
		36	39	16.25	16.19	16.17	17.00
		75	0	16.20	16.21	16.14	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	16.10	16.18	16.11	17.00
		1	50	16.07	16.09	16.04	17.00
		1	99	16.04	16.06	16.02	17.00
		50	0	16.17	16.13	16.09	17.00
		50	25	16.15	16.11	16.08	17.00
		50	50	16.03	16.14	16.04	17.00
		100	0	16.07	16.15	16.13	17.00
	16QAM	1	0	16.03	16.29	16.16	17.00
		1	50	16.02	16.33	16.11	17.00
		1	99	15.93	16.27	16.13	17.00
		50	0	16.11	16.23	16.09	17.00
		50	25	16.08	16.20	16.07	17.00
		50	50	16.05	16.17	16.10	17.00
		100	0	16.04	16.14	16.04	17.00
	64QAM	1	0	16.30	16.13	16.14	17.00
		1	50	16.36	16.19	16.10	17.00



		1	99	16.46	16.11	16.05	17.00
		50	0	16.22	16.13	16.16	17.00
		50	25	16.18	16.15	16.18	17.00
		50	50	16.22	16.14	16.13	17.00
		100	0	16.18	16.17	16.11	17.00

LTE FDD Band 4 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	22.06	22.21	22.18	23.00
		1	2	22.00	22.22	22.16	23.00
		1	5	22.07	22.13	22.11	23.00
		3	0	22.11	22.19	22.12	23.00
		3	2	22.19	22.18	22.15	23.00
		3	3	22.07	22.10	22.12	23.00
		6	0	22.14	22.19	22.21	23.00
	16QAM	1	0	22.12	22.19	22.16	23.00
		1	2	22.21	22.25	22.31	23.00
		1	5	22.18	22.21	22.09	23.00
		3	0	22.27	22.27	22.25	23.00
		3	2	22.15	22.29	22.31	23.00
		3	3	22.06	22.26	22.14	23.00
		6	0	22.05	22.25	22.23	23.00
	64QAM	1	0	22.13	22.25	21.84	23.00
		1	2	21.98	22.18	22.11	23.00
		1	5	22.06	22.14	21.83	23.00
		3	0	22.07	22.18	22.28	23.00
		3	2	22.17	22.20	22.21	23.00
		3	3	22.28	22.24	22.05	23.00
		6	0	22.13	22.22	22.20	23.00
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	22.08	22.25	22.21	23.00
		1	7	22.00	22.24	22.20	23.00
		1	14	22.10	22.18	22.15	23.00
		8	0	22.15	22.26	22.19	23.00
		8	4	22.22	22.26	22.21	23.00
		8	7	22.11	22.15	22.16	23.00
		15	0	22.16	22.23	22.24	23.00
	16QAM	1	0	22.15	22.21	22.19	23.00
		1	7	22.24	22.27	22.35	23.00
1		14	22.20	22.25	22.12	23.00	



		8	0	22.32	22.31	22.28	23.00
		8	4	22.20	22.36	22.37	23.00
		8	7	22.10	22.32	22.21	23.00
		15	0	22.08	22.29	22.26	23.00
	64QAM	1	0	22.16	22.27	21.87	23.00
		1	7	22.01	22.20	22.15	23.00
		1	14	22.08	22.18	21.86	23.00
		8	0	22.12	22.22	22.31	23.00
		8	4	22.22	22.27	22.27	23.00
		8	7	22.32	22.30	22.12	23.00
		15	0	22.15	22.28	22.25	23.00
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	22.05	22.23	22.17	23.00
		1	13	21.98	22.20	22.17	23.00
		1	24	22.07	22.13	22.11	23.00
		12	0	22.12	22.21	22.15	23.00
		12	6	22.20	22.22	22.16	23.00
		12	13	22.09	22.13	22.12	23.00
		25	0	22.14	22.22	22.22	23.00
	16QAM	1	0	22.12	22.17	22.16	23.00
		1	13	22.21	22.25	22.32	23.00
		1	24	22.17	22.23	22.08	23.00
		12	0	22.30	22.27	22.25	23.00
		12	6	22.17	22.31	22.33	23.00
		12	13	22.07	22.27	22.17	23.00
		25	0	22.06	22.25	22.21	23.00
	64QAM	1	0	22.13	22.23	21.84	23.00
		1	13	21.98	22.18	22.12	23.00
		1	24	22.05	22.16	21.82	23.00
		12	0	22.10	22.18	22.28	23.00
		12	6	22.19	22.22	22.23	23.00
		12	13	22.29	22.25	22.08	23.00
		25	0	22.13	22.24	22.20	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	22.06	22.22	22.19	23.00
		1	25	21.99	22.24	22.19	23.00
		1	49	22.08	22.15	22.13	23.00
		25	0	22.13	22.25	22.17	23.00
		25	13	22.22	22.25	22.19	23.00
		25	25	22.09	22.13	22.16	23.00
		50	0	22.14	22.23	22.23	23.00



	16QAM	1	0	22.11	22.15	22.16	23.00
		1	25	22.23	22.28	22.30	23.00
		1	49	22.18	22.21	22.10	23.00
		25	0	22.28	22.31	22.26	23.00
		25	13	22.16	22.30	22.34	23.00
		25	25	22.09	22.31	22.16	23.00
		50	0	22.05	22.27	22.21	23.00
	64QAM	1	0	22.13	22.22	21.85	23.00
		1	25	22.00	22.20	22.12	23.00
		1	49	22.05	22.13	21.83	23.00
		25	0	22.12	22.22	22.27	23.00
		25	13	22.17	22.23	22.22	23.00
		25	25	22.30	22.26	22.11	23.00
		50	0	22.15	22.27	22.21	23.00
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	22.06	22.20	22.18	23.00
		1	38	21.99	22.24	22.18	23.00
		1	74	22.06	22.12	22.10	23.00
		36	0	22.13	22.22	22.16	23.00
		36	18	22.20	22.22	22.16	23.00
		36	39	22.08	22.14	22.13	23.00
		75	0	22.17	22.20	22.21	23.00
	16QAM	1	0	22.09	22.18	22.16	23.00
		1	38	22.22	22.26	22.33	23.00
		1	74	22.17	22.21	22.08	23.00
		36	0	22.30	22.30	22.26	23.00
		36	18	22.16	22.30	22.32	23.00
		36	39	22.08	22.28	22.18	23.00
		75	0	22.06	22.25	22.21	23.00
	64QAM	1	0	22.10	22.24	21.84	23.00
		1	38	21.99	22.19	22.13	23.00
		1	74	22.05	22.14	21.82	23.00
		36	0	22.10	22.21	22.29	23.00
		36	18	22.18	22.21	22.22	23.00
		36	39	22.30	22.26	22.09	23.00
		75	0	22.13	22.24	22.20	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	22.03	22.16	22.15	23.00
		1	50	21.98	22.20	22.16	23.00
		1	99	22.04	22.11	22.07	23.00
		50	0	22.10	22.17	22.12	23.00



		50	25	22.17	22.18	22.13	23.00
		50	50	22.05	22.09	22.09	23.00
		100	0	22.14	22.15	22.17	23.00
	16QAM	1	0	22.07	22.14	22.11	23.00
		1	50	22.18	22.24	22.29	23.00
		1	99	22.15	22.18	22.06	23.00
		50	0	22.27	22.26	22.23	23.00
		50	25	22.13	22.28	22.29	23.00
		50	50	22.05	22.23	22.14	23.00
		100	0	22.04	22.21	22.18	23.00
	64QAM	1	0	22.08	22.20	21.79	23.00
		1	50	21.95	22.17	22.09	23.00
		1	99	22.03	22.11	21.80	23.00
		50	0	22.07	22.17	22.26	23.00
		50	25	22.15	22.19	22.19	23.00
		50	50	22.27	22.21	22.05	23.00
		100	0	22.11	22.20	22.17	23.00

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	18.09	18.28	18.12	19.00
		1	2	18.06	18.12	18.13	19.00
		1	5	18.06	17.96	18.05	19.00
		3	0	18.12	18.17	18.11	19.00
		3	2	18.13	18.13	18.10	19.00
		3	3	18.19	18.11	18.10	19.00
		6	0	18.13	18.18	18.16	19.00
	16QAM	1	0	18.32	18.34	18.38	19.00
		1	2	18.23	18.25	18.29	19.00
		1	5	18.25	18.18	18.28	19.00
		3	0	18.21	18.19	18.25	19.00
		3	2	18.26	18.23	18.29	19.00
		3	3	18.22	18.21	18.19	19.00
		6	0	18.24	18.24	18.25	19.00
	64QAM	1	0	18.29	18.36	18.34	19.00
		1	2	18.29	18.23	18.30	19.00
		1	5	18.40	18.43	18.43	19.00
		3	0	18.24	18.22	18.29	19.00
		3	2	18.28	18.24	18.26	19.00
		3	3	18.21	18.20	18.22	19.00
		6	0	18.23	18.21	18.22	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	18.11	18.32	18.15	19.00
		1	7	18.06	18.14	18.17	19.00
		1	14	18.09	18.01	18.09	19.00
		8	0	18.16	18.24	18.18	19.00
		8	4	18.16	18.21	18.16	19.00
		8	7	18.23	18.16	18.14	19.00
		15	0	18.15	18.22	18.19	19.00
	16QAM	1	0	18.35	18.36	18.41	19.00
		1	7	18.26	18.27	18.33	19.00
		1	14	18.27	18.22	18.31	19.00
		8	0	18.26	18.23	18.28	19.00
		8	4	18.31	18.30	18.35	19.00
		8	7	18.26	18.27	18.26	19.00
		15	0	18.27	18.28	18.28	19.00
	64QAM	1	0	18.32	18.38	18.37	19.00
		1	7	18.32	18.25	18.34	19.00
		1	14	18.42	18.47	18.46	19.00
		8	0	18.29	18.26	18.32	19.00
		8	4	18.33	18.31	18.32	19.00
		8	7	18.25	18.26	18.29	19.00
		15	0	18.25	18.27	18.27	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	18.08	18.30	18.11	19.00
		1	13	18.04	18.10	18.14	19.00
		1	24	18.06	17.96	18.05	19.00
		12	0	18.13	18.19	18.14	19.00
		12	6	18.14	18.17	18.11	19.00
		12	13	18.21	18.14	18.10	19.00
		25	0	18.13	18.21	18.17	19.00
	16QAM	1	0	18.32	18.32	18.38	19.00
		1	13	18.23	18.25	18.30	19.00
		1	24	18.24	18.20	18.27	19.00
		12	0	18.24	18.19	18.25	19.00
		12	6	18.28	18.25	18.31	19.00
		12	13	18.23	18.22	18.22	19.00
		25	0	18.25	18.24	18.23	19.00
	64QAM	1	0	18.29	18.34	18.34	19.00
		1	13	18.29	18.23	18.31	19.00
		1	24	18.39	18.45	18.42	19.00
		12	0	18.27	18.22	18.29	19.00



		12	6	18.30	18.26	18.28	19.00
		12	13	18.22	18.21	18.25	19.00
		25	0	18.23	18.23	18.22	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	18.09	18.29	18.13	19.00
		1	25	18.05	18.14	18.16	19.00
		1	49	18.07	17.98	18.07	19.00
		25	0	18.14	18.23	18.16	19.00
		25	13	18.16	18.20	18.14	19.00
		25	25	18.21	18.14	18.14	19.00
		50	0	18.13	18.22	18.18	19.00
	16QAM	1	0	18.31	18.30	18.38	19.00
		1	25	18.25	18.28	18.28	19.00
		1	49	18.25	18.18	18.29	19.00
		25	0	18.22	18.23	18.26	19.00
		25	13	18.27	18.24	18.32	19.00
		25	25	18.25	18.26	18.21	19.00
		50	0	18.24	18.26	18.23	19.00
	64QAM	1	0	18.29	18.33	18.35	19.00
		1	25	18.31	18.25	18.31	19.00
		1	49	18.39	18.42	18.43	19.00
		25	0	18.29	18.26	18.28	19.00
		25	13	18.28	18.27	18.27	19.00
		25	25	18.23	18.22	18.28	19.00
		50	0	18.25	18.26	18.23	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	18.09	18.27	18.12	19.00
		1	38	18.05	18.14	18.15	19.00
		1	74	18.05	17.95	18.04	19.00
		36	0	18.14	18.20	18.15	19.00
		36	18	18.14	18.17	18.11	19.00
		36	39	18.20	18.15	18.11	19.00
		75	0	18.16	18.19	18.16	19.00
	16QAM	1	0	18.29	18.33	18.38	19.00
		1	38	18.24	18.26	18.31	19.00
		1	74	18.24	18.18	18.27	19.00
		36	0	18.24	18.22	18.26	19.00
		36	18	18.27	18.24	18.30	19.00
		36	39	18.24	18.23	18.23	19.00
		75	0	18.25	18.24	18.23	19.00
	64QAM	1	0	18.26	18.35	18.34	19.00



		1	38	18.30	18.24	18.32	19.00
		1	74	18.39	18.43	18.42	19.00
		36	0	18.27	18.25	18.30	19.00
		36	18	18.29	18.25	18.27	19.00
		36	39	18.23	18.22	18.26	19.00
		75	0	18.23	18.23	18.22	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	18.06	18.23	18.09	19.00
		1	50	18.04	18.10	18.13	19.00
		1	99	18.03	17.94	18.01	19.00
		50	0	18.11	18.15	18.11	19.00
		50	25	18.12	18.13	18.08	19.00
		50	50	18.17	18.10	18.07	19.00
		100	0	18.13	18.14	18.12	19.00
	16QAM	1	0	18.27	18.29	18.33	19.00
		1	50	18.20	18.24	18.27	19.00
		1	99	18.22	18.15	18.25	19.00
		50	0	18.21	18.18	18.23	19.00
		50	25	18.24	18.22	18.27	19.00
		50	50	18.21	18.18	18.19	19.00
		100	0	18.23	18.20	18.20	19.00
	64QAM	1	0	18.24	18.31	18.29	19.00
		1	50	18.26	18.22	18.28	19.00
		1	99	18.37	18.40	18.40	19.00
		50	0	18.24	18.21	18.27	19.00
		50	25	18.26	18.23	18.24	19.00
		50	50	18.20	18.17	18.22	19.00
		100	0	18.21	18.19	18.19	19.00

LTE FDD Band 5 Full Power&D2&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	24.41	24.49	24.35	25.50
		1	2	24.36	24.34	24.43	25.50
		1	5	24.35	24.33	24.45	25.50
		3	0	24.36	24.40	24.42	25.50
		3	2	24.38	24.49	24.43	25.50
		3	3	24.37	24.39	24.32	25.50
		6	0	23.44	23.51	23.44	24.50
	16QAM	1	0	23.48	23.40	23.42	24.50
		1	2	23.46	23.46	23.45	24.50



		1	5	23.37	23.39	23.42	24.50
		3	0	23.48	23.47	23.50	24.50
		3	2	23.46	23.44	23.47	24.50
		3	3	23.38	23.48	23.49	24.50
		6	0	22.52	22.61	22.63	23.50
	64QAM	1	0	23.47	23.40	23.50	24.00
		1	2	23.34	23.43	23.47	24.00
		1	5	23.36	23.45	23.42	24.00
		3	0	23.44	23.55	23.59	24.00
		3	2	23.52	23.60	23.65	24.00
		3	3	23.38	23.55	23.54	24.00
		6	0	22.40	22.60	22.63	23.00
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	24.42	24.52	24.37	25.50
		1	7	24.35	24.38	24.48	25.50
		1	14	24.37	24.37	24.48	25.50
		8	0	23.46	23.52	23.55	24.50
		8	4	23.51	23.60	23.54	24.50
		8	7	23.47	23.52	23.43	24.50
		15	0	23.48	23.56	23.49	24.50
	16QAM	1	0	23.50	23.41	23.44	24.50
		1	7	23.49	23.48	23.49	24.50
		1	14	23.39	23.43	23.44	24.50
		8	0	22.60	22.61	22.63	23.50
		8	4	22.56	22.56	22.58	23.50
		8	7	22.48	22.60	22.62	23.50
		15	0	22.56	22.66	22.65	23.50
	64QAM	1	0	23.49	23.41	23.52	24.00
		1	7	23.37	23.45	23.49	24.00
		1	14	23.38	23.44	23.44	24.00
		8	0	22.56	22.69	22.72	23.00
		8	4	22.62	22.72	22.76	23.00
		8	7	22.48	22.67	22.67	23.00
		15	0	22.44	22.65	22.65	23.00
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	24.41	24.48	24.35	25.50
		1	13	24.33	24.37	24.45	25.50
		1	24	24.34	24.32	24.44	25.50
		12	0	23.44	23.48	23.52	24.50
		12	6	23.48	23.55	23.50	24.50
		12	13	23.44	23.49	23.39	24.50



	16QAM	25	0	23.46	23.52	23.44	24.50
		1	0	23.45	23.39	23.42	24.50
		1	13	23.47	23.45	23.47	24.50
		1	24	23.36	23.39	23.41	24.50
		12	0	22.57	22.59	22.60	23.50
		12	6	22.53	22.51	22.54	23.50
		12	13	22.46	22.56	22.59	23.50
		25	0	22.53	22.61	22.61	23.50
	64QAM	1	0	23.44	23.39	23.50	24.00
		1	13	23.35	23.42	23.47	24.00
		1	24	23.39	23.43	23.45	24.00
		12	0	22.55	22.71	22.73	23.00
		12	6	22.60	22.69	22.75	23.00
		12	13	22.46	22.63	22.64	23.00
		25	0	22.41	22.60	22.61	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	24.38	24.44	24.32	25.50
		1	25	24.32	24.33	24.43	25.50
		1	49	24.32	24.31	24.41	25.50
		25	0	23.41	23.43	23.48	24.50
		25	13	23.46	23.51	23.47	24.50
		25	25	23.41	23.44	23.35	24.50
		50	0	23.43	23.47	23.40	24.50
	16QAM	1	0	23.41	23.35	23.37	24.50
		1	25	23.43	23.43	23.43	24.50
		1	49	23.34	23.36	23.39	24.50
		25	0	22.54	22.55	22.57	23.50
		25	13	22.50	22.49	22.51	23.50
		25	25	22.43	22.51	22.55	23.50
		50	0	22.51	22.57	22.58	23.50
	64QAM	1	0	23.42	23.35	23.45	24.00
		1	25	23.31	23.40	23.43	24.00
		1	49	23.33	23.37	23.39	24.00
		25	0	22.50	22.63	22.66	23.00
		25	13	22.56	22.65	22.69	23.00
		25	25	22.43	22.58	22.60	23.00
		50	0	22.39	22.56	22.58	23.00



LTE FDD Band 5 D1 & D4				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	21.98	21.79	21.79	23.00
		1	2	21.85	21.85	21.94	23.00
		1	5	22.03	21.98	21.85	23.00
		3	0	21.91	22.01	21.96	23.00
		3	2	21.94	21.97	22.00	23.00
		3	3	21.99	21.94	21.90	23.00
		6	0	21.99	21.98	22.02	23.00
	16QAM	1	0	21.92	22.05	21.89	23.00
		1	2	21.88	22.07	21.88	23.00
		1	5	21.72	22.13	21.86	23.00
		3	0	21.93	22.08	21.88	23.00
		3	2	21.99	22.04	21.95	23.00
		3	3	21.92	22.08	21.91	23.00
		6	0	21.91	22.05	21.98	23.00
	64QAM	1	0	22.04	21.99	22.09	23.00
		1	2	22.04	21.92	22.05	23.00
		1	5	22.32	22.07	22.35	23.00
		3	0	22.00	21.97	22.05	23.00
		3	2	21.98	21.99	22.01	23.00
		3	3	21.92	21.96	21.93	23.00
		6	0	21.90	21.99	21.94	23.00
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	21.97	21.81	21.78	23.00
		1	7	21.83	21.83	21.95	23.00
		1	14	22.03	21.98	21.85	23.00
		8	0	21.92	22.03	21.99	23.00
		8	4	21.95	22.01	22.01	23.00
		8	7	22.01	21.97	21.90	23.00
		15	0	21.99	22.01	22.03	23.00
	16QAM	1	0	21.92	22.03	21.89	23.00
		1	7	21.88	22.07	21.89	23.00
		1	14	21.71	22.15	21.85	23.00
		8	0	21.96	22.08	21.88	23.00
		8	4	22.01	22.06	21.97	23.00
		8	7	21.93	22.09	21.94	23.00
		15	0	21.92	22.05	21.96	23.00
	64QAM	1	0	22.04	21.97	22.09	23.00
1		7	22.04	21.92	22.06	23.00	



		1	14	22.31	22.09	22.34	23.00
		8	0	22.03	21.97	22.05	23.00
		8	4	22.00	22.01	22.03	23.00
		8	7	21.93	21.97	21.96	23.00
		15	0	21.90	22.01	21.94	23.00
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	21.98	21.78	21.79	23.00
		1	13	21.84	21.87	21.96	23.00
		1	24	22.02	21.97	21.84	23.00
		12	0	21.93	22.04	22.00	23.00
		12	6	21.95	22.01	22.01	23.00
		12	13	22.00	21.98	21.91	23.00
		25	0	22.02	21.99	22.02	23.00
	16QAM	1	0	21.89	22.04	21.89	23.00
		1	13	21.89	22.08	21.90	23.00
		1	24	21.71	22.13	21.85	23.00
		12	0	21.96	22.11	21.89	23.00
		12	6	22.00	22.05	21.96	23.00
		12	13	21.94	22.10	21.95	23.00
		25	0	21.92	22.05	21.96	23.00
	64QAM	1	0	22.01	21.98	22.09	23.00
		1	13	22.05	21.93	22.07	23.00
		1	24	22.31	22.07	22.34	23.00
		12	0	22.03	22.00	22.06	23.00
		12	6	21.99	22.00	22.02	23.00
		12	13	21.94	21.98	21.97	23.00
		25	0	21.90	22.01	21.94	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	21.95	21.74	21.76	23.00
		1	25	21.83	21.83	21.94	23.00
		1	49	22.00	21.96	21.81	23.00
		25	0	21.90	21.99	21.96	23.00
		25	13	21.93	21.97	21.98	23.00
		25	25	21.97	21.93	21.87	23.00
		50	0	21.99	21.94	21.98	23.00
	16QAM	1	0	21.87	22.00	21.84	23.00
		1	25	21.85	22.06	21.86	23.00
		1	49	21.69	22.10	21.83	23.00
		25	0	21.93	22.07	21.86	23.00
		25	13	21.97	22.03	21.93	23.00
		25	25	21.91	22.05	21.91	23.00



	64QAM	50	0	21.90	22.01	21.93	23.00
		1	0	21.99	21.94	22.04	23.00
		1	25	22.01	21.91	22.03	23.00
		1	49	22.29	22.04	22.32	23.00
		25	0	22.00	21.96	22.03	23.00
		25	13	21.96	21.98	21.99	23.00
		25	25	21.91	21.93	21.93	23.00
		50	0	21.88	21.97	21.91	23.00

LTE FDD Band 7 Full Power & 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	24.40	24.41	24.41	25.50
		1	13	24.34	24.41	24.42	25.50
		1	24	24.48	24.30	24.27	25.50
		12	0	23.50	23.56	23.76	24.50
		12	6	23.60	23.59	23.72	24.50
		12	13	23.55	23.53	23.56	24.50
		25	0	23.64	23.63	23.71	24.50
	16QAM	1	0	23.45	23.48	23.40	24.50
		1	13	23.43	23.48	23.46	24.50
		1	24	23.39	23.59	23.44	24.50
		12	0	22.61	22.74	22.65	23.50
		12	6	22.71	22.83	22.76	23.50
		12	13	22.53	22.73	22.60	23.50
		25	0	22.55	22.64	22.61	23.50
	64QAM	1	0	23.50	23.69	23.54	24.00
		1	13	23.45	23.65	23.51	24.00
		1	24	23.43	23.57	23.44	24.00
		12	0	22.64	22.78	22.73	23.00
		12	6	22.68	22.87	22.74	23.00
		12	13	22.56	22.73	22.62	23.00
		25	0	22.54	22.69	22.60	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	24.42	24.42	24.44	25.50
		1	25	24.37	24.46	24.46	25.50
		1	49	24.50	24.34	24.30	25.50
		25	0	23.53	23.61	23.80	24.50
		25	13	23.63	23.64	23.76	24.50
		25	25	23.57	23.57	23.61	24.50
		50	0	23.68	23.65	23.75	24.50



	16QAM	1	0	23.47	23.51	23.42	24.50
		1	25	23.46	23.52	23.49	24.50
		1	49	23.42	23.61	23.47	24.50
		25	0	22.64	22.79	22.69	23.50
		25	13	22.73	22.87	22.79	23.50
		25	25	22.56	22.78	22.64	23.50
		50	0	22.58	22.69	22.65	23.50
	64QAM	1	0	23.52	23.68	23.56	24.00
		1	25	23.48	23.65	23.54	24.00
		1	49	23.42	23.59	23.47	24.00
		25	0	22.67	22.83	22.73	23.00
		25	13	22.70	22.91	22.77	23.00
		25	25	22.59	22.78	22.66	23.00
		50	0	22.57	22.74	22.64	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	24.41	24.38	24.42	25.50
		1	38	24.35	24.45	24.43	25.50
		1	74	24.47	24.29	24.26	25.50
		36	0	23.51	23.57	23.77	24.50
		36	18	23.60	23.59	23.72	24.50
		36	39	23.54	23.54	23.57	24.50
		75	0	23.66	23.61	23.70	24.50
	16QAM	1	0	23.42	23.49	23.40	24.50
		1	38	23.44	23.49	23.47	24.50
		1	74	23.39	23.57	23.44	24.50
		36	0	22.61	22.77	22.66	23.50
		36	18	22.70	22.82	22.75	23.50
		36	39	22.54	22.74	22.61	23.50
		75	0	22.55	22.64	22.61	23.50
	64QAM	1	0	23.47	23.66	23.54	24.00
		1	38	23.46	23.62	23.52	24.00
		1	74	23.43	23.58	23.48	24.00
		36	0	22.66	22.85	22.74	23.00
		36	18	22.68	22.88	22.76	23.00
		36	39	22.57	22.74	22.63	23.00
		75	0	22.54	22.69	22.60	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	24.38	24.34	24.39	25.50
		1	50	24.34	24.41	24.41	25.50
		1	99	24.45	24.28	24.23	25.50
		50	0	23.48	23.52	23.73	24.50



		50	25	23.58	23.55	23.69	24.50
		50	50	23.51	23.49	23.53	24.50
		100	0	23.63	23.56	23.66	24.50
	16QAM	1	0	23.31	23.45	23.35	24.50
		1	50	23.40	23.47	23.43	24.50
		1	99	23.37	23.54	23.42	24.50
		50	0	22.58	22.73	22.63	23.50
		50	25	22.67	22.80	22.72	23.50
		50	50	22.51	22.69	22.57	23.50
		100	0	22.53	22.60	22.58	23.50
	64QAM	1	0	23.45	23.62	23.49	24.00
		1	50	23.42	23.60	23.48	24.00
		1	99	23.37	23.52	23.42	24.00
		50	0	22.61	22.77	22.67	23.00
		50	25	22.64	22.84	22.70	23.00
		50	50	22.54	22.69	22.59	23.00
		100	0	22.52	22.65	22.57	23.00

LTE FDD Band 7 D1 & D4				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	15.72	15.70	15.72	17.00
		1	13	15.59	15.61	15.61	17.00
		1	24	15.69	15.66	15.71	17.00
		12	0	15.82	15.81	15.84	17.00
		12	6	15.85	15.85	15.87	17.00
		12	13	15.84	15.83	15.86	17.00
		25	0	15.82	15.81	15.84	17.00
	16QAM	1	0	16.14	16.14	16.20	17.00
		1	13	16.29	16.23	16.29	17.00
		1	24	16.23	16.22	16.23	17.00
		12	0	15.81	15.79	15.81	17.00
		12	6	15.94	15.90	15.94	17.00
		12	13	15.82	15.81	15.84	17.00
		25	0	15.87	15.87	15.89	17.00
	64QAM	1	0	15.73	15.73	15.79	17.00
		1	13	15.80	15.74	15.80	17.00
		1	24	15.75	15.74	15.75	17.00
		12	0	15.90	15.88	15.90	17.00
		12	6	15.86	15.82	15.86	17.00
		12	13	15.84	15.83	15.86	17.00
		25	0	15.92	15.92	15.94	17.00



Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	15.71	15.73	15.71	17.00
		1	25	15.58	15.57	15.60	17.00
		1	49	15.70	15.67	15.72	17.00
		25	0	15.81	15.80	15.83	17.00
		25	13	15.85	15.85	15.87	17.00
		25	25	15.85	15.82	15.85	17.00
		50	0	15.79	15.83	15.85	17.00
	16QAM	1	0	16.17	16.13	16.20	17.00
		1	25	16.28	16.22	16.28	17.00
		1	49	16.23	16.24	16.23	17.00
		25	0	15.81	15.76	15.80	17.00
		25	13	15.95	15.91	15.95	17.00
		25	25	15.81	15.80	15.83	17.00
		50	0	15.87	15.87	15.89	17.00
	64QAM	1	0	15.76	15.72	15.79	17.00
		1	25	15.79	15.73	15.79	17.00
		1	49	15.75	15.76	15.75	17.00
		25	0	15.90	15.85	15.89	17.00
		25	13	15.87	15.83	15.87	17.00
		25	25	15.83	15.82	15.85	17.00
		50	0	15.92	15.92	15.94	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	15.74	15.75	15.75	17.00
		1	38	15.60	15.61	15.63	17.00
		1	74	15.73	15.72	15.76	17.00
		36	0	15.84	15.85	15.87	17.00
		36	18	15.87	15.89	15.92	17.00
		36	39	15.87	15.84	15.89	17.00
		75	0	15.81	15.84	15.87	17.00
	16QAM	1	0	16.20	16.17	16.23	17.00
		1	38	16.31	16.24	16.31	17.00
		1	74	16.26	16.26	16.27	17.00
		36	0	15.83	15.80	15.83	17.00
		36	18	15.98	15.96	15.99	17.00
		36	39	15.84	15.85	15.87	17.00
		75	0	15.89	15.91	15.94	17.00
	64QAM	1	0	15.79	15.76	15.82	17.00
		1	38	15.82	15.75	15.82	17.00
		1	74	15.78	15.78	15.79	17.00
		36	0	15.92	15.89	15.92	17.00



		36	18	15.90	15.88	15.91	17.00
		36	39	15.86	15.87	15.89	17.00
		75	0	15.94	15.96	15.99	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	15.68	15.66	15.69	17.00
		1	50	15.58	15.57	15.59	17.00
		1	99	15.67	15.65	15.68	17.00
		50	0	15.79	15.76	15.80	17.00
		50	25	15.83	15.81	15.84	17.00
		50	50	15.81	15.78	15.82	17.00
		100	0	15.79	15.76	15.80	17.00
	16QAM	1	0	16.12	16.10	16.15	17.00
		1	50	16.25	16.21	16.25	17.00
		1	99	16.21	16.19	16.21	17.00
		50	0	15.78	15.75	15.78	17.00
		50	25	15.91	15.88	15.91	17.00
		50	50	15.79	15.76	15.80	17.00
		100	0	15.85	15.83	15.86	17.00
	64QAM	1	0	15.71	15.69	15.74	17.00
		1	50	15.76	15.72	15.76	17.00
		1	99	15.73	15.71	15.73	17.00
		50	0	15.87	15.84	15.87	17.00
		50	25	15.83	15.80	15.83	17.00
		50	50	15.81	15.78	15.82	17.00
		100	0	15.90	15.88	15.91	17.00

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	18.09	18.03	18.07	19.00
		1	13	17.95	18.03	18.10	19.00
		1	24	18.08	18.13	18.18	19.00
		12	0	18.10	18.18	18.28	19.00
		12	6	18.15	18.22	18.32	19.00
		12	13	18.20	18.23	18.25	19.00
		25	0	18.12	18.25	18.19	19.00
	16QAM	1	0	18.20	18.15	18.22	19.00
		1	13	18.21	18.18	18.22	19.00
		1	24	18.14	18.15	18.18	19.00
		12	0	18.12	18.07	18.13	19.00
		12	6	18.18	18.15	18.20	19.00



		12	13	18.25	18.24	18.29	19.00
		25	0	18.28	18.27	18.27	19.00
	64QAM	1	0	18.37	18.25	18.43	19.00
		1	13	18.37	18.31	18.39	19.00
		1	24	18.23	18.24	18.26	19.00
		12	0	18.22	18.17	18.23	19.00
		12	6	18.18	18.14	18.22	19.00
		12	13	18.30	18.29	18.33	19.00
		25	0	18.32	18.32	18.35	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	18.10	18.02	18.09	19.00
		1	25	17.96	18.07	18.12	19.00
		1	49	18.09	18.15	18.20	19.00
		25	0	18.11	18.22	18.30	19.00
		25	13	18.17	18.25	18.35	19.00
		25	25	18.20	18.23	18.29	19.00
		50	0	18.12	18.26	18.20	19.00
	16QAM	1	0	18.19	18.13	18.22	19.00
		1	25	18.23	18.21	18.20	19.00
		1	49	18.15	18.13	18.20	19.00
		25	0	18.10	18.11	18.14	19.00
		25	13	18.17	18.14	18.21	19.00
		25	25	18.27	18.28	18.28	19.00
		50	0	18.27	18.29	18.27	19.00
	64QAM	1	0	18.37	18.24	18.44	19.00
		1	25	18.39	18.33	18.39	19.00
		1	49	18.23	18.21	18.27	19.00
		25	0	18.24	18.21	18.22	19.00
		25	13	18.16	18.15	18.21	19.00
		25	25	18.31	18.30	18.36	19.00
		50	0	18.34	18.35	18.36	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	18.10	18.00	18.08	19.00
		1	38	17.96	18.07	18.11	19.00
		1	74	18.07	18.12	18.17	19.00
		36	0	18.11	18.19	18.29	19.00
		36	18	18.15	18.22	18.32	19.00
		36	39	18.19	18.24	18.26	19.00
		75	0	18.15	18.23	18.18	19.00
	16QAM	1	0	18.17	18.16	18.22	19.00
		1	38	18.22	18.19	18.23	19.00



		1	74	18.14	18.13	18.18	19.00
		36	0	18.12	18.10	18.14	19.00
		36	18	18.17	18.14	18.19	19.00
		36	39	18.26	18.25	18.30	19.00
		75	0	18.28	18.27	18.27	19.00
	64QAM	1	0	18.34	18.26	18.43	19.00
		1	38	18.38	18.32	18.40	19.00
		1	74	18.23	18.22	18.26	19.00
		36	0	18.22	18.20	18.24	19.00
		36	18	18.17	18.13	18.21	19.00
		36	39	18.31	18.30	18.34	19.00
		75	0	18.32	18.32	18.35	19.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	18.07	17.96	18.05	19.00
		1	50	17.95	18.03	18.09	19.00
		1	99	18.05	18.11	18.14	19.00
		50	0	18.08	18.14	18.25	19.00
		50	25	18.13	18.18	18.29	19.00
		50	50	18.16	18.19	18.22	19.00
		100	0	18.12	18.18	18.14	19.00
	16QAM	1	0	18.15	18.12	18.17	19.00
		1	50	18.18	18.17	18.19	19.00
		1	99	18.12	18.10	18.16	19.00
		50	0	18.09	18.06	18.11	19.00
		50	25	18.14	18.12	18.16	19.00
		50	50	18.23	18.20	18.26	19.00
		100	0	18.26	18.23	18.24	19.00
	64QAM	1	0	18.32	18.22	18.38	19.00
		1	50	18.34	18.30	18.36	19.00
		1	99	18.21	18.19	18.24	19.00
		50	0	18.19	18.16	18.21	19.00
		50	25	18.14	18.11	18.18	19.00
		50	50	18.28	18.25	18.30	19.00
		100	0	18.30	18.28	18.32	19.00

LTE TDD Band 38 Full Power&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	24.20	24.20	24.19	25.50
		1	13	24.20	24.17	24.09	25.50
		1	24	24.18	24.07	24.23	25.50



		12	0	23.26	23.40	23.24	24.50
		12	6	23.43	23.42	23.30	24.50
		12	13	23.43	23.33	23.30	24.50
		25	0	23.29	23.22	23.18	24.50
	16QAM	1	0	23.59	23.71	23.63	24.50
		1	13	23.57	23.49	23.47	24.50
		1	24	23.83	23.68	23.53	24.50
		12	0	22.70	22.53	22.44	23.50
		12	6	22.49	22.36	22.29	23.50
		12	13	22.68	22.52	22.39	23.50
		25	0	22.54	22.53	22.50	23.50
	64QAM	1	0	23.67	23.51	23.58	24.00
		1	13	23.63	23.47	23.33	24.00
		1	24	23.69	23.53	23.40	24.00
		12	0	22.73	22.56	22.51	23.00
		12	6	22.75	22.53	22.40	23.00
		12	13	22.63	22.50	22.39	23.00
		25	0	22.55	22.45	22.36	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	24.22	24.21	24.22	25.50
		1	25	24.23	24.22	24.13	25.50
		1	49	24.20	24.11	24.26	25.50
		25	0	23.29	23.45	23.28	24.50
		25	13	23.46	23.47	23.34	24.50
		25	25	23.45	23.37	23.35	24.50
		50	0	23.33	23.24	23.22	24.50
	16QAM	1	0	23.61	23.74	23.65	24.50
		1	25	23.60	23.53	23.50	24.50
		1	49	23.86	23.70	23.56	24.50
		25	0	22.73	22.58	22.48	23.50
		25	13	22.51	22.40	22.32	23.50
		25	25	22.71	22.57	22.43	23.50
		50	0	22.57	22.58	22.54	23.50
	64QAM	1	0	23.69	23.50	23.60	24.00
		1	25	23.66	23.47	23.36	24.00
		1	49	23.68	23.55	23.43	24.00
		25	0	22.76	22.61	22.51	23.00
		25	13	22.77	22.57	22.43	23.00
		25	25	22.66	22.55	22.43	23.00
		50	0	22.58	22.50	22.40	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	24.21	24.17	24.20	25.50
		1	38	24.21	24.21	24.10	25.50
		1	74	24.17	24.06	24.22	25.50
		36	0	23.27	23.41	23.25	24.50
		36	18	23.43	23.42	23.30	24.50
		36	39	23.42	23.34	23.31	24.50
		75	0	23.31	23.20	23.17	24.50
	16QAM	1	0	23.56	23.72	23.63	24.50
		1	38	23.58	23.50	23.48	24.50
		1	74	23.83	23.66	23.53	24.50
		36	0	22.70	22.56	22.45	23.50
		36	18	22.48	22.35	22.28	23.50
		36	39	22.69	22.53	22.40	23.50
		75	0	22.54	22.53	22.50	23.50
	64QAM	1	0	23.64	23.48	23.58	24.00
		1	38	23.64	23.44	23.34	24.00
		1	74	23.69	23.54	23.44	24.00
		36	0	22.75	22.63	22.52	23.00
		36	18	22.75	22.54	22.42	23.00
		36	39	22.64	22.51	22.40	23.00
		75	0	22.55	22.45	22.36	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	24.18	24.13	24.17	25.50
		1	50	24.20	24.17	24.08	25.50
		1	99	24.15	24.05	24.19	25.50
		50	0	23.24	23.36	23.21	24.50
		50	25	23.41	23.38	23.27	24.50
		50	50	23.39	23.29	23.27	24.50
		100	0	23.28	23.15	23.13	24.50
	16QAM	1	0	23.83	23.68	23.58	24.50
		1	50	23.54	23.48	23.44	24.50
		1	99	23.81	23.63	23.51	24.50
		50	0	22.67	22.52	22.42	23.50
		50	25	22.45	22.33	22.25	23.50
		50	50	22.66	22.48	22.36	23.50
		100	0	22.52	22.49	22.47	23.50
	64QAM	1	0	23.62	23.44	23.53	24.00
		1	50	23.60	23.42	23.30	24.00
		1	99	23.63	23.48	23.38	24.00
		50	0	22.70	22.55	22.45	23.00
		50	25	22.71	22.50	22.36	23.00
		50	50	22.61	22.46	22.36	23.00



		100	0	22.53	22.41	22.33	23.00
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LTE TDD Band 38 D1&D3 & D4				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	19.05	19.02	18.91	20.00
		1	13	18.90	18.98	18.87	20.00
		1	24	19.01	19.07	19.03	20.00
		12	0	19.11	19.16	19.04	20.00
		12	6	19.16	19.19	19.06	20.00
		12	13	19.21	19.08	19.08	20.00
		25	0	19.15	19.21	19.14	20.00
	16QAM	1	0	19.16	19.26	19.25	20.00
		1	13	19.17	19.28	19.24	20.00
		1	24	19.20	19.24	19.20	20.00
		12	0	19.08	19.12	19.17	20.00
		12	6	19.14	19.15	19.21	20.00
		12	13	19.04	19.14	19.14	20.00
		25	0	19.13	19.13	19.18	20.00
	64QAM	1	0	19.23	19.23	19.20	20.00
		1	13	19.13	19.16	19.13	20.00
		1	24	19.13	19.17	19.19	20.00
		12	0	19.05	19.12	19.10	20.00
		12	6	19.12	19.08	19.15	20.00
		12	13	19.10	19.12	19.15	20.00
		25	0	19.12	19.16	19.21	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	19.06	19.01	18.93	20.00
		1	25	18.91	19.02	18.89	20.00
		1	49	19.02	19.09	19.05	20.00
		25	0	19.12	19.20	19.06	20.00
		25	13	19.18	19.22	19.09	20.00
		25	25	19.21	19.08	19.12	20.00
		50	0	19.15	19.22	19.15	20.00
	16QAM	1	0	19.15	19.24	19.25	20.00
		1	25	19.19	19.31	19.22	20.00
		1	49	19.21	19.22	19.22	20.00
		25	0	19.06	19.16	19.18	20.00
		25	13	19.13	19.14	19.22	20.00
		25	25	19.06	19.18	19.13	20.00
		50	0	19.12	19.15	19.18	20.00



	64QAM	1	0	19.23	19.22	19.21	20.00
		1	25	19.15	19.18	19.13	20.00
		1	49	19.13	19.14	19.20	20.00
		25	0	19.07	19.16	19.09	20.00
		25	13	19.10	19.09	19.14	20.00
		25	25	19.11	19.13	19.18	20.00
		50	0	19.14	19.19	19.22	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	19.06	18.99	18.92	20.00
		1	38	18.91	19.02	18.88	20.00
		1	74	19.00	19.06	19.02	20.00
		36	0	19.12	19.17	19.05	20.00
		36	18	19.16	19.19	19.06	20.00
		36	39	19.20	19.09	19.09	20.00
		75	0	19.18	19.19	19.13	20.00
	16QAM	1	0	19.13	19.27	19.25	20.00
		1	38	19.18	19.29	19.25	20.00
		1	74	19.20	19.22	19.20	20.00
		36	0	19.08	19.15	19.18	20.00
		36	18	19.13	19.14	19.20	20.00
		36	39	19.05	19.15	19.15	20.00
		75	0	19.13	19.13	19.18	20.00
	64QAM	1	0	19.20	19.24	19.20	20.00
		1	38	19.14	19.17	19.14	20.00
		1	74	19.13	19.15	19.19	20.00
		36	0	19.05	19.15	19.11	20.00
		36	18	19.11	19.07	19.14	20.00
		36	39	19.11	19.13	19.16	20.00
		75	0	19.12	19.16	19.21	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	19.03	18.95	18.89	20.00
		1	50	18.90	18.98	18.86	20.00
		1	99	19.05	18.99	18.99	20.00
		50	0	19.09	19.12	19.01	20.00
		50	25	19.14	19.15	19.03	20.00
		50	50	19.17	19.04	19.05	20.00
		100	0	19.15	19.14	19.09	20.00
	16QAM	1	0	19.11	19.23	19.20	20.00
		1	50	19.14	19.27	19.21	20.00
		1	99	19.18	19.19	19.18	20.00
		50	0	19.05	19.11	19.15	20.00



		50	25	19.10	19.12	19.17	20.00
		50	50	19.02	19.10	19.11	20.00
		100	0	19.11	19.09	19.15	20.00
	64QAM	1	0	19.18	19.20	19.15	20.00
		1	50	19.10	19.15	19.10	20.00
		1	99	19.11	19.12	19.17	20.00
		50	0	19.02	19.11	19.08	20.00
		50	25	19.08	19.05	19.11	20.00
		50	50	19.08	19.08	19.12	20.00
		100	0	19.10	19.12	19.18	20.00

LTE TDD Band 41 Full Power&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	24.26	24.15	24.13	24.26	25.50
		1	13	24.26	24.16	24.17	24.26	25.50
		1	24	24.41	24.42	24.38	24.43	25.50
		12	0	23.31	23.35	23.33	23.31	24.50
		12	6	23.37	23.25	23.22	23.39	24.50
		12	13	23.36	23.34	23.38	23.37	24.50
		25	0	23.28	23.45	23.37	23.25	24.50
	16QAM	1	0	23.77	23.58	23.62	23.78	24.50
		1	13	23.75	23.76	23.61	23.76	24.50
		1	24	23.67	23.76	23.30	23.68	24.50
		12	0	22.63	22.68	23.18	22.61	23.50
		12	6	22.63	22.67	23.24	22.63	23.50
		12	13	22.58	22.70	23.21	22.59	23.50
		25	0	22.41	22.52	22.17	22.40	23.50
	64QAM	1	0	23.66	23.79	23.24	23.69	24.00
		1	13	23.65	23.70	23.26	23.66	24.00
		1	24	23.55	23.63	23.25	23.55	24.00
		12	0	22.57	22.70	22.80	22.59	23.00
		12	6	22.58	22.64	22.80	22.57	23.00
		12	13	22.59	22.71	22.91	22.59	23.00
		25	0	22.59	22.70	22.58	22.61	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	24.28	24.16	24.16	24.28	25.50
		1	25	24.29	24.21	24.21	24.29	25.50
		1	49	24.43	24.46	24.41	24.45	25.50
		25	0	23.34	23.40	23.37	23.34	24.50
		25	13	23.40	23.30	23.26	23.42	24.50



		25	25	23.38	23.38	23.43	23.39	24.50
		50	0	23.32	23.47	23.41	23.29	24.50
	16QAM	1	0	23.79	23.61	23.64	23.80	24.50
		1	25	23.78	23.80	23.64	23.79	24.50
		1	49	23.70	23.78	23.33	23.71	24.50
		25	0	22.66	22.73	23.22	22.64	23.50
		25	13	22.65	22.71	23.27	22.65	23.50
		25	25	22.61	22.75	23.25	22.62	23.50
		50	0	22.44	22.57	22.21	22.43	23.50
		1	0	23.68	23.78	23.26	23.71	24.00
	64QAM	1	25	23.68	23.70	23.29	23.69	24.00
		1	49	23.54	23.65	23.28	23.54	24.00
		25	0	22.60	22.75	22.80	22.62	23.00
		25	13	22.60	22.68	22.83	22.59	23.00
		25	25	22.62	22.76	22.95	22.62	23.00
		50	0	22.62	22.75	22.62	22.64	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	24.27	24.12	24.14	24.27	25.50
		1	38	24.27	24.20	24.18	24.27	25.50
		1	74	24.40	24.41	24.37	24.42	25.50
		36	0	23.32	23.36	23.34	23.32	24.50
		36	18	23.37	23.25	23.22	23.39	24.50
		36	39	23.35	23.35	23.39	23.36	24.50
		75	0	23.30	23.43	23.36	23.27	24.50
	16QAM	1	0	23.74	23.59	23.62	23.75	24.50
		1	38	23.76	23.77	23.62	23.77	24.50
		1	74	23.67	23.74	23.30	23.68	24.50
		36	0	22.63	22.71	23.19	22.61	23.50
		36	18	22.62	22.66	23.23	22.62	23.50
		36	39	22.59	22.71	23.22	22.60	23.50
		75	0	22.41	22.52	22.17	22.40	23.50
	64QAM	1	0	23.63	23.76	23.24	23.66	24.00
		1	38	23.66	23.67	23.27	23.67	24.00
		1	74	23.55	23.64	23.29	23.55	24.00
		36	0	22.59	22.77	22.81	22.61	23.00
		36	18	22.58	22.65	22.82	22.57	23.00
		36	39	22.60	22.72	22.92	22.60	23.00
		75	0	22.59	22.70	22.58	22.61	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	24.24	24.08	24.11	24.24	25.50
		1	50	24.26	24.16	24.16	24.26	25.50



		1	99	24.38	24.40	24.34	24.39	25.50
		50	0	23.29	23.31	23.30	23.29	24.50
		50	25	23.35	23.21	23.19	23.37	24.50
		50	50	23.32	23.30	23.35	23.33	24.50
		100	0	23.27	23.38	23.32	23.24	24.50
	16QAM	1	0	23.44	23.55	23.57	23.46	24.50
		1	50	23.72	23.75	23.58	23.73	24.50
		1	99	23.65	23.71	23.28	23.66	24.50
		50	0	22.60	22.67	23.16	22.58	23.50
		50	25	22.59	22.64	23.20	22.59	23.50
		50	50	22.56	22.66	23.18	22.57	23.50
		100	0	22.39	22.48	22.14	22.38	23.50
	64QAM	1	0	23.61	23.72	23.19	23.64	24.00
		1	50	23.62	23.65	23.23	23.63	24.00
		1	99	23.49	23.58	23.23	23.49	24.00
		50	0	22.54	22.69	22.74	22.56	23.00
		50	25	22.54	22.61	22.76	22.53	23.00
		50	50	22.57	22.67	22.88	22.57	23.00
		100	0	22.57	22.66	22.55	22.59	23.00

LTE TDD Band 41 D1				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	20.16	19.90	20.03	19.86	21.00
		1	13	19.97	20.03	19.93	20.01	21.00
		1	24	20.09	20.07	20.00	20.13	21.00
		12	0	20.28	20.18	20.20	20.18	21.00
		12	6	20.29	20.28	20.12	20.28	21.00
		12	13	20.24	20.29	20.21	20.27	21.00
		25	0	20.24	20.28	20.17	20.24	21.00
	16QAM	1	0	20.34	20.12	20.20	20.38	21.00
		1	13	20.32	20.30	20.36	20.36	21.00
		1	24	20.13	20.35	20.15	20.31	21.00
		12	0	20.13	20.22	20.15	20.24	21.00
		12	6	20.07	20.30	20.10	20.32	21.00
		12	13	20.10	20.34	20.16	20.34	21.00
		25	0	19.91	20.29	19.96	20.28	21.00
	64QAM	1	0	20.10	20.22	20.18	20.19	21.00
		1	13	20.08	20.11	20.12	20.12	21.00
		1	24	20.13	20.35	20.11	20.35	21.00
		12	0	20.06	20.20	20.14	20.22	21.00
		12	6	20.01	20.26	20.06	20.31	21.00



		12	13	20.01	20.33	20.07	20.30	21.00
		25	0	20.01	20.23	20.06	20.23	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	20.18	19.91	20.06	19.88	21.00
		1	25	20.00	20.08	19.97	20.04	21.00
		1	49	20.11	20.11	20.03	20.15	21.00
		25	0	20.31	20.23	20.24	20.21	21.00
		25	13	20.32	20.33	20.16	20.31	21.00
		25	25	20.26	20.33	20.26	20.29	21.00
		50	0	20.28	20.30	20.21	20.28	21.00
	16QAM	1	0	20.36	20.15	20.22	20.40	21.00
		1	25	20.35	20.34	20.39	20.39	21.00
		1	49	20.16	20.37	20.18	20.34	21.00
		25	0	20.16	20.27	20.19	20.27	21.00
		25	13	20.09	20.34	20.13	20.34	21.00
		25	25	20.13	20.39	20.20	20.37	21.00
		50	0	19.94	20.34	20.00	20.31	21.00
	64QAM	1	0	20.12	20.21	20.20	20.21	21.00
		1	25	20.11	20.11	20.15	20.15	21.00
		1	49	20.12	20.37	20.14	20.34	21.00
		25	0	20.09	20.25	20.14	20.25	21.00
		25	13	20.03	20.30	20.09	20.33	21.00
		25	25	20.04	20.38	20.11	20.33	21.00
		50	0	20.04	20.28	20.10	20.26	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	20.17	19.87	20.04	19.87	21.00
		1	38	19.98	20.07	19.94	20.02	21.00
		1	74	20.08	20.06	19.99	20.12	21.00
		36	0	20.29	20.19	20.21	20.19	21.00
		36	18	20.29	20.28	20.12	20.28	21.00
		36	39	20.23	20.30	20.22	20.26	21.00
		75	0	20.26	20.26	20.16	20.26	21.00
	16QAM	1	0	20.31	20.13	20.20	20.35	21.00
		1	38	20.33	20.31	20.37	20.37	21.00
		1	74	20.13	20.33	20.15	20.31	21.00
		36	0	20.13	20.25	20.16	20.24	21.00
		36	18	20.06	20.29	20.09	20.31	21.00
		36	39	20.11	20.35	20.17	20.35	21.00
		75	0	19.91	20.29	19.96	20.28	21.00
	64QAM	1	0	20.07	20.19	20.18	20.16	21.00
		1	38	20.09	20.08	20.13	20.13	21.00



		1	74	20.13	20.36	20.15	20.35	21.00
		36	0	20.08	20.27	20.15	20.24	21.00
		36	18	20.01	20.27	20.08	20.31	21.00
		36	39	20.02	20.34	20.08	20.31	21.00
		75	0	20.01	20.23	20.06	20.23	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	20.14	19.83	20.01	19.84	21.00
		1	50	19.97	20.03	19.92	20.01	21.00
		1	99	20.06	20.05	19.96	20.10	21.00
		50	0	20.26	20.14	20.17	20.16	21.00
		50	25	20.27	20.24	20.09	20.26	21.00
		50	50	20.20	20.25	20.18	20.23	21.00
		100	0	20.23	20.21	20.12	20.23	21.00
	16QAM	1	0	20.27	20.09	20.15	20.07	21.00
		1	50	20.29	20.29	20.33	20.33	21.00
		1	99	20.11	20.30	20.13	20.29	21.00
		50	0	20.10	20.21	20.13	20.21	21.00
		50	25	20.03	20.27	20.06	20.28	21.00
		50	50	20.08	20.30	20.13	20.32	21.00
		100	0	19.89	20.25	19.93	20.26	21.00
	64QAM	1	0	20.05	20.15	20.13	20.14	21.00
		1	50	20.05	20.06	20.09	20.09	21.00
		1	99	20.07	20.30	20.09	20.29	21.00
		50	0	20.03	20.19	20.08	20.19	21.00
		50	25	19.97	20.23	20.02	20.27	21.00
		50	50	19.99	20.29	20.04	20.28	21.00
		100	0	19.99	20.19	20.03	20.21	21.00

LTE TDD Band 41 D3 & D4				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	19.13	19.04	19.02	19.04	20.00
		1	13	19.03	18.95	18.81	18.83	20.00
		1	24	19.15	19.15	19.02	19.05	20.00
		12	0	19.34	19.22	19.28	19.30	20.00
		12	6	19.27	19.28	19.15	19.18	20.00
		12	13	19.21	19.31	19.23	19.28	20.00
		25	0	19.24	19.30	19.18	19.19	20.00
	16QAM	1	0	19.30	19.22	19.33	19.35	20.00
		1	13	19.28	19.21	19.31	19.33	20.00
		1	24	19.33	19.36	19.38	19.41	20.00



		12	0	19.20	19.17	19.24	19.28	20.00
		12	6	19.34	19.29	19.39	19.43	20.00
		12	13	19.36	19.39	19.45	19.47	20.00
		25	0	19.32	19.35	19.40	19.43	20.00
	64QAM	1	0	19.27	19.26	19.42	19.44	20.00
		1	13	19.31	19.25	19.37	19.39	20.00
		1	24	19.24	19.22	19.25	19.28	20.00
		12	0	19.31	19.30	19.42	19.38	20.00
		12	6	19.17	19.12	19.25	19.26	20.00
		12	13	19.17	19.20	19.25	19.27	20.00
		25	0	19.25	19.29	19.33	19.36	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/2540	40390/2570	40690/2600	41190/2650	
10MHz	QPSK	1	0	19.15	19.05	19.05	19.06	20.00
		1	25	19.06	19.00	18.85	18.86	20.00
		1	49	19.17	19.19	19.05	19.07	20.00
		25	0	19.37	19.27	19.32	19.33	20.00
		25	13	19.30	19.33	19.19	19.21	20.00
		25	25	19.23	19.35	19.28	19.30	20.00
		50	0	19.28	19.32	19.22	19.23	20.00
	16QAM	1	0	19.32	19.25	19.35	19.37	20.00
		1	25	19.31	19.25	19.34	19.36	20.00
		1	49	19.36	19.38	19.41	19.44	20.00
		25	0	19.23	19.22	19.28	19.31	20.00
		25	13	19.36	19.33	19.42	19.45	20.00
		25	25	19.39	19.44	19.49	19.50	20.00
		50	0	19.35	19.40	19.44	19.46	20.00
	64QAM	1	0	19.29	19.25	19.44	19.46	20.00
		1	25	19.34	19.25	19.40	19.42	20.00
		1	49	19.23	19.24	19.28	19.27	20.00
		25	0	19.34	19.35	19.42	19.41	20.00
		25	13	19.19	19.16	19.28	19.28	20.00
		25	25	19.20	19.25	19.29	19.30	20.00
		50	0	19.28	19.34	19.37	19.39	20.00
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	19.14	19.01	19.03	19.05	20.00
		1	38	19.04	18.99	18.82	18.84	20.00
		1	74	19.14	19.14	19.01	19.04	20.00
		36	0	19.35	19.23	19.29	19.31	20.00
		36	18	19.27	19.28	19.15	19.18	20.00
		36	39	19.20	19.32	19.24	19.27	20.00
		75	0	19.26	19.28	19.17	19.21	20.00



	16QAM	1	0	19.27	19.23	19.33	19.32	20.00
		1	38	19.29	19.22	19.32	19.34	20.00
		1	74	19.33	19.34	19.38	19.41	20.00
		36	0	19.20	19.20	19.25	19.28	20.00
		36	18	19.33	19.28	19.38	19.42	20.00
		36	39	19.37	19.40	19.46	19.48	20.00
		75	0	19.32	19.35	19.40	19.43	20.00
	64QAM	1	0	19.24	19.23	19.42	19.41	20.00
		1	38	19.32	19.22	19.38	19.40	20.00
		1	74	19.24	19.23	19.29	19.28	20.00
		36	0	19.33	19.37	19.43	19.40	20.00
		36	18	19.17	19.13	19.27	19.26	20.00
		36	39	19.18	19.21	19.26	19.28	20.00
		75	0	19.25	19.29	19.33	19.36	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/2545	40400/2571	40670/2598	41140/2645	
20MHz	QPSK	1	0	19.11	18.97	19.00	19.02	20.00
		1	50	19.03	18.95	18.80	18.83	20.00
		1	99	19.12	19.13	18.98	19.02	20.00
		50	0	19.32	19.18	19.25	19.28	20.00
		50	25	19.25	19.24	19.12	19.16	20.00
		50	50	19.17	19.27	19.20	19.24	20.00
		100	0	19.23	19.23	19.13	19.18	20.00
	16QAM	1	0	19.23	19.19	19.28	19.30	20.00
		1	50	19.25	19.20	19.28	19.30	20.00
		1	99	19.31	19.31	19.36	19.39	20.00
		50	0	19.17	19.16	19.22	19.25	20.00
		50	25	19.30	19.26	19.35	19.39	20.00
		50	50	19.34	19.35	19.42	19.45	20.00
		100	0	19.30	19.31	19.37	19.41	20.00
	64QAM	1	0	19.22	19.19	19.37	19.39	20.00
		1	50	19.28	19.20	19.34	19.36	20.00
		1	99	19.18	19.17	19.23	19.22	20.00
		50	0	19.28	19.29	19.36	19.35	20.00
		50	25	19.13	19.09	19.21	19.22	20.00
		50	50	19.15	19.16	19.22	19.25	20.00
		100	0	19.23	19.25	19.30	19.34	20.00



9.1.1 LTE CA

Main- Antenna

CA Combination	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	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	23.76	25.50
CA_7C	D1	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	23.98	25.50
CA_7C	D1	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	24.02	25.50
CA_7C	D1	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	24.07	25.50
CA_7C	D2	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	22.62	24.00
CA_7C	D2	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	22.81	24.00
CA_7C	D2	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	22.73	24.00
CA_7C	D2	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	22.66	24.00
CA_7C	D3&D4	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	19.02	20.00
CA_7C	D3&D4	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	18.94	20.00
CA_7C	D3&D4	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	19.08	20.00
CA_7C	D3&D4	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	19.17	20.00
CA_38C	D1	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	24.33	25.50
CA_38C	D1	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	24.41	25.50
CA_38C	D2	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	23.47	24.50
CA_38C	D2	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	23.39	24.50
CA_38C	D3&D4	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	20.06	21.00
CA_38C	D3&D4	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	20.19	21.00

Second – Antenna

CA Combination	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&D4	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	15.60	17.00
CA_7C	D1&D4	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	15.43	17.00
CA_7C	D1&D4	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	15.34	17.00
CA_7C	D1&D4	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	15.57	17.00
CA_7C	D2	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	24.13	25.50
CA_7C	D2	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	24.03	25.50
CA_7C	D2	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	23.93	25.50
CA_7C	D2	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	23.88	25.50
CA_7C	D3	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	17.96	19.00
CA_7C	D3	QPSK	7	20	1	99	21100	3100	7	20	21298	1	0	18.02	19.00
CA_7C	D3	QPSK	7	20	1	0	21100	3100	7	20	20902	1	99	17.92	19.00
CA_7C	D3	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	18.10	19.00
CA_38C	D1&D3&D4	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	18.75	20.00



CA_38C	D1&D3&D4	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	18.82	20.00
CA_38C	D2	QPSK	38	20	1	99	37850	37850	38	20	38048	1	0	24.33	25.50
CA_38C	D2	QPSK	38	20	1	0	38150	38150	38	20	37952	1	99	24.27	25.50

9.4 WLAN Mode

Ant 1 Wi-Fi 2.4G D1&D2 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	20	18.44
	6/2437	20	18.73
	11/2462	20	18.85
802.11g (6M)	1/2412	17.5	15.57
	6/2437	17.5	15.85
	11/2462	17.5	15.79
802.11n-HT20 (MCS0)	1/2412	14.5	12.68
	6/2437	14.5	13.06
	11/2462	14.5	12.97
802.11n-HT40 (MCS0)	3/2422	12.5	11.28
	6/2437	11.5	10.71
	9/2452	11.5	10.60
Ant 1 Wi-Fi 2.4G D4 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	16	14.57
	6/2437	16	14.91
	11/2462	16	14.96
802.11g (6M)	1/2412	16	14.37
	6/2437	16	14.85
	11/2462	16	14.83
802.11n-HT20 (MCS0)	1/2412	14.5	12.88
	6/2437	14.5	13.30
	11/2462	14.5	13.15
802.11n-HT40 (MCS0)	3/2422	12.5	11.10
	6/2437	11.5	11.20
	9/2452	11.5	10.66
Ant 2 Wi-Fi 2.4G D1&D2 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11b (1M)	1/2412	20	18.91
	6/2437	20	18.83



	11/2462	20	18.87		
802.11g (6M)	1/2412	17.5	15.68		
	6/2437	17.5	15.77		
	11/2462	17.5	15.64		
802.11n-HT20 (MCS0)	1/2412	14.5	12.73		
	6/2437	14.5	12.61		
	11/2462	14.5	12.82		
802.11n-HT40 (MCS0)	3/2422	12.5	12.08		
	6/2437	11.5	10.50		
	9/2452	11.5	10.41		
MIMO Wi-Fi 2.4G D1&D2	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
Mode					
802.11b (1M)	1/2412	23.00	21.69	18.44	18.91
	6/2437	23.00	21.79	18.73	18.83
	11/2462	23.00	21.87	18.85	18.87
802.11g (6M)	1/2412	19.50	18.64	15.57	15.68
	6/2437	19.50	18.82	15.85	15.77
	11/2462	19.50	18.73	15.79	15.64
802.11n-HT20 (MCS0)	1/2412	16.50	15.72	12.68	12.73
	6/2437	16.50	15.85	13.06	12.61
	11/2462	16.50	15.91	12.97	12.82
802.11n-HT40 (MCS0)	3/2422	15.50	14.70	11.28	12.08
	6/2437	14.50	13.61	10.71	10.50
	9/2452	14.50	13.51	10.60	10.41
Note: Initial test configuration is 802.11b mode.					

Note: Initial test configuration is 802.11b mode.

Ant 1 Wi-Fi 5G (U-NII-1) D1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	18.50	17.62
	40/5200	18.50	17.55
	48/5240	18.50	17.49
802.11n-HT20 (MCS0)	36/5180	18.50	17.04
	40/5200	18.50	16.66
	48/5240	18.50	17.14
802.11n-HT40 (MCS0)	38/5190	15.50	14.25
	46/5230	15.50	14.29



802.11ac-VHT20 (MCS0)		36/5180	18.50	17.09	
		40/5200	18.50	16.74	
		48/5240	18.50	17.25	
802.11ac-VHT40 (MCS0)		38/5190	15.50	14.15	
		46/5230	15.50	14.12	
802.11ac-VHT80 (MCS0)		42/5210	15.50	14.74	
Ant 2 Wi-Fi 5G (U-NII-1) D1	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.		
Mode					
802.11a (6M)	36/5180	18.50	17.63		
	40/5200	18.50	17.54		
	48/5240	18.50	17.48		
802.11n-HT20 (MCS0)	36/5180	18.50	17.36		
	40/5200	18.50	16.75		
	48/5240	18.50	16.87		
802.11n-HT40 (MCS0)	38/5190	15.50	14.15		
	46/5230	15.50	14.18		
802.11ac-VHT20 (MCS0)	36/5180	18.50	17.38		
	40/5200	18.50	16.94		
	48/5240	18.50	16.89		
802.11ac-VHT40 (MCS0)	38/5190	15.50	14.72		
	46/5230	15.50	14.33		
802.11ac-VHT80 (MCS0)	42/5210	15.50	14.65		
MIMO Wi-Fi 5G (U-NII-1) D1	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
Mode					
802.11a (6M)	36/5180	21.50	20.64	17.62	17.63
	40/5200	21.50	20.56	17.55	17.54
	48/5240	21.50	20.50	17.49	17.48
802.11n-HT20 (MCS0)	36/5180	21.50	20.21	17.04	17.36
	40/5200	21.50	19.72	16.66	16.75
	48/5240	21.50	20.02	17.14	16.87
802.11n-HT40 (MCS0)	38/5190	18.50	17.21	14.25	14.15
	46/5230	18.50	17.24	14.29	14.18
802.11ac-VHT20 (MCS0)	36/5180	21.50	20.25	17.09	17.38
	40/5200	21.50	19.85	16.74	16.94
	48/5240	21.50	20.08	17.25	16.89



802.11ac-VHT40 (MCS0)	38/5190	18.50	17.46	14.15	14.72
	46/5230	18.50	17.24	14.12	14.33
802.11ac-VHT80 (MCS0)	42/5210	18.50	17.70	14.74	14.65

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

Ant 1 Wi-Fi 5G (U-NII-2A) D1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	18.50	16.83
	60/5300	18.50	16.85
	64/5320	18.50	17.24
802.11n-HT20 (MCS0)	52/5260	18.50	17.09
	60/5300	18.50	17.11
	64/5320	18.50	17.35
802.11n-HT40 (MCS0)	54/5270	18.50	17.37
	62/5310	18.50	17.45
802.11ac-VHT20 (MCS0)	52/5260	18.50	17.08
	60/5300	18.50	17.01
	64/5320	18.50	17.33
802.11ac-VHT40 (MCS0)	54/5270	18.50	17.52
	62/5310	18.50	17.81
802.11ac-VHT80 (MCS0)	58/5290	17.50	17.13
Ant 2 Wi-Fi 5G (U-NII-2A) D1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	18.50	17.22
	60/5300	18.50	16.84
	64/5320	18.50	16.95
802.11n-HT20 (MCS0)	52/5260	18.50	16.98
	60/5300	18.50	16.83
	64/5320	18.50	16.94
802.11n-HT40 (MCS0)	54/5270	18.50	17.42
	62/5310	18.50	17.19
802.11ac-VHT20 (MCS0)	52/5260	18.50	17.04
	60/5300	18.50	16.75
	64/5320	18.50	16.82
802.11ac-VHT40	54/5270	18.50	17.27



(MCS0)	62/5310	18.50	17.31		
802.11ac-VHT80 (MCS0)	58/5290	17.50	16.65		
MIMO Wi-Fi 5G (U-NII-2A) D1	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
Mode					
802.11a (6M)	52/5260	21.50	20.04	16.83	17.22
	60/5300	21.50	19.86	16.85	16.84
	64/5320	21.50	20.11	17.24	16.95
802.11n-HT20 (MCS0)	52/5260	21.50	20.05	17.09	16.98
	60/5300	21.50	19.98	17.11	16.83
	64/5320	21.50	20.16	17.35	16.94
802.11n-HT40 (MCS0)	54/5270	21.50	20.41	17.37	17.42
	62/5310	21.50	20.33	17.45	17.19
802.11ac-VHT20 (MCS0)	52/5260	21.50	20.07	17.08	17.04
	60/5300	21.50	19.89	17.01	16.75
	64/5320	21.50	20.09	17.33	16.82
802.11ac-VHT40 (MCS0)	54/5270	21.50	20.41	17.52	17.27
	62/5310	21.50	20.58	17.81	17.31
802.11ac-VHT80 (MCS0)	58/5290	20.50	19.90	17.13	16.65
Note. Initial test configuration is 802.11ac-VHT40 mode for Ant 1; 802.11n-HT40 mode for Ant 2; 802.11ac-VHT40 for MIMO, since the highest maximum output power.					

Ant 1 Wi-Fi 5G (U-NII-2C) D1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	18.50	17.64
	116/5580	18.50	17.49
	132/5660	18.50	17.34
	140/5700	18.50	17.31
	144/5720	18.50	17.30
802.11n-HT20 (MCS0)	100/5500	18.50	17.01
	116/5580	18.50	17.08
	132/5660	18.50	17.03
	140/5700	18.50	17.06
	144/5720	18.50	16.89
802.11n-HT40 (MCS0)	102/5510	14.50	13.50
	110/5550	14.50	13.47



	118/5590	14.50	13.59
	134/5670	14.50	13.45
	142/5710	14.50	13.38
802.11ac-VHT20 (MCS0)	100/5500	18.50	16.93
	116/5580	18.50	17.03
	132/5660	18.50	16.97
	140/5700	18.50	16.94
	144/5720	18.50	16.53
802.11ac-VHT40 (MCS0)	102/5510	14.50	13.58
	110/5550	14.50	13.55
	118/5590	14.50	13.63
	134/5670	14.50	13.52
	142/5710	14.50	13.44
802.11ac-VHT80 (MCS0)	106/5530	17.50	16.95
	122/5610	17.50	16.98
	138/5690	17.50	16.63
Ant 2 Wi-Fi 5G (U-NII-2C) D1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	18.50	17.89
	116/5580	18.50	17.63
	132/5660	18.50	17.27
	140/5700	18.50	17.22
	144/5720	18.50	17.08
802.11n-HT20 (MCS0)	100/5500	18.50	17.44
	116/5580	18.50	17.63
	132/5660	18.50	16.89
	140/5700	18.50	16.94
	144/5720	18.50	16.83
802.11n-HT40 (MCS0)	102/5510	14.50	13.42
	110/5550	14.50	13.37
	118/5590	14.50	13.33
	134/5670	14.50	13.70
	142/5710	14.50	13.48
802.11ac-VHT20 (MCS0)	100/5500	18.50	17.31
	116/5580	18.50	17.63
	132/5660	18.50	16.88
	140/5700	18.50	16.94
	144/5720	18.50	16.79



802.11ac-VHT40 (MCS0)	102/5510	14.50	13.43		
	110/5550	14.50	13.39		
	118/5590	14.50	13.58		
	134/5670	14.50	13.35		
	142/5710	14.50	13.40		
802.11ac-VHT80 (MCS0)	106/5530	17.50	17.23		
	122/5610	17.50	17.12		
	138/5690	17.50	17.07		
MIMO Wi-Fi 5G (U-NII-2C) D1	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
Mode		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	100/5500	21.50	20.78	17.64	17.89
	116/5580	21.50	20.57	17.49	17.63
	132/5660	21.50	20.32	17.34	17.27
	140/5700	21.50	20.28	17.31	17.22
	144/5720	21.50	20.20	17.30	17.08
802.11n-HT20 (MCS0)	100/5500	21.50	20.24	17.01	17.44
	116/5580	21.50	20.37	17.08	17.63
	132/5660	21.50	19.97	17.03	16.89
	140/5700	21.50	20.01	17.06	16.94
	144/5720	21.50	19.87	16.89	16.83
802.11n-HT40 (MCS0)	102/5510	17.50	16.47	13.50	13.42
	110/5550	17.50	16.43	13.47	13.37
	118/5590	17.50	16.47	13.59	13.33
	134/5670	17.50	16.58	13.45	13.70
	142/5710	17.50	16.44	13.38	13.48
802.11ac-VHT20 (MCS0)	100/5500	21.50	20.13	16.93	17.31
	116/5580	21.50	20.35	17.03	17.63
	132/5660	21.50	19.94	16.97	16.88
	140/5700	21.50	19.95	16.94	16.94
	144/5720	21.50	19.67	16.53	16.79
802.11ac-VHT40 (MCS0)	102/5510	17.50	16.52	13.58	13.43
	110/5550	17.50	16.48	13.55	13.39
	118/5590	17.50	16.62	13.63	13.58
	134/5670	17.50	16.45	13.52	13.35
	142/5710	17.50	16.43	13.44	13.40
802.11ac-VHT80 (MCS0)	106/5530	20.50	20.10	16.95	17.23
	122/5610	20.50	20.06	16.98	17.12
	138/5690	20.50	19.86	16.63	17.07



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

Ant 1 Wi-Fi 5G (U-NII-3) D1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	16.50	15.72
	157/5785	16.50	15.79
	165/5825	16.50	15.49
802.11n-HT20 (MCS0)	149/5745	16.50	15.22
	157/5785	16.50	15.27
	165/5825	16.50	15.31
802.11n-HT40 (MCS0)	151/5755	16.50	15.26
	159/5795	16.50	15.67
802.11ac-VHT20 (MCS0)	149/5745	16.50	14.66
	157/5785	16.50	15.34
	165/5825	16.50	15.21
802.11ac-VHT40 (MCS0)	151/5755	16.50	15.58
	159/5795	16.50	15.62
802.11ac-VHT80 (MCS0)	155/5775	16.50	15.52
Ant 2 Wi-Fi 5G (U-NII-3) D1 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	16.50	15.70
	157/5785	16.50	15.42
	165/5825	16.50	15.37
802.11n-HT20 (MCS0)	149/5745	16.50	15.39
	157/5785	16.50	15.03
	165/5825	16.50	15.11
802.11n-HT40 (MCS0)	151/5755	16.50	15.68
	159/5795	16.50	15.47
802.11ac-VHT20 (MCS0)	149/5745	16.50	15.27
	157/5785	16.50	15.02
	165/5825	16.50	14.99
802.11ac-VHT40 (MCS0)	151/5755	16.50	15.62
	159/5795	16.50	15.48
802.11ac-VHT80 (MCS0)	155/5775	16.50	15.66
MIMO	Channel	Maximum Output Power (dBm)	



Wi-Fi 5G (U-NII-3) D1	/Frequency(MHz)	Tune-up	Meas.	Ant 1	Ant 2
Mode					
802.11a (6M)	149/5745	19.50	18.72	15.72	15.70
	157/5785	19.50	18.62	15.79	15.42
	165/5825	19.50	18.44	15.49	15.37
802.11n-HT20 (MCS0)	149/5745	19.50	18.32	15.22	15.39
	157/5785	19.50	18.16	15.27	15.03
	165/5825	19.50	18.22	15.31	15.11
802.11n-HT40 (MCS0)	151/5755	19.50	18.49	15.26	15.68
	159/5795	19.50	18.58	15.67	15.47
802.11ac-VHT20 (MCS0)	149/5745	19.50	17.99	14.66	15.27
	157/5785	19.50	18.19	15.34	15.02
	165/5825	19.50	18.11	15.21	14.99
802.11ac-VHT40 (MCS0)	151/5755	19.50	18.61	15.58	15.62
	159/5795	19.50	18.56	15.62	15.48
802.11ac-VHT80 (MCS0)	155/5775	19.50	18.60	15.52	15.66

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

Ant 1 Wi-Fi 5G (U-NII-3) D2	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Mode			
802.11a (6M)	149/5745	18.50	17.54
	157/5785	18.50	17.66
	165/5825	18.50	17.46
802.11n-HT20 (MCS0)	149/5745	18.50	16.64
	157/5785	18.50	17.52
	165/5825	18.50	17.23
802.11n-HT40 (MCS0)	151/5755	18.50	16.89
	159/5795	18.50	17.54
802.11ac-VHT20 (MCS0)	149/5745	18.50	16.56
	157/5785	18.50	17.51
	165/5825	18.50	17.11
802.11ac-VHT40 (MCS0)	151/5755	18.50	16.92
	159/5795	18.50	17.59
802.11ac-VHT80 (MCS0)	155/5775	18.50	17.42

Ant 2 Wi-Fi 5G (U-NII-3)	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.



D2					
Mode					
802.11a (6M)	149/5745	18.50	17.69		
	157/5785	18.50	17.28		
	165/5825	18.50	17.41		
802.11n-HT20 (MCS0)	149/5745	18.50	17.38		
	157/5785	18.50	17.28		
	165/5825	18.50	17.33		
802.11n-HT40 (MCS0)	151/5755	18.50	17.61		
	159/5795	18.50	17.58		
802.11ac-VHT20 (MCS0)	149/5745	18.50	17.26		
	157/5785	18.50	17.23		
	165/5825	18.50	16.94		
802.11ac-VHT40 (MCS0)	151/5755	18.50	17.67		
	159/5795	18.50	17.61		
802.11ac-VHT80 (MCS0)	155/5775	18.50	17.55		
MIMO Wi-Fi 5G (U-NII-3) D2	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
Mode		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	149/5745	21.50	20.63	17.54	17.69
	157/5785	21.50	20.48	17.66	17.28
	165/5825	21.50	20.45	17.46	17.41
802.11n-HT20 (MCS0)	149/5745	21.50	20.04	16.64	17.38
	157/5785	21.50	20.41	17.52	17.28
	165/5825	21.50	20.29	17.23	17.33
802.11n-HT40 (MCS0)	151/5755	21.50	20.28	16.89	17.61
	159/5795	21.50	20.57	17.54	17.58
802.11ac-VHT20 (MCS0)	149/5745	21.50	19.93	16.56	17.26
	157/5785	21.50	20.38	17.51	17.23
	165/5825	21.50	20.04	17.11	16.94
802.11ac-VHT40 (MCS0)	151/5755	21.50	20.32	16.92	17.67
	159/5795	21.50	20.61	17.59	17.61
802.11ac-VHT80 (MCS0)	155/5775	21.50	20.50	17.42	17.55
Note. Initial test configuration is 802.11a mode, since the highest maximum output power.					



Ant 1 Wi-Fi 5G (U-NII-1) D3	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.		
Mode					
802.11a (6M)	36/5180	17.50	15.96		
	40/5200	17.50	15.55		
	48/5240	17.50	16.03		
802.11n-HT20 (MCS0)	36/5180	17.50	15.91		
	40/5200	17.50	15.53		
	48/5240	17.50	16.01		
802.11n-HT40 (MCS0)	38/5190	14.50	13.25		
	46/5230	14.50	13.29		
802.11ac-VHT20 (MCS0)	36/5180	17.50	15.96		
	40/5200	17.50	15.61		
	48/5240	17.50	16.12		
802.11ac-VHT40 (MCS0)	38/5190	14.50	13.15		
	46/5230	14.50	13.12		
802.11ac-VHT80 (MCS0)	42/5210	14.50	13.74		
Ant 2 Wi-Fi 5G (U-NII-1) D3	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.		
Mode					
802.11a (6M)	36/5180	17.50	16.52		
	40/5200	17.50	15.84		
	48/5240	17.50	15.88		
802.11n-HT20 (MCS0)	36/5180	17.50	16.36		
	40/5200	17.50	15.75		
	48/5240	17.50	15.87		
802.11n-HT40 (MCS0)	38/5190	14.50	13.15		
	46/5230	14.50	13.18		
802.11ac-VHT20 (MCS0)	36/5180	17.50	16.25		
	40/5200	17.50	15.81		
	48/5240	17.50	15.76		
802.11ac-VHT40 (MCS0)	38/5190	14.50	13.72		
	46/5230	14.50	13.33		
802.11ac-VHT80 (MCS0)	42/5210	14.50	13.65		
MIMO Wi-Fi 5G (U-NII-1)	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2



D3					
Mode					
802.11a (6M)	36/5180	20.50	19.26	15.96	16.52
	40/5200	20.50	18.71	15.55	15.84
	48/5240	20.50	18.97	16.03	15.88
802.11n-HT20 (MCS0)	36/5180	20.50	19.15	15.91	16.36
	40/5200	20.50	18.65	15.53	15.75
	48/5240	20.50	18.95	16.01	15.87
802.11n-HT40 (MCS0)	38/5190	17.50	16.21	13.25	13.15
	46/5230	17.50	16.24	13.29	13.18
802.11ac-VHT20 (MCS0)	36/5180	20.50	19.12	15.96	16.25
	40/5200	20.50	18.72	15.61	15.81
	48/5240	20.50	18.95	16.12	15.76
802.11ac-VHT40 (MCS0)	38/5190	17.50	16.46	13.15	13.72
	46/5230	17.50	16.24	13.12	13.33
802.11ac-VHT80 (MCS0)	42/5210	17.50	16.70	13.74	13.65
Note. Initial test configuration is 802.11ac-VHT20 mode for Ant 1; 802.11a mode for Ant 2; 802.11a for MIMO, since the highest maximum output power.					

Ant 1 Wi-Fi 5G (U-NII-2A) D3	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Mode			
802.11a (6M)	52/5260	17.50	15.83
	60/5300	17.50	15.85
	64/5320	17.50	16.24
802.11n-HT20 (MCS0)	52/5260	17.50	16.09
	60/5300	17.50	16.11
	64/5320	17.50	16.22
802.11n-HT40 (MCS0)	54/5270	17.50	16.24
	62/5310	17.50	16.32
802.11ac-VHT20 (MCS0)	52/5260	17.50	15.95
	60/5300	17.50	16.01
	64/5320	17.50	16.33
802.11ac-VHT40 (MCS0)	54/5270	17.50	16.52
	62/5310	17.50	16.72
802.11ac-VHT80 (MCS0)	58/5290	16.50	16.13
Ant 2 Wi-Fi 5G (U-NII-2A)	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.



D3					
Mode					
802.11a (6M)	52/5260	17.50	16.22		
	60/5300	17.50	15.84		
	64/5320	17.50	15.95		
802.11n-HT20 (MCS0)	52/5260	17.50	15.98		
	60/5300	17.50	15.70		
	64/5320	17.50	15.81		
802.11n-HT40 (MCS0)	54/5270	17.50	16.29		
	62/5310	17.50	16.06		
802.11ac-VHT20 (MCS0)	52/5260	17.50	15.91		
	60/5300	17.50	15.75		
	64/5320	17.50	15.82		
802.11ac-VHT40 (MCS0)	54/5270	17.50	16.27		
	62/5310	17.50	16.31		
802.11ac-VHT80 (MCS0)	58/5290	16.50	15.65		
MIMO Wi-Fi 5G (U-NII-2A) D3	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
Mode		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	52/5260	20.50	19.04	15.83	16.22
	60/5300	20.50	18.86	15.85	15.84
	64/5320	20.50	19.11	16.24	15.95
802.11n-HT20 (MCS0)	52/5260	20.50	19.05	16.09	15.98
	60/5300	20.50	18.92	16.11	15.70
	64/5320	20.50	19.03	16.22	15.81
802.11n-HT40 (MCS0)	54/5270	20.50	19.28	16.24	16.29
	62/5310	20.50	19.20	16.32	16.06
802.11ac-VHT20 (MCS0)	52/5260	20.50	18.94	15.95	15.91
	60/5300	20.50	18.89	16.01	15.75
	64/5320	20.50	19.09	16.33	15.82
802.11ac-VHT40 (MCS0)	54/5270	20.50	19.41	16.52	16.27
	62/5310	20.50	19.53	16.72	16.31
802.11ac-VHT80 (MCS0)	58/5290	19.50	18.90	16.13	15.65
Note. Initial test configuration is 802.11ac-VHT40 mode, since the highest maximum output power.					

Note. Initial test configuration is 802.11ac-VHT40 mode, since the highest maximum output power.



Ant 1 Wi-Fi 5G (U-NII-2C) D3 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	17.50	16.03
	116/5580	17.50	15.97
	132/5660	17.50	15.84
	140/5700	17.50	15.81
	144/5720	17.50	15.90
802.11n-HT20 (MCS0)	100/5500	17.50	16.01
	116/5580	17.50	16.08
	132/5660	17.50	15.90
	140/5700	17.50	15.93
	144/5720	17.50	15.76
802.11n-HT40 (MCS0)	102/5510	13.50	12.50
	110/5550	13.50	12.47
	118/5590	13.50	12.59
	134/5670	13.50	12.45
	142/5710	13.50	12.38
802.11ac-VHT20 (MCS0)	100/5500	17.50	15.93
	116/5580	17.50	16.03
	132/5660	17.50	15.97
	140/5700	17.50	15.94
	144/5720	17.50	15.53
802.11ac-VHT40 (MCS0)	102/5510	13.50	12.58
	110/5550	13.50	12.55
	118/5590	13.50	12.63
	134/5670	13.50	12.52
	142/5710	13.50	12.44
802.11ac-VHT80 (MCS0)	106/5530	16.50	15.95
	122/5610	16.50	15.98
	138/5690	16.50	15.63
Ant 2 Wi-Fi 5G (U-NII-2C) D3 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	100/5500	17.50	16.51
	116/5580	17.50	16.63
	132/5660	17.50	16.27
	140/5700	17.50	15.96



	144/5720	17.50	16.08		
802.11n-HT20 (MCS0)	100/5500	17.50	16.44		
	116/5580	17.50	16.50		
	132/5660	17.50	15.76		
	140/5700	17.50	15.81		
	144/5720	17.50	15.70		
802.11n-HT40 (MCS0)	102/5510	13.50	12.42		
	110/5550	13.50	12.37		
	118/5590	13.50	12.33		
	134/5670	13.50	12.70		
	142/5710	13.50	12.48		
802.11ac-VHT20 (MCS0)	100/5500	17.50	16.31		
	116/5580	17.50	16.02		
	132/5660	17.50	15.88		
	140/5700	17.50	15.94		
	144/5720	17.50	15.79		
802.11ac-VHT40 (MCS0)	102/5510	13.50	12.43		
	110/5550	13.50	12.39		
	118/5590	13.50	12.58		
	134/5670	13.50	12.35		
	142/5710	13.50	12.40		
802.11ac-VHT80 (MCS0)	106/5530	16.50	16.23		
	122/5610	16.50	16.12		
	138/5690	16.50	16.07		
MIMO Wi-Fi 5G (U-NII-2C) D3	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 1	Ant 2
Mode					
802.11a (6M)	100/5500	20.50	19.29	16.03	16.51
	116/5580	20.50	19.32	15.97	16.63
	132/5660	20.50	19.07	15.84	16.27
	140/5700	20.50	18.90	15.81	15.96
	144/5720	20.50	19.00	15.90	16.08
802.11n-HT20 (MCS0)	100/5500	20.50	19.24	16.01	16.44
	116/5580	20.50	19.31	16.08	16.50
	132/5660	20.50	18.84	15.90	15.76
	140/5700	20.50	18.88	15.93	15.81
	144/5720	20.50	18.74	15.76	15.70
802.11n-HT40 (MCS0)	102/5510	16.50	15.47	12.50	12.42
	110/5550	16.50	15.43	12.47	12.37



	118/5590	16.50	15.47	12.59	12.33
	134/5670	16.50	15.58	12.45	12.70
	142/5710	16.50	15.44	12.38	12.48
802.11ac-VHT20 (MCS0)	100/5500	20.50	19.13	15.93	16.31
	116/5580	20.50	19.04	16.03	16.02
	132/5660	20.50	18.94	15.97	15.88
	140/5700	20.50	18.95	15.94	15.94
	144/5720	20.50	18.67	15.53	15.79
802.11ac-VHT40 (MCS0)	102/5510	16.50	15.52	12.58	12.43
	110/5550	16.50	15.48	12.55	12.39
	118/5590	16.50	15.62	12.63	12.58
	134/5670	16.50	15.45	12.52	12.35
	142/5710	16.50	15.43	12.44	12.40
802.11ac-VHT80 (MCS0)	106/5530	19.50	19.10	15.95	16.23
	122/5610	19.50	19.06	15.98	16.12
	138/5690	19.50	18.86	15.63	16.07

Note. Initial test configuration is 802.11n-HT20 mode for Ant 1; 802.11a mode for Ant 2; 802.11a for MIMO, since the highest maximum output power.

Ant 1 Wi-Fi 5G (U-NII-3) D3 Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	15.50	14.69
	157/5785	15.50	14.88
	165/5825	15.50	14.79
802.11n-HT20 (MCS0)	149/5745	15.50	14.08
	157/5785	15.50	14.04
	165/5825	15.50	14.08
802.11n-HT40 (MCS0)	151/5755	15.50	14.13
	159/5795	15.50	14.04
802.11ac-VHT20 (MCS0)	149/5745	15.50	14.16
	157/5785	15.50	14.34
	165/5825	15.50	14.21
802.11ac-VHT40 (MCS0)	151/5755	15.50	14.69
	159/5795	15.50	14.31
802.11ac-VHT80 (MCS0)	155/5775	15.50	14.52
Ant 2 Wi-Fi 5G (U-NII-3) D3	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.



Mode					
802.11a (6M)	149/5745	15.50	14.75		
	157/5785	15.50	14.15		
	165/5825	15.50	14.20		
802.11n-HT20 (MCS0)	149/5745	15.50	14.44		
	157/5785	15.50	14.13		
	165/5825	15.50	14.12		
802.11n-HT40 (MCS0)	151/5755	15.50	14.55		
	159/5795	15.50	14.37		
802.11ac-VHT20 (MCS0)	149/5745	15.50	14.24		
	157/5785	15.50	13.88		
	165/5825	15.50	13.82		
802.11ac-VHT40 (MCS0)	151/5755	15.50	14.59		
	159/5795	15.50	14.37		
802.11ac-VHT80 (MCS0)	155/5775	15.50	14.52		
MIMO Wi-Fi 5G (U-NII-3) D3	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
Mode		Tune-up	Meas.	Ant 1	Ant 2
802.11a (6M)	149/5745	18.50	17.73	14.69	14.75
	157/5785	18.50	17.54	14.88	14.15
	165/5825	18.50	17.52	14.79	14.20
802.11n-HT20 (MCS0)	149/5745	18.50	17.27	14.08	14.44
	157/5785	18.50	17.10	14.04	14.13
	165/5825	18.50	17.11	14.08	14.12
802.11n-HT40 (MCS0)	151/5755	18.50	17.36	14.13	14.55
	159/5795	18.50	17.22	14.04	14.37
802.11ac-VHT20 (MCS0)	149/5745	18.50	17.21	14.16	14.24
	157/5785	18.50	17.13	14.34	13.88
	165/5825	18.50	17.03	14.21	13.82
802.11ac-VHT40 (MCS0)	151/5755	18.50	17.65	14.69	14.59
	159/5795	18.50	17.35	14.31	14.37
802.11ac-VHT80 (MCS0)	155/5775	18.50	17.53	14.52	14.52

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	12.34	12.78	12.49	13.50
$\pi/4$ DQPSK	10.59	10.90	10.87	12.00
8DPSK	10.41	10.89	10.83	12.00
BLE	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	2.86	3.12	4.67	9.00
GFSK(2M)	0.04	0.51	1.80	9.00



10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations refer to *Antenna Locations*.

Overall (Length x Width): 164mm x76mm Overall Diagonal: 175 mm						
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
Wi-Fi 2.4G Ant 1	<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
Wi-Fi 5G Ant 1	<25mm	<25mm	>25mm	<25mm	<25mm	>25mm
Wi-Fi 2.4G/5G/BT Ant 0	<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
Wi-Fi 2.4G Ant 1	Yes	Yes	Yes	N/A	Yes	N/A
Wi-Fi 5G Ant 1	Yes	Yes	N/A	Yes	Yes	N/A
Wi-Fi 2.4G/5G/BT Ant 0	Yes	Yes	N/A	Yes	Yes	N/A

Note: 1. Per KDB 941225 D06, when the overall device length and width are $\geq 9\text{cm} \times 5\text{cm}$, 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 175mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension $> 15.0\text{ cm}$ or an overall diagonal dimension $> 16.0\text{ cm}$, product specific 10-g SAR must be tested as a phablet to determine SAR compliance. For Phablet, Since hotspot mode 1-g *reported* SAR $< 1.2\text{ W/kg}$, product specific 10-g SAR is no required.

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

a) $\leq 0.8\text{ W/kg}$ or 2.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\leq 100\text{MHz}$

b) $\leq 0.6\text{ W/kg}$ or 1.5 W/kg , for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.

c) $\leq 0.4\text{ W/kg}$ or 1.0 W/kg , for 1-g or 10-g respectively, when the transmission band is $\geq 200\text{ MHz}$.

4. When the original highest measured SAR is $\geq 0.80\text{ W/kg}$, 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 $\leq 1.2\text{ W/kg}$, 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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for product specific 10-g SAR

- $f(\text{GHz})$ 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	13.50	2480	7.05	Yes
Body-worn	15	13.50	2480	2.35	No
Hotspot	10	13.50	2480	3.53	Yes
Product Specific 10-g SAR	5	13.50	2480	7.05	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	34.00	32.83	0.069	0.101	1.31	0.090	18
Left Tilt	0	N/A	D1	GSM	190/836.6	34.00	32.83	0.055	0.010	1.31	0.072	/
Right Cheek	0	N/A	D1	GSM	190/836.6	34.00	32.83	0.051	0.040	1.31	0.067	/
Right Tilt	0	N/A	D1	GSM	190/836.6	34.00	32.83	0.042	0.033	1.31	0.055	/
Left Cheek SIM 2	0	N/A	D1	GSM	190/836.6	34.00	32.83	0.060	0.027	1.31	0.079	/
Left Cheek Battery 2	0	N/A	D1	GSM	190/836.6	34.00	32.83	0.064	-0.030	1.31	0.084	/
Body-worn SAR												
Back Side	15	off	D2	GSM	190/836.6	34.00	32.83	0.102	0.110	1.31	0.134	19
Front Side	15	N/A	D2	GSM	190/836.6	34.00	32.83	0.086	0.120	1.31	0.113	/
Back Side SIM 2	15	off	D2	GSM	190/836.6	34.00	32.83	0.091	0.051	1.31	0.119	/
Back Side Battery 2	15	off	D2	GSM	190/836.6	34.00	32.83	0.097	0.100	1.31	0.127	/
Hotspot SAR												
Back Side	10	on	D4	4Txslots	190/836.6	28.00	26.47	0.169	-0.041	1.42	0.240	20
Front Side	10	N/A	D4	4Txslots	190/836.6	28.00	26.47	0.145	0.040	1.42	0.206	/
Left Edge	10	N/A	D4	4Txslots	190/836.6	28.00	26.47	0.024	0.011	1.42	0.033	/
Right Edge	10	N/A	D4	4Txslots	190/836.6	28.00	26.47	0.058	0.030	1.42	0.082	/
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	D4	4Txslots	190/836.6	28.00	26.47	0.156	0.050	1.42	0.222	/
Bottom Edge SIM 2	10	on	D4	4Txslots	190/836.6	28.00	26.47	0.140	0.039	1.42	0.199	/
Bottom Edge Battery 2	10	on	D4	4Txslots	190/836.6	28.00	26.47	0.137	0.070	1.42	0.195	/

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	190/836.6	28.00	28.00	0.240	1.00	0.240	NO
Front Side	10	N/A	D4	4Txslots	190/836.6	28.00	28.00	0.206	1.00	0.206	NO
Left Edge	10	N/A	D4	4Txslots	190/836.6	28.00	28.00	0.033	1.00	0.033	NO
Right Edge	10	N/A	D4	4Txslots	190/836.6	28.00	28.00	0.082	1.00	0.082	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	D4	4Txslots	190/836.6	28.00	28.00	0.222	1.00	0.222	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 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	31.00	30.18	0.043	0.173	1.21	0.052	21
Left Tilt	0	N/A	D1	GSM	661/1880	31.00	30.18	0.022	0.010	1.21	0.026	/
Right Cheek	0	N/A	D1	GSM	661/1880	31.00	30.18	0.034	0.107	1.21	0.041	/
Right Tilt	0	N/A	D1	GSM	661/1880	31.00	30.18	0.029	0.170	1.21	0.036	/
Left Cheek SIM 2	0	N/A	D1	GSM	661/1880	31.00	30.18	0.038	0.100	1.21	0.046	/
Left Cheek Battery 2	0	N/A	D1	GSM	661/1880	31.00	30.18	0.040	0.082	1.21	0.048	/
Body-worn SAR												
Back Side	15	off	D2	GSM	661/1880	31.00	30.18	0.391	0.043	1.21	0.472	22
Front Side	15	N/A	D2	GSM	661/1880	31.00	30.18	0.179	0.045	1.21	0.216	/
Back Side SIM 2	15	off	D2	GSM	661/1880	31.00	30.18	0.356	0.051	1.21	0.430	/
Back Side Battery 2	15	off	D2	GSM	661/1880	31.00	30.18	0.372	0.120	1.21	0.449	/
Hotspot SAR												
Back Side	10	on	D4	4Txslots	661/1880	22.00	21.47	0.338	-0.121	1.13	0.382	/
Front Side	10	N/A	D4	4Txslots	661/1880	22.00	21.47	0.181	-0.022	1.13	0.204	/
Left Edge	10	N/A	D4	4Txslots	661/1880	22.00	21.47	0.003	-0.030	1.13	0.003	/
Right Edge	10	N/A	D4	4Txslots	661/1880	22.00	21.47	0.012	0.028	1.13	0.014	/
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	D4	4Txslots	661/1880	22.00	21.47	0.434	0.031	1.13	0.490	23
Bottom Edge SIM 2	10	on	D4	4Txslots	661/1880	22.00	21.47	0.419	0.065	1.13	0.473	/
Bottom Edge Battery 2	10	on	D4	4Txslots	661/1880	22.00	21.47	0.430	0.127	1.13	0.486	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Back Side	15	off	D2	4Txslots	661/1880	25.00	23.91	0.305	0.166	1.29	0.392	/
Bottom Edge	15	off	D2	4Txslots	661/1880	25.00	23.91	0.395	0.023	1.29	0.508	/
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	D4	4Txslots	661/1880	25.00	22.00	0.382	2.00	0.762	NO
Front Side	10	N/A	D4	4Txslots	661/1880	25.00	22.00	0.204	2.00	0.408	NO
Left Edge	10	N/A	D4	4Txslots	661/1880	25.00	22.00	0.003	2.00	0.006	NO
Right Edge	10	N/A	D4	4Txslots	661/1880	25.00	22.00	0.014	2.00	0.027	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	D4	4Txslots	661/1880	25.00	22.00	0.490	2.00	0.978	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	25.00	24.16	0.094	0.035	1.21	0.114	24
Left Tilt	0	N/A	D1	RMC 12.2K	9400/1880	25.00	24.16	0.040	0.011	1.21	0.049	/
Right Cheek	0	N/A	D1	RMC 12.2K	9400/1880	25.00	24.16	0.066	0.060	1.21	0.080	/
Right Tilt	0	N/A	D1	RMC 12.2K	9400/1880	25.00	24.16	0.031	0.102	1.21	0.037	/
Left Cheek SIM 2	0	N/A	D1	RMC 12.2K	9400/1880	25.00	24.16	0.090	-0.100	1.21	0.109	/
Left Cheek Battery 2	0	N/A	D1	RMC 12.2K	9400/1880	25.00	24.16	0.088	0.073	1.21	0.107	/
Body-worn SAR												
Back Side	15	off	D2	RMC 12.2K	9400/1880	23.00	22.16	0.446	0.140	1.21	0.541	25
Front Side	15	N/A	D2	RMC 12.2K	9400/1880	23.00	22.16	0.309	0.035	1.21	0.375	/
Back Side SIM 2	15	off	D2	RMC 12.2K	9400/1880	23.00	22.16	0.419	0.107	1.21	0.508	/
Back Side Battery 2	15	off	D2	RMC 12.2K	9400/1880	23.00	22.16	0.441	0.133	1.21	0.535	/
Hotspot SAR												
Back Side	10	on	D4	RMC 12.2K	9400/1880	18.00	17.23	0.301	0.144	1.19	0.359	/
Front Side	10	N/A	D4	RMC 12.2K	9400/1880	18.00	17.23	0.156	0.018	1.19	0.186	/
Left Edge	10	N/A	D4	RMC 12.2K	9400/1880	18.00	17.23	0.005	0.026	1.19	0.006	/
Right Edge	10	N/A	D4	RMC 12.2K	9400/1880	18.00	17.23	0.005	-0.131	1.19	0.006	/
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	D4	RMC 12.2K	9400/1880	18.00	17.23	0.526	0.038	1.19	0.628	26
Bottom Edge SIM 2	10	on	D4	RMC 12.2K	9400/1880	18.00	17.23	0.511	0.020	1.19	0.610	/
Bottom Edge Battery 2	10	on	D4	RMC 12.2K	9400/1880	18.00	17.23	0.483	0.103	1.19	0.577	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Bottom Edge	15	off	D2	RMC 12.2K	9262/1852.4	23.00	22.16	1.090	0.137	1.21	1.323	/
	15	off	D2	RMC 12.2K	9400/1880	23.00	22.16	0.893	0.024	1.21	1.084	/
	15	off	D2	RMC 12.2K	9538/1907.6	23.00	22.16	0.787	0.022	1.21	0.955	/
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	D4	RMC 12.2K	9400/1880	18.00	17.23	0.908	0.062	1.19	1.084	/
Bottom Edge	0	on	D4	RMC 12.2K	9400/1880	18.00	17.23	1.280	0.093	1.19	1.528	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 $\leq \frac{1}{4}$ 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	D4	RMC 12.2K	9400/1880	25.00	18.00	0.359	5.01	1.801	YES
Front Side	10	N/A	D4	RMC 12.2K	9400/1880	25.00	18.00	0.186	5.01	0.934	NO
Left Edge	10	N/A	D4	RMC 12.2K	9400/1880	25.00	18.00	0.006	5.01	0.032	NO
Right Edge	10	N/A	D4	RMC 12.2K	9400/1880	25.00	18.00	0.006	5.01	0.029	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	D4	RMC 12.2K	9400/1880	25.00	18.00	0.628	5.01	3.148	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	25.00	24.28	0.069	0.063	1.18	0.081	28
Left Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	25.00	24.28	0.061	0.130	1.18	0.072	/
Right Cheek	0	N/A	D1	RMC 12.2K	1413/1732.6	25.00	24.28	0.065	0.048	1.18	0.077	/
Right Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	25.00	24.28	0.051	0.112	1.18	0.060	/
Left Cheek SIM 2	0	N/A	D1	RMC 12.2K	1413/1732.6	25.00	24.28	0.066	0.145	1.18	0.078	/
Left Cheek Battery 2	0	N/A	D1	RMC 12.2K	1413/1732.6	25.00	24.28	0.063	0.058	1.18	0.074	/
Body-worn SAR												
Back Side	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.28	0.450	-0.030	1.18	0.531	29
Front Side	15	N/A	D2	RMC 12.2K	1413/1732.6	24.00	23.28	0.228	0.105	1.18	0.269	/
Back Side SIM 2	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.28	0.437	0.087	1.18	0.516	/
Back Side Battery 2	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.28	0.446	0.136	1.18	0.526	/
Hotspot SAR												
Back Side	10	on	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.227	0.148	1.19	0.269	/
Front Side	10	N/A	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.118	0.022	1.19	0.140	/
Left Edge	10	N/A	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.005	0.031	1.19	0.006	/
Right Edge	10	N/A	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.006	-0.057	1.19	0.008	/
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	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.349	0.073	1.19	0.414	30
Bottom Edge SIM 2	10	on	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.340	-0.070	1.19	0.403	/
Bottom Edge Battery 2	10	on	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.327	0.108	1.19	0.388	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Bottom Edge	15	off	D2	RMC 12.2K	1312/1712.4	24.00	23.17	0.621	0.050	1.21	0.752	/
	15	off	D2	RMC 12.2K	1413/1732.6	24.00	23.28	0.535	0.029	1.18	0.631	/
	15	off	D2	RMC 12.2K	1513/1752.6	24.00	23.26	0.586	-0.030	1.19	0.695	/
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}	
Back Side	0	on	D4	RMC 12.2K	1413/1732.6	18.50	17.76	0.592	0.040	1.19	0.702	/
Bottom Edge	0	on	D4	RMC 12.2K	1413/1732.6	18.50	17.76	1.080	0.023	1.19	1.281	31

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 $\leq \frac{1}{4}$ 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	D4	RMC 12.2K	1413/1732.6	25.00	18.50	0.269	4.47	1.202	YES
Front Side	10	N/A	D4	RMC 12.2K	1413/1732.6	25.00	18.50	0.140	4.47	0.625	NO
Left Edge	10	N/A	D4	RMC 12.2K	1413/1732.6	25.00	18.50	0.006	4.47	0.029	NO
Right Edge	10	N/A	D4	RMC 12.2K	1413/1732.6	25.00	18.50	0.008	4.47	0.034	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	D4	RMC 12.2K	1413/1732.6	25.00	18.50	0.414	4.47	1.849	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	25.00	24.38	0.082	0.188	1.15	0.094	32
Left Tilt	0	N/A	D1	RMC 12.2K	4183/836.6	25.00	24.38	0.060	0.040	1.15	0.069	/
Right Cheek	0	N/A	D1	RMC 12.2K	4183/836.6	25.00	24.38	0.047	0.110	1.15	0.054	/
Right Tilt	0	N/A	D1	RMC 12.2K	4183/836.6	25.00	24.38	0.038	0.000	1.15	0.044	/
Left Cheek SIM 2	0	N/A	D1	RMC 12.2K	4183/836.6	25.00	24.38	0.077	0.053	1.15	0.089	/
Left Cheek Battery 2	0	N/A	D1	RMC 12.2K	4183/836.6	25.00	24.38	0.080	0.190	1.15	0.092	/
Body-worn SAR												
Back Side	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.38	0.117	0.130	1.15	0.135	33
Front Side	15	N/A	D2	RMC 12.2K	4183/836.6	25.00	24.38	0.103	0.035	1.15	0.119	/
Back Side SIM 2	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.38	0.108	0.047	1.15	0.125	/
Back Side Battery 2	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.38	0.112	0.100	1.15	0.129	/
Hotspot SAR												
Back Side	10	on	D4	RMC 12.2K	4183/836.6	25.00	24.38	0.190	0.170	1.15	0.219	34
Front Side	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	24.38	0.166	-0.054	1.15	0.191	/
Left Edge	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	24.38	0.005	0.101	1.15	0.006	/
Right Edge	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	24.38	0.057	0.124	1.15	0.066	/
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	D4	RMC 12.2K	4183/836.6	25.00	24.38	0.189	0.166	1.15	0.218	/
Back Side SIM 2	10	on	D4	RMC 12.2K	4183/836.6	25.00	24.38	0.175	0.100	1.15	0.202	/
Back Side Battery 2	10	on	D4	RMC 12.2K	4183/836.6	25.00	24.38	0.183	0.075	1.15	0.211	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Bottom Edge	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.38	0.081	0.182	1.15	0.093	/

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 $\leq \frac{1}{4}$ 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	D4	RMC 12.2K	4183/836.6	25.00	25.00	0.219	1.00	0.219	NO
Front Side	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	25.00	0.191	1.00	0.191	NO
Left Edge	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	25.00	0.006	1.00	0.006	NO
Right Edge	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	25.00	0.066	1.00	0.066	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	D4	RMC 12.2K	4183/836.6	25.00	25.00	0.218	1.00	0.218	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 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	99	18900/1880	25.50	24.27	0.091	0.100	1.33	0.121	35	
Left Tilt	0	N/A	D1	1	99	18900/1880	25.50	24.27	0.068	0.120	1.33	0.090	/	
Right Cheek	0	N/A	D1	1	99	18900/1880	25.50	24.27	0.071	0.030	1.33	0.094	/	
Right Tilt	0	N/A	D1	1	99	18900/1880	25.50	24.27	0.090	0.164	1.33	0.119	/	
Left Cheek	0	N/A	D1	50%	25	18900/1880	24.50	23.47	0.081	0.025	1.27	0.103	/	
Left Tilt	0	N/A	D1	50%	25	18900/1880	24.50	23.47	0.053	-0.010	1.27	0.067	/	
Right Cheek	0	N/A	D1	50%	25	18900/1880	24.50	23.47	0.056	-0.060	1.27	0.071	/	
Right Tilt	0	N/A	D1	50%	25	18900/1880	24.50	23.47	0.073	0.030	1.27	0.093	/	
Left Cheek SIM 2	0	N/A	D1	1	99	18900/1880	25.50	24.27	0.089	0.051	1.33	0.118	/	
Left Cheek Battery 2	0	N/A	D1	1	99	18900/1880	25.50	24.27	0.083	0.070	1.33	0.111	/	
Body-worn SAR (QPSK)														
Back Side	15	off	D2	1	99	18900/1880	23.00	21.77	0.467	0.026	1.33	0.620	/	
Front Side	15	N/A	D2	1	99	18900/1880	23.00	21.77	0.260	0.150	1.33	0.345	/	
Back Side	15	off	D2	50%	25	18900/1880	23.00	21.97	0.532	0.050	1.27	0.674	36	
Front Side	15	N/A	D2	50%	25	18900/1880	23.00	21.97	0.257	0.133	1.27	0.326	/	
Back Side SIM 2	15	off	D2	50%	25	18900/1880	23.00	21.97	0.529	0.100	1.27	0.671	/	
Back Side Battery 2	15	off	D2	50%	25	18900/1880	23.00	21.97	0.513	0.043	1.27	0.650	/	
Hotspot SAR(QPSK)														
Back Side	10	on	D4	1	50	18900/1880	18.00	17.19	0.283	-0.023	1.21	0.341	/	
Front Side	10	N/A	D4	1	99	18900/1880	18.00	17.19	0.159	0.121	1.21	0.192	/	
Left Edge	10	N/A	D4	1	99	18900/1880	18.00	17.19	0.009	0.145	1.21	0.011	/	
Right Edge	10	N/A	D4	1	99	18900/1880	18.00	17.19	0.007	-0.044	1.21	0.009	/	
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	D4	1	50	18900/1880	18.00	17.19	0.430	0.103	1.21	0.518	/	
Back Side	10	on	D4	50%	50	19100/1900	18.00	17.24	0.315	-0.026	1.19	0.375	/	
Front Side	10	N/A	D4	50%	25	18900/1880	18.00	17.24	0.162	0.117	1.19	0.193	/	
Left Edge	10	N/A	D4	50%	25	18900/1880	18.00	17.24	0.010	0.125	1.19	0.012	/	
Right Edge	10	N/A	D4	50%	25	18900/1880	18.00	17.24	0.006	0.083	1.19	0.007	/	
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	D4	50%	50	19100/1900	18.00	17.24	0.467	0.150	1.19	0.556	37	
Bottom Edge	10	on	D4	50%	50	19100/1900	18.00	17.24	0.425	0.107	1.19	0.506	/	



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SIM 2																											
Bottom Edge Battery 2	10	on	D4	50%	50	19100/1900	18.00	17.24	0.451	0.113	1.19	0.537	/														
Additional SAR test at a conserative distance (triggering distance minus 1mm)																											
Bottom Edge	15	off	D2	1	99	18900/1880	23.00	21.77	0.784	-0.050	1.33	1.041	/														
Test Position	Dist. (mm)	Sens or	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	D4	1	50	18900/1880	18.00	17.19	0.407	-0.023	1.21	0.490	/														
Bottom Edge	0	on	D4	1	50	18900/1880	18.00	17.19	1.020	0.011	1.21	1.229	/														
Back Side	0	on	D4	50%	50	19100/1900	18.00	17.24	0.414	0.023	1.19	0.493	/														
Bottom Edge	0	on	D4	50%	50	19100/1900	18.00	17.24	1.060	0.026	1.19	1.263	38														
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	D4	1	50	18900/1880	25.50	18.00	0.341	5.62	1.918	YES
Front Side	10	N/A	D4	1	99	18900/1880	25.50	18.00	0.192	5.62	1.077	NO
Left Edge	10	N/A	D4	1	99	18900/1880	25.50	18.00	0.011	5.62	0.064	NO
Right Edge	10	N/A	D4	1	99	18900/1880	25.50	18.00	0.009	5.62	0.048	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	D4	1	50	18900/1880	25.50	18.00	0.518	5.62	2.914	YES
Back Side	10	on	D4	50%	50	19100/1900	24.50	18.00	0.375	4.47	1.676	YES
Front Side	10	N/A	D4	50%	25	18900/1880	24.50	18.00	0.193	4.47	0.862	NO
Left Edge	10	N/A	D4	50%	25	18900/1880	24.50	18.00	0.012	4.47	0.052	NO
Right Edge	10	N/A	D4	50%	25	18900/1880	24.50	18.00	0.007	4.47	0.033	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	D4	50%	50	19100/1900	24.50	18.00	0.556	4.47	2.485	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 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	20175/1732.5	25.50	24.47	0.056	0.104	1.27	0.071	/
Left Tilt	0	N/A	D1	1	99	20175/1732.5	25.50	24.47	0.023	0.106	1.27	0.029	/
Right Cheek	0	N/A	D1	1	99	20175/1732.5	25.50	24.47	0.064	0.023	1.27	0.081	39
Right Tilt	0	N/A	D1	1	99	20175/1732.5	25.50	24.47	0.044	0.012	1.27	0.056	/
Left Cheek	0	N/A	D1	50%	25	20175/1732.6	24.50	23.70	0.046	-0.134	1.20	0.055	/
Left Tilt	0	N/A	D1	50%	25	20175/1732.6	24.50	23.70	0.021	-0.064	1.20	0.026	/
Right Cheek	0	N/A	D1	50%	25	20175/1732.6	24.50	23.70	0.048	0.103	1.20	0.058	/
Right Tilt	0	N/A	D1	50%	25	20175/1732.6	24.50	23.70	0.020	0.011	1.20	0.025	/
Right Cheek SIM 2	0	N/A	D1	1	99	20175/1732.5	25.50	24.47	0.060	-0.022	1.27	0.076	/
Right Cheek Battery 2	0	N/A	D1	1	99	20175/1732.5	25.50	24.47	0.057	0.050	1.27	0.072	/
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	0	20175/1732.5	24.00	23.19	0.386	-0.032	1.21	0.465	/
Front Side	15	N/A	D2	1	0	20175/1732.5	24.00	23.19	0.207	0.170	1.21	0.249	/
Back Side	15	off	D2	50%	25	20175/1732.5	24.50	23.70	0.430	-0.060	1.20	0.517	40
Front Side	15	N/A	D2	50%	25	20175/1732.5	24.50	23.70	0.216	0.154	1.20	0.260	/
Back Side SIM 2	15	off	D2	50%	25	20175/1732.5	24.50	23.70	0.419	0.103	1.20	0.504	/
Back Side Battery 2	15	off	D2	50%	25	20175/1732.5	24.50	23.70	0.386	0.120	1.20	0.464	/
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	0	20300/1745	18.50	17.66	0.214	-0.115	1.21	0.260	/
Front Side	10	N/A	D4	1	0	20300/1745	18.50	17.66	0.117	0.162	1.21	0.142	/
Left Edge	10	N/A	D4	1	0	20300/1745	18.50	17.66	0.007	0.137	1.21	0.009	/
Right Edge	10	N/A	D4	1	0	20300/1745	18.50	17.66	0.007	0.102	1.21	0.008	/
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	D4	1	0	20300/1745	18.50	17.66	0.311	-0.024	1.21	0.377	/
Back Side	10	on	D4	50%	0	20175/1732.5	18.50	17.75	0.208	0.036	1.19	0.247	/
Front Side	10	N/A	D4	50%	0	20175/1732.5	18.50	17.75	0.120	-0.011	1.19	0.143	/
Left Edge	10	N/A	D4	50%	0	20175/1732.5	18.50	17.75	0.007	0.012	1.19	0.009	/
Right Edge	10	N/A	D4	50%	0	20175/1732.5	18.50	17.75	0.006	-0.101	1.19	0.008	/
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	D4	50%	0	20175/1732.5	18.50	17.75	0.312	0.160	1.19	0.371	41
Bottom Edge	10	on	D4	1	0	20300/1745	18.50	17.66	0.290	0.041	1.21	0.352	/



SIM 2													
Bottom Edge Battery 2	10	on	D4	1	0	20300/1745	18.50	17.66	0.278	0.059	1.21	0.337	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	15	off	D2	1	0	20175/1732.5	24.00	23.19	0.386	-0.032	1.21	0.465	/
Bottom Edge	15	off	D2	1	0	20175/1732.5	24.00	23.19	0.527	-0.074	1.21	0.635	/
Test Position	Dist. (mm)	Senso r	Power Reduction	RB alloc ation	RB offset	Channel/ Frequency (MHz)	Tune-u p (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	D4	1	0	20300/1745	18.50	17.66	0.853	-0.024	1.21	1.035	42
Bottom Edge	0	on	D4	50%	0	20175/1732.5	18.50	17.75	0.819	0.160	1.19	0.973	/
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	D4	1	0	20300/1745	24.50	18.50	0.260	3.98	1.034	NO
Front Side	10	N/A	D4	1	0	20300/1745	24.50	18.50	0.142	3.98	0.565	NO
Left Edge	10	N/A	D4	1	0	20300/1745	24.50	18.50	0.009	3.98	0.035	NO
Right Edge	10	N/A	D4	1	0	20300/1745	24.50	18.50	0.008	3.98	0.033	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	D4	1	0	20300/1745	24.50	18.50	0.377	3.98	1.502	YES
Back Side	10	on	D4	50%	0	20175/1732.5	24.50	18.50	0.247	3.98	0.984	NO
Front Side	10	N/A	D4	50%	0	20175/1732.5	24.50	18.50	0.143	3.98	0.568	NO
Left Edge	10	N/A	D4	50%	0	20175/1732.5	24.50	18.50	0.009	3.98	0.035	NO
Right Edge	10	N/A	D4	50%	0	20175/1732.5	24.50	18.50	0.008	3.98	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	N/A	NO
Bottom Edge	10	on	D4	50%	0	20175/1732.5	24.50	18.50	0.371	3.98	1.476	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	20450/829	25.50	24.46	0.080	0.113	1.27	0.102	/
Left Tilt	0	N/A	D1	1	0	20450/829	25.50	24.46	0.057	0.154	1.27	0.072	/
Right Cheek	0	N/A	D1	1	0	20450/829	25.50	24.46	0.114	0.021	1.27	0.145	43
Right Tilt	0	N/A	D1	1	0	20450/829	25.50	24.46	0.062	0.011	1.27	0.079	/
Left Cheek	0	N/A	D1	50%	25	20525/836.5	24.50	23.55	0.063	-0.164	1.24	0.078	/
Left Tilt	0	N/A	D1	50%	25	20525/836.5	24.50	23.55	0.046	0.010	1.24	0.057	/
Right Cheek	0	N/A	D1	50%	25	20525/836.5	24.50	23.55	0.092	0.131	1.24	0.114	/
Right Tilt	0	N/A	D1	50%	25	20525/836.5	24.50	23.55	0.048	0.033	1.24	0.060	/
Right Cheek SIM 2	0	N/A	D1	1	0	20450/829	25.50	24.46	0.096	0.021	1.27	0.122	/
Right Cheek Battery 2	0	N/A	D1	1	0	20450/829	25.50	24.46	0.108	-0.050	1.27	0.137	/
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	0	20450/829	25.50	24.46	0.146	0.050	1.27	0.186	44
Front Side	15	N/A	D2	1	0	20450/829	25.50	24.46	0.107	-0.022	1.27	0.136	/
Back Side	15	off	D2	50%	25	20525/836.5	24.50	23.55	0.094	-0.065	1.24	0.117	/
Front Side	15	N/A	D2	50%	25	20525/836.5	24.50	23.55	0.080	0.147	1.24	0.100	/
Back Side SIM 2	15	off	D2	1	0	20450/829	25.50	24.46	0.129	0.102	1.27	0.164	/
Back Side Battery 2	15	off	D2	1	0	20450/829	25.50	24.46	0.139	0.034	1.27	0.177	/
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	0	20450/829	25.50	24.46	0.228	-0.033	1.27	0.290	45
Front Side	10	N/A	D4	1	0	20450/829	25.50	24.46	0.164	0.051	1.27	0.208	/
Left Edge	10	N/A	D4	1	0	20450/829	25.50	24.46	0.010	0.143	1.27	0.013	/
Right Edge	10	N/A	D4	1	0	20450/829	25.50	24.46	0.056	0.026	1.27	0.071	/
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	D4	1	0	20450/829	25.50	24.46	0.222	0.051	1.27	0.282	/
Back Side	10	on	D4	50%	25	20525/836.5	24.50	23.55	0.197	0.164	1.24	0.245	/
Front Side	10	N/A	D4	50%	25	20525/836.5	24.50	23.55	0.145	-0.032	1.24	0.180	/
Left Edge	10	N/A	D4	50%	25	20525/836.5	24.50	23.55	0.011	0.101	1.24	0.013	/
Right Edge	10	N/A	D4	50%	25	20525/836.5	24.50	23.55	0.045	0.155	1.24	0.056	/
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	D4	50%	25	20525/836.5	24.50	23.55	0.153	-0.065	1.24	0.190	/
Back Side	10	on	D4	1	0	20450/829	25.50	24.46	0.203	-0.070	1.27	0.258	/



SIM 2													
Back Side Battery 2	10	on	D4	1	0	20450/829	25.50	24.46	0.189	0.038	1.27	0.240	/

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 $\geq 50\%$ 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	D4	1	0	20450/829	25.50	25.50	0.290	1.00	0.290	NO
Front Side	10	N/A	D4	1	0	20450/829	25.50	25.50	0.208	1.00	0.208	NO
Left Edge	10	N/A	D4	1	0	20450/829	25.50	25.50	0.013	1.00	0.013	NO
Right Edge	10	N/A	D4	1	0	20450/829	25.50	25.50	0.071	1.00	0.071	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	D4	1	0	20450/829	25.50	25.50	0.282	1.00	0.282	NO
Back Side	10	on	D4	50%	25	20525/836.5	24.50	24.50	0.245	1.00	0.245	NO
Front Side	10	N/A	D4	50%	25	20525/836.5	24.50	24.50	0.180	1.00	0.180	NO
Left Edge	10	N/A	D4	50%	25	20525/836.5	24.50	24.50	0.013	1.00	0.013	NO
Right Edge	10	N/A	D4	50%	25	20525/836.5	24.50	24.50	0.056	1.00	0.056	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	D4	50%	25	20525/836.5	24.50	24.50	0.190	1.00	0.190	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	0	21350/2560	25.50	24.59	0.045	-0.157	1.23	0.055	/
Left Tilt	0	N/A	D1	1	0	21350/2560	25.50	24.59	0.033	-0.115	1.23	0.040	/
Right Cheek	0	N/A	D1	1	0	21350/2560	25.50	24.59	0.051	0.048	1.23	0.063	/
Right Tilt	0	N/A	D1	1	0	21350/2560	25.50	24.59	0.057	0.024	1.23	0.070	/
Left Cheek	0	N/A	D1	50%	25	21350/2560	24.50	23.80	0.045	0.052	1.17	0.053	/
Left Tilt	0	N/A	D1	50%	25	21350/2560	24.50	23.80	0.037	0.000	1.17	0.043	/
Right Cheek	0	N/A	D1	50%	25	21350/2560	24.50	23.80	0.043	0.069	1.17	0.051	/
Right Tilt	0	N/A	D1	50%	25	21350/2560	24.50	23.80	0.065	0.198	1.17	0.076	46
Right Tilt SIM 2	0	N/A	D1	50%	25	21350/2560	24.50	23.80	0.058	0.020	1.17	0.068	/
Right Tilt Battery 2	0	N/A	D1	50%	25	21350/2560	24.50	23.80	0.063	0.039	1.17	0.074	/
Right Tilt	0	N/A	D1	1	0	21350/2560	25.50	24.07	0.062	0.047	1.39	0.039	/
				1	99	21152/2540.2							
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	99	21100/2535	24.00	22.89	0.322	0.140	1.29	0.416	/
Front Side	15	N/A	D2	1	99	21100/2535	24.00	22.89	0.308	0.152	1.29	0.398	/
Back Side	15	off	D2	50%	25	21100/2535	24.00	23.09	0.403	0.110	1.23	0.497	47
Front Side	15	N/A	D2	50%	25	21100/2535	24.00	23.09	0.369	-0.103	1.23	0.455	/
Front Side SIM 2	15	N/A	D2	50%	25	21100/2535	24.00	23.09	0.397	-0.039	1.23	0.490	/
Front Side Battery 2	15	N/A	D2	50%	25	21100/2535	24.00	23.09	0.386	0.056	1.23	0.476	/
Front Side	15	N/A	D2	1	0	21100/2535	24.00	22.81	0.372	0.100	1.32	0.272	/
				1	99	21152/2540.2							
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	99	21350/2560	20.00	19.24	0.480	0.155	1.19	0.572	/
Front Side	10	N/A	D4	1	0	21350/2560	20.00	19.24	0.234	0.023	1.19	0.279	/
Left Edge	10	N/A	D4	1	0	21350/2560	20.00	19.24	0.060	0.145	1.19	0.071	/
Right Edge	10	N/A	D4	1	0	21350/2560	20.00	19.24	0.076	0.105	1.19	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	D4	1	99	21350/2560	20.00	19.24	0.608	-0.032	1.19	0.724	/
Back Side	10	on	D4	50%	25	21350/2560	20.00	19.33	0.468	0.144	1.17	0.546	/
Front Side	10	N/A	D4	50%	25	21350/2560	20.00	19.33	0.230	0.022	1.17	0.268	/
Left Edge	10	N/A	D4	50%	25	21350/2560	20.00	19.33	0.066	-0.112	1.17	0.077	/



Right Edge	10	N/A	D4	50%	25	21350/2560	20.00	19.33	0.077	0.043	1.17	0.090	/
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	D4	50%	25	21350/2560	20.00	19.33	0.668	0.160	1.17	0.779	48
Bottom Edge SIM 2	10	on	D4	50%	25	21350/2560	20.00	19.33	0.645	0.139	1.17	0.753	/
Bottom Edge Battery 2	10	on	D4	50%	25	21350/2560	20.00	19.33	0.621	0.105	1.17	0.725	/
Bottom Edge	10	on	D4	1	0	21350/2560	20.00	19.17	0.596	0.117	1.21	0.358	/
				1	99	21152/2540.2							
Additional SAR test at a conservative distance (triggering distance minus 1mm)													
Bottom Edge	15	off	D2	1	99	21100/2535	24.00	22.89	0.464	-0.150	1.29	0.599	/
Test Position	Dist. (mm)	Sens or	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	D4	1	99	21350/2560	20.00	19.24	1.020	0.044	1.19	1.215	/
Bottom Edge	0	on	D4	1	99	21350/2560	20.00	19.24	0.402	-0.032	1.19	0.479	/
Back Side	0	on	D4	50%	25	21350/2560	20.00	19.33	1.090	0.015	1.17	1.272	49
Bottom Edge	0	on	D4	50%	25	21350/2560	20.00	19.33	0.413	-0.110	1.17	0.482	/
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 $\geq$ 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	D4	1	99	21350/2560	24.00	20.00	0.572	2.51	1.436	YES
Front Side	10	N/A	D4	1	0	21350/2560	24.00	20.00	0.279	2.51	0.700	NO
Left Edge	10	N/A	D4	1	0	21350/2560	24.00	20.00	0.071	2.51	0.180	NO
Right Edge	10	N/A	D4	1	0	21350/2560	24.00	20.00	0.091	2.51	0.227	NO
Bottom Edge	10	on	D4	1	99	21350/2560	24.00	20.00	0.724	2.51	1.819	YES
Back Side	10	on	D4	50%	25	21350/2560	24.00	20.00	0.546	2.51	1.372	YES
Front Side	10	N/A	D4	50%	25	21350/2560	24.00	20.00	0.268	2.51	0.674	NO
Left Edge	10	N/A	D4	50%	25	21350/2560	24.00	20.00	0.077	2.51	0.193	NO
Right Edge	10	N/A	D4	50%	25	21350/2560	24.00	20.00	0.090	2.51	0.226	NO
Bottom Edge	10	on	D4	50%	25	21350/2560	24.00	20.00	0.779	2.51	1.958	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	50	38150/2610	25.50	24.57	0.031	-0.028	1.24	0.039	/
Left Tilt	0	N/A	D1	1	50	38150/2610	25.50	24.57	0.026	-0.030	1.24	0.032	/
Right Cheek	0	N/A	D1	1	50	38150/2610	25.50	24.57	0.056	0.065	1.24	0.070	50
Right Tilt	0	N/A	D1	1	50	38150/2610	25.50	24.57	0.045	0.036	1.24	0.056	/
Left Cheek	0	N/A	D1	50%	25	38150/2610	24.50	23.71	0.033	-0.037	1.20	0.039	/
Left Tilt	0	N/A	D1	50%	25	38150/2610	24.50	23.71	0.022	-0.094	1.20	0.026	/
Right Cheek	0	N/A	D1	50%	25	38150/2610	24.50	23.71	0.030	0.100	1.20	0.036	/
Right Tilt	0	N/A	D1	50%	25	38150/2610	24.50	23.71	0.037	0.038	1.20	0.044	/
Right Cheek SIM 2	0	N/A	D1	1	50	38150/2610	25.50	24.57	0.049	-0.040	1.24	0.061	/
Right Cheek Battery 2	0	N/A	D1	1	50	38150/2610	25.50	24.57	0.051	0.050	1.24	0.063	/
Right Cheek	0	N/A	D1	1	0	38150/2610	25.50	24.41	0.043	-0.072	1.29	0.026	/
				1	99	37952/2590.2							
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	50	38000/2595	24.50	23.50	0.307	-0.055	1.26	0.386	/
Front Side	15	N/A	D2	1	50	38000/2595	24.50	23.50	0.151	0.103	1.26	0.190	/
Back Side	15	off	D2	50%	50	38000/2595	24.50	23.72	0.310	0.014	1.20	0.371	51
Front Side	15	N/A	D2	50%	50	38000/2595	24.50	23.72	0.152	0.044	1.20	0.182	/
Back Side SIM 2	15	off	D2	1	50	38000/2595	24.50	23.50	0.291	0.100	1.26	0.366	/
Back Side Battery 2	15	off	D2	1	50	38000/2595	24.50	23.50	0.300	-0.022	1.26	0.378	/
Back Side	15	N/A	D2	1	99	37850/2580	24.50	23.47	0.297	0.037	1.27	0.202	/
				1	0	38048/2599.8							
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	50	38150/2610	21.00	20.27	0.210	-0.155	1.18	0.248	/
Front Side	10	N/A	D4	1	50	38150/2610	21.00	20.27	0.109	0.023	1.18	0.129	/
Left Edge	10	N/A	D4	1	50	38150/2610	21.00	20.27	0.006	0.055	1.18	0.007	/
Right Edge	10	N/A	D4	1	50	38150/2610	21.00	20.27	0.009	0.107	1.18	0.010	/
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	D4	1	50	38150/2610	21.00	20.27	0.586	0.032	1.18	0.693	/
Back Side	10	on	D4	50%	50	37850/2580	21.00	20.39	0.221	0.044	1.15	0.254	/
Front Side	10	N/A	D4	50%	50	37850/2580	21.00	20.39	0.111	0.026	1.15	0.128	/
Left Edge	10	N/A	D4	50%	50	37850/2580	21.00	20.39	0.005	0.156	1.15	0.006	/



Right Edge	10	N/A	D4	50%	50	37850/2580	21.00	20.39	0.010	0.131	1.15	0.011	/
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	D4	50%	50	37850/2580	21.00	20.39	0.608	-0.036	1.15	0.700	52
Bottom Edge SIM 2	10	on	D4	50%	50	37850/2580	21.00	20.39	0.579	0.050	1.15	0.666	/
Bottom Edge Battery 2	10	on	D4	50%	50	37850/2580	21.00	20.39	0.594	0.073	1.15	0.684	/
Bottom Edge	10	on	D4	1	0	38150/2610	21.00	20.19	0.558	0.100	1.21	0.324	/
				1	99	37952/2590.2							

Additional SAR test at a conservative distance (triggering distance minus 1mm)

Bottom Edge	15	off	D2	1	50	38000/2595	24.50	23.50	0.322	0.000	1.26	0.405	/
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.
									Measure d SAR _{10g}	Power Drift (dB)	Scaling Factor	Report SAR _{10g}	

Product Specific 10-g SAR

Bottom Edge	0	on	D4	1	50	38150/2610	21.00	20.27	0.524	-0.060	1.18	0.620	/
Bottom Edge	0	on	D4	50%	50	37850/2580	21.00	20.39	0.610	-0.010	1.15	0.702	53

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 $\geq 50\%$ 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	D4	1	50	38150/2610	24.50	21.00	0.248	2.24	0.556	NO
Front Side	10	N/A	D4	1	50	38150/2610	24.50	21.00	0.129	2.24	0.289	NO
Left Edge	10	N/A	D4	1	50	38150/2610	24.50	21.00	0.007	2.24	0.015	NO
Right Edge	10	N/A	D4	1	50	38150/2610	24.50	21.00	0.010	2.24	0.023	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	D4	1	50	38150/2610	24.50	21.00	0.693	2.24	1.552	YES
Back Side	10	on	D4	50%	50	37850/2580	24.50	21.00	0.254	2.24	0.569	NO
Front Side	10	N/A	D4	50%	50	37850/2580	24.50	21.00	0.128	2.24	0.286	NO
Left Edge	10	N/A	D4	50%	50	37850/2580	24.50	21.00	0.006	2.24	0.014	NO
Right Edge	10	N/A	D4	50%	50	37850/2580	24.50	21.00	0.011	2.24	0.025	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	D4	50%	50	37850/2580	24.50	21.00	0.700	2.24	1.566	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 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	50	40140/2545	25.50	24.56	0.034	-0.038	1.24	0.042	/
Left Tilt	0	N/A	D1	1	50	40140/2545	25.50	24.56	0.028	-0.045	1.24	0.035	/
Right Cheek	0	N/A	D1	1	50	40140/2545	25.50	24.56	0.055	-0.029	1.24	0.068	54
Right Tilt	0	N/A	D1	1	50	40140/2545	25.50	24.56	0.038	0.029	1.24	0.047	/
Left Cheek	0	N/A	D1	50%	25	40400/2571	24.50	23.54	0.021	-0.060	1.25	0.026	/
Left Tilt	0	N/A	D1	50%	25	40400/2571	24.50	23.54	0.011	-0.190	1.25	0.014	/
Right Cheek	0	N/A	D1	50%	25	40400/2571	24.50	23.54	0.038	0.012	1.25	0.047	/
Right Tilt	0	N/A	D1	50%	25	40400/2571	24.50	23.54	0.025	0.031	1.25	0.032	/
Right Cheek SIM 2	0	N/A	D1	1	50	40140/2545	25.50	24.56	0.050	-0.020	1.24	0.062	/
Right Cheek Battery 2	0	N/A	D1	1	50	40140/2545	25.50	24.56	0.044	-0.089	1.24	0.055	/
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	99	41140/2645	24.50	23.84	0.288	0.045	1.16	0.335	55
Front Side	15	N/A	D2	1	99	41140/2645	24.50	23.84	0.146	0.105	1.16	0.170	/
Back Side	15	off	D2	50%	50	40400/2571	24.50	23.73	0.276	0.112	1.19	0.330	/
Front Side	15	N/A	D2	50%	50	40400/2571	24.50	23.73	0.142	0.100	1.19	0.170	/
Back Side SIM 2	15	off	D2	1	99	41140/2645	24.50	23.84	0.281	0.061	1.16	0.327	/
Back Side Battery 2	15	off	D2	1	99	41140/2645	24.50	23.84	0.272	0.079	1.16	0.317	/
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	50	40670/2598	21.00	20.72	0.220	-0.065	1.07	0.235	/
Front Side	10	N/A	D4	1	50	40670/2598	21.00	20.72	0.109	0.123	1.07	0.116	/
Left Edge	10	N/A	D4	1	50	40670/2598	21.00	20.72	0.103	0.014	1.07	0.110	/
Right Edge	10	N/A	D4	1	50	40670/2598	21.00	20.72	0.003	-0.035	1.07	0.004	/
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	D4	1	50	40670/2598	21.00	20.72	0.605	0.066	1.07	0.645	/
Back Side	10	on	D4	50%	0	41140/2645	21.00	20.41	0.238	-0.157	1.15	0.273	/
Front Side	10	N/A	D4	50%	0	41140/2645	21.00	20.90	0.114	0.010	1.02	0.117	/
Left Edge	10	N/A	D4	50%	0	41140/2645	21.00	20.90	0.004	0.024	1.02	0.004	/
Right Edge	10	N/A	D4	50%	0	41140/2645	21.00	20.90	0.009	-0.025	1.02	0.009	/
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	D4	50%	0	41140/2645	21.00	20.90	0.672	-0.042	1.02	0.688	56
Bottom Edge	10	on	D4	50%	0	41140/2645	21.00	20.90	0.653	0.030	1.02	0.668	/



SIM 2													
Bottom Edge Battery 2	10	on	D4	50%	0	41140/2645	21.00	20.90	0.668	0.110	1.02	0.684	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Back Side	15	off	D2	1	99	41140/2645	24.50	23.84	0.293	0.055	1.16	0.341	/
Bottom Edge	15	off	D2	1	99	41140/2645	24.50	23.84	0.332	-0.027	1.16	0.386	/
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 1.6 W/kg (mW/g)				Plot No.
									Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Product Specific 10-g SAR													
Bottom Edge	0	on	D4	1	50	40670/2598	21.00	20.72	0.561	0.032	1.07	0.598	57
Bottom Edge	0	on	D4	50%	0	41140/2645	21.00	20.90	0.547	-0.010	1.02	0.560	/
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	D4	1	50	40670/2598	24.50	21.00	0.235	2.24	0.525	NO
Front Side	10	N/A	D4	1	50	40670/2598	24.50	21.00	0.116	2.24	0.260	NO
Left Edge	10	N/A	D4	1	50	40670/2598	24.50	21.00	0.110	2.24	0.246	NO
Right Edge	10	N/A	D4	1	50	40670/2598	24.50	21.00	0.004	2.24	0.008	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	D4	1	50	40670/2598	24.50	21.00	0.645	2.24	1.445	YES
Back Side	10	on	D4	50%	0	41140/2645	24.50	21.00	0.273	2.24	0.610	NO
Front Side	10	N/A	D4	50%	0	41140/2645	24.50	21.00	0.117	2.24	0.261	NO
Left Edge	10	N/A	D4	50%	0	41140/2645	24.50	21.00	0.004	2.24	0.009	NO
Right Edge	10	N/A	D4	50%	0	41140/2645	24.50	21.00	0.009	2.24	0.020	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	D4	50%	0	41140/2645	24.50	21.00	0.688	2.24	1.539	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 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	32.50	31.44	0.260	0.060	1.28	0.332	/
Left Tilt	0	N/A	D1	GSM	190/836.6	32.50	31.44	0.234	-0.010	1.28	0.299	/
Right Cheek	0	N/A	D1	GSM	190/836.6	32.50	31.44	0.518	-0.070	1.28	0.661	58
Right Tilt	0	N/A	D1	GSM	190/836.6	32.50	31.44	0.494	-0.040	1.28	0.631	/
Right Cheek SIM 2	0	N/A	D1	GSM	190/836.6	32.50	31.44	0.506	0.100	1.28	0.646	/
Right Cheek Battery 2	0	N/A	D1	GSM	190/836.6	32.50	31.44	0.482	0.060	1.28	0.615	/
Body-worn SAR												
Back Side	15	off	D2	GSM	190/836.6	34.00	33.33	0.133	0.000	1.17	0.155	59
Front Side	15	N/A	D2	GSM	190/836.6	34.00	33.33	0.091	-0.021	1.17	0.106	/
Back Side SIM 2	15	off	D2	GSM	190/836.6	34.00	33.33	0.125	0.030	1.17	0.146	/
Back Side Battery 2	15	off	D2	GSM	190/836.6	34.00	33.33	0.118	0.050	1.17	0.138	/
Hotspot SAR												
Back Side	10	on	D4	4Txslots	190/836.6	27.00	25.78	0.157	-0.040	1.32	0.208	60
Front Side	10	N/A	D4	4Txslots	190/836.6	27.00	25.78	0.125	0.033	1.32	0.166	/
Left Edge	10	N/A	D4	4Txslots	190/836.6	27.00	25.78	0.045	0.036	1.32	0.060	/
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	D4	4Txslots	190/836.6	27.00	25.78	0.116	0.011	1.32	0.154	/
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 SIM 2	10	on	D4	4Txslots	190/836.6	27.00	25.78	0.152	0.046	1.32	0.201	/
Back Side Battery 2	10	on	D4	4Txslots	190/836.6	27.00	25.78	0.147	0.055	1.32	0.195	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Back Side	15	off	D2	4Txslots	190/836.6	28.00	26.63	0.122	-0.140	1.37	0.167	/
Bottom Edge	15	off	D2	4Txslots	190/836.6	28.00	26.63	0.101	0.031	1.37	0.138	/
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	D4	4Txslots	190/836.6	28.00	27.00	0.208	1.26	0.262	NO
Front Side	10	N/A	D4	4Txslots	190/836.6	28.00	27.00	0.166	1.26	0.208	NO
Left Edge	10	N/A	D4	4Txslots	190/836.6	28.00	27.00	0.060	1.26	0.075	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	D4	4Txslots	190/836.6	28.00	27.00	0.154	1.26	0.193	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 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	28.00	26.97	0.406	0.010	1.27	0.515	/
Left Tilt	0	N/A	D1	GSM	661/1880	28.00	26.97	0.306	0.113	1.27	0.388	/
Right Cheek	0	N/A	D1	GSM	661/1880	28.00	26.97	0.622	-0.010	1.27	0.788	61
Right Tilt	0	N/A	D1	GSM	661/1880	28.00	26.97	0.596	0.043	1.27	0.756	/
Right Cheek SIM 2	0	N/A	D1	GSM	661/1880	28.00	26.97	0.579	0.100	1.27	0.734	/
Right Cheek Battery 2	0	N/A	D1	GSM	661/1880	28.00	26.97	0.583	0.090	1.27	0.739	/
Body-worn SAR												
Back Side	15	off	D2	GSM	661/1880	31.00	29.58	0.303	0.010	1.39	0.420	62
Front Side	15	N/A	D2	GSM	661/1880	31.00	29.58	0.115	0.092	1.39	0.159	/
Back Side SIM 2	15	off	D2	GSM	661/1880	31.00	29.58	0.290	0.100	1.39	0.402	/
Back Side Battery 2	15	off	D2	GSM	661/1880	31.00	29.58	0.299	0.053	1.39	0.415	/
Hotspot SAR												
Back Side	10	on	D4	4Txslots	661/1880	21.00	20.02	0.320	0.133	1.25	0.401	/
Front Side	10	N/A	D4	4Txslots	661/1880	21.00	20.02	0.281	0.151	1.25	0.352	/
Left Edge	10	N/A	D4	4Txslots	661/1880	21.00	20.02	0.055	0.010	1.25	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	D4	4Txslots	661/1880	21.00	20.02	0.367	0.058	1.25	0.460	63
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 SIM 2	10	on	D4	4Txslots	661/1880	31.00	29.58	0.326	-0.074	1.39	0.452	/
Top Edge Battery 2	10	on	D4	4Txslots	661/1880	21.00	20.02	0.349	0.110	1.25	0.437	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Back Side	15	off	D2	4Txslots	661/1880	25.00	23.28	0.166	0.185	1.49	0.247	/
Top Edge	15	off	D2	4Txslots	661/1880	25.00	23.28	0.400	0.031	1.49	0.594	/
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.												

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	D4	4Txslots	661/1880	25.00	21.00	0.401	2.51	1.007	NO
Front Side	10	N/A	D4	4Txslots	661/1880	25.00	21.00	0.352	2.51	0.885	NO
Left Edge	10	N/A	D4	4Txslots	661/1880	25.00	21.00	0.069	2.51	0.173	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	D4	4Txslots	661/1880	25.00	21.00	0.460	2.51	1.155	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 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	18.00	16.99	0.382	0.040	1.26	0.482	/
Left Tilt	0	N/A	D1	RMC 12.2K	9400/1880	18.00	16.99	0.334	0.120	1.26	0.421	/
Right Cheek	0	N/A	D1	RMC 12.2K	9400/1880	18.00	16.99	0.511	-0.050	1.26	0.645	64
Right Tilt	0	N/A	D1	RMC 12.2K	9400/1880	18.00	16.99	0.496	0.103	1.26	0.626	/
Right Cheek SIM 2	0	N/A	D1	RMC 12.2K	9400/1880	18.00	16.99	0.481	0.064	1.26	0.607	/
Right Cheek Battery 2	0	N/A	D1	RMC 12.2K	9400/1880	18.00	16.99	0.507	0.020	1.26	0.640	/
Body-worn SAR												
Back Side	15	off	D2	RMC 12.2K	9400/1880	23.00	21.97	0.270	0.071	1.27	0.342	65
Front Side	15	N/A	D2	RMC 12.2K	9400/1880	23.00	21.97	0.212	0.051	1.27	0.269	/
Back Side SIM 2	15	off	D2	RMC 12.2K	9400/1880	23.00	21.97	0.264	0.105	1.27	0.335	/
Back Side Battery 2	15	off	D2	RMC 12.2K	9400/1880	23.00	21.97	0.258	0.021	1.27	0.327	/
Hotspot SAR												
Back Side	10	on	D4	RMC 12.2K	9400/1880	18.00	16.99	0.176	0.141	1.26	0.222	66
Front Side	10	N/A	D4	RMC 12.2K	9400/1880	18.00	16.99	0.142	0.023	1.26	0.179	/
Left Edge	10	N/A	D4	RMC 12.2K	9400/1880	18.00	16.99	0.008	0.014	1.26	0.009	/
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	D4	RMC 12.2K	9400/1880	18.00	16.99	0.140	-0.059	1.26	0.177	/
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 SIM 2	10	on	D4	RMC 12.2K	9400/1880	18.00	16.99	0.165	0.110	1.26	0.208	/
Back Side Battery 2	10	on	D4	RMC 12.2K	9400/1880	18.00	16.99	0.170	0.092	1.26	0.215	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Top Edge	15	off	D2	RMC 12.2K	9400/1880	23.00	21.97	0.457	0.027	1.27	0.579	/
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	D4	RMC 12.2K	9400/1880	23.00	18.00	0.222	3.16	0.702	NO
Front Side	10	N/A	D4	RMC 12.2K	9400/1880	23.00	18.00	0.179	3.16	0.567	NO
Left Edge	10	N/A	D4	RMC 12.2K	9400/1880	23.00	18.00	0.009	3.16	0.030	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	D4	RMC 12.2K	9400/1880	23.00	18.00	0.177	3.16	0.559	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	17.00	15.95	0.361	0.112	1.27	0.460	/
Left Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	17.00	15.95	0.432	0.030	1.27	0.550	/
Right Cheek	0	N/A	D1	RMC 12.2K	1413/1732.6	17.00	15.95	0.590	-0.039	1.27	0.751	/
Right Tilt	0	N/A	D1	RMC 12.2K	1413/1732.6	17.00	15.95	0.594	-0.101	1.27	0.756	67
Right Tilt SIM 2	0	N/A	D1	RMC 12.2K	1413/1732.6	17.00	15.95	0.588	0.135	1.27	0.749	/
Right Tilt Battery 2	0	N/A	D1	RMC 12.2K	1413/1732.6	17.00	15.95	0.572	0.170	1.27	0.728	/
Body-worn SAR												
Back Side	15	off	D2	RMC 12.2K	1413/1732.6	23.00	21.94	0.208	0.164	1.28	0.265	/
Front Side	15	N/A	D2	RMC 12.2K	1413/1732.6	23.00	21.94	0.320	0.054	1.28	0.408	68
Front Side SIM 2	15	N/A	D2	RMC 12.2K	1413/1732.6	23.00	21.94	0.314	0.102	1.28	0.401	/
Front Side Battery 2	15	N/A	D2	RMC 12.2K	1413/1732.6	23.00	21.94	0.289	0.096	1.28	0.369	/
Hotspot SAR												
Back Side	10	on	D4	RMC 12.2K	1413/1732.6	18.00	16.99	0.146	0.132	1.26	0.184	/
Front Side	10	N/A	D4	RMC 12.2K	1413/1732.6	18.00	16.99	0.138	-0.145	1.26	0.174	/
Left Edge	10	N/A	D4	RMC 12.2K	1413/1732.6	18.00	16.99	0.004	0.030	1.26	0.005	/
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	D4	RMC 12.2K	1413/1732.6	18.00	16.99	0.381	0.046	1.26	0.481	69
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 SIM 2	10	on	D4	RMC 12.2K	1413/1732.6	18.00	16.99	0.365	-0.050	1.26	0.461	/
Top Edge Battery 2	10	on	D4	RMC 12.2K	1413/1732.6	18.00	16.99	0.372	0.106	1.26	0.469	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Top Edge	15	off	D2	Txslots	1413/1732.6	23.00	21.94	0.700	0.023	1.28	0.894	/
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												
Top Edge	0	on	D4	RMC 12.2K	1413/1732.6	18.00	16.99	0.670	0.106	1.26	0.845	70
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	D4	RMC 12.2K	1413/1732.6	23.00	18.00	0.184	3.16	0.583	NO
Front Side	10	N/A	D4	RMC 12.2K	1413/1732.6	23.00	18.00	0.174	3.16	0.551	NO
Left Edge	10	N/A	D4	RMC 12.2K	1413/1732.6	23.00	18.00	0.005	3.16	0.017	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	D4	RMC 12.2K	1413/1732.6	23.00	18.00	0.481	3.16	1.520	YES
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	23.00	22.12	0.253	0.104	1.22	0.310	/
Left Tilt	0	N/A	D1	RMC 12.2K	4183/836.6	23.00	22.12	0.202	-0.140	1.22	0.247	/
Right Cheek	0	N/A	D1	RMC 12.2K	4183/836.6	23.00	22.12	0.296	0.113	1.22	0.362	71
Right Tilt	0	N/A	D1	RMC 12.2K	4183/836.6	23.00	22.12	0.240	0.030	1.22	0.294	/
Right Cheek SIM 2	0	N/A	D1	RMC 12.2K	4183/836.6	23.00	22.12	0.287	0.021	1.22	0.351	/
Right Cheek Battery 2	0	N/A	D1	RMC 12.2K	4183/836.6	23.00	22.12	0.273	-0.050	1.22	0.334	/
Body-worn SAR												
Back Side	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.42	0.105	0.160	1.14	0.120	72
Front Side	15	N/A	D2	RMC 12.2K	4183/836.6	25.00	24.42	0.101	-0.033	1.14	0.115	/
Back Side SIM 2	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.42	0.099	0.029	1.14	0.113	/
Back Side Battery 2	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.42	0.103	0.100	1.14	0.118	/
Hotspot SAR												
Back Side	10	on	D4	RMC 12.2K	4183/836.6	23.00	22.12	0.166	0.180	1.22	0.203	73
Front Side	10	N/A	D4	RMC 12.2K	4183/836.6	23.00	22.12	0.121	-0.022	1.22	0.148	/
Left Edge	10	N/A	D4	RMC 12.2K	4183/836.6	23.00	22.12	0.048	0.036	1.22	0.059	/
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	D4	RMC 12.2K	4183/836.6	23.00	22.12	0.105	0.042	1.22	0.129	/
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 SIM 2	10	on	D4	RMC 12.2K	4183/836.6	25.00	24.42	0.157	0.030	1.14	0.179	/
Back Side Battery 2	10	on	D4	RMC 12.2K	4183/836.6	23.00	22.12	0.149	0.051	1.22	0.182	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)												
Top Edge	15	off	D2	RMC 12.2K	4183/836.6	25.00	24.42	0.096	0.105	1.14	0.110	/

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 $\leq \frac{1}{4}$ 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	D4	RMC 12.2K	4183/836.6	25.00	23.00	0.203	1.58	0.322	NO
Front Side	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	23.00	0.148	1.58	0.235	NO
Left Edge	10	N/A	D4	RMC 12.2K	4183/836.6	25.00	23.00	0.059	1.58	0.093	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	D4	RMC 12.2K	4183/836.6	25.00	23.00	0.129	1.58	0.204	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 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	1	0	18900/1880	19.00	18.05	0.332	-0.100	1.24	0.413	/
Left Tilt	0	N/A	D1	1	0	18900/1880	19.00	18.05	0.413	0.130	1.24	0.514	/
Right Cheek	0	N/A	D1	1	0	18900/1880	19.00	18.05	0.577	-0.130	1.24	0.718	/
Right Tilt	0	N/A	D1	1	0	18900/1880	19.00	18.05	0.618	0.021	1.24	0.769	74
Left Cheek	0	N/A	D1	50%	50	18900/1880	19.00	18.08	0.305	-0.023	1.24	0.377	/
Left Tilt	0	N/A	D1	50%	50	18900/1880	19.00	18.08	0.444	-0.020	1.24	0.549	/
Right Cheek	0	N/A	D1	50%	50	18900/1880	19.00	18.08	0.450	0.040	1.24	0.556	/
Right Tilt	0	N/A	D1	50%	50	18900/1880	19.00	18.08	0.581	-0.040	1.24	0.718	/
Right Tilt SIM 2	0	N/A	D1	1	0	18900/1880	19.00	18.05	0.580	0.071	1.24	0.722	/
Right Tilt Battery 2	0	N/A	D1	1	0	18900/1880	19.00	18.05	0.597	0.100	1.24	0.743	/
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	0	18900/1880	23.00	22.11	0.222	-0.030	1.23	0.272	/
Front Side	15	N/A	D2	1	0	18900/1880	23.00	22.11	0.212	0.016	1.23	0.260	/
Back Side	15	off	D2	50%	50	19100/1900	23.00	22.13	0.229	0.070	1.22	0.280	75
Front Side	15	N/A	D2	50%	25	19100/1900	23.00	22.13	0.185	0.031	1.22	0.226	/
Back Side SIM 2	15	off	D2	50%	50	19100/1900	23.00	22.13	0.215	0.053	1.22	0.263	/
Back Side Battery 2	15	off	D2	50%	50	19100/1900	23.00	22.13	0.220	-0.021	1.22	0.269	/
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	0	18900/1880	19.00	18.05	0.163	-0.110	1.24	0.203	/
Front Side	10	N/A	D4	1	0	18900/1880	19.00	18.05	0.157	0.105	1.24	0.195	/
Left Edge	10	N/A	D4	1	0	18900/1880	19.00	18.05	0.006	-0.127	1.24	0.008	/
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	D4	1	0	18900/1880	19.00	18.05	0.417	-0.104	1.24	0.519	76
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	D4	50%	50	18900/1880	19.00	18.08	0.168	0.112	1.24	0.208	/
Front Side	10	N/A	D4	50%	25	18900/1880	19.00	18.08	0.162	0.025	1.24	0.200	/
Left Edge	10	N/A	D4	50%	25	18900/1880	19.00	18.08	0.005	0.043	1.24	0.007	/
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	D4	50%	50	18900/1880	19.00	18.08	0.360	0.150	1.24	0.445	/
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	D4	1	0	18900/1880	19.00	18.05	0.372	0.109	1.24	0.463	/



SIM 2													
Top Edge Battery 2	10	on	D4	1	0	18900/1880	19.00	18.05	0.408	0.128	1.24	0.508	/
Additional SAR test at a conserative distance (triggering distance minus 1mm)													
Top Edge	15	off	D2	1	0	18900/1880	23.00	22.11	0.383	0.100	1.23	0.470	/
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													
Top Edge	0	on	D4	1	0	18900/1880	19.00	18.05	1.010	0.070	1.24	1.257	77
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	D4	1	0	18900/1880	23.00	19.00	0.203	2.51	0.510	NO
Front Side	10	N/A	D4	1	0	18900/1880	23.00	19.00	0.195	2.51	0.491	NO
Left Edge	10	N/A	D4	1	0	18900/1880	23.00	19.00	0.008	2.51	0.020	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	D4	1	0	18900/1880	23.00	19.00	0.519	2.51	1.304	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	D4	50%	50	18900/1880	23.00	19.00	0.208	2.51	0.522	NO
Front Side	10	N/A	D4	50%	25	18900/1880	23.00	19.00	0.200	2.51	0.503	NO
Left Edge	10	N/A	D4	50%	25	18900/1880	23.00	19.00	0.007	2.51	0.017	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	D4	50%	50	18900/1880	23.00	19.00	0.445	2.51	1.118	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 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	20175/1732.5	17.00	16.18	0.350	-0.010	1.21	0.423	/
Left Tilt	0	N/A	D1	1	0	20175/1732.5	17.00	16.18	0.442	-0.120	1.21	0.534	/
Right Cheek	0	N/A	D1	1	0	20175/1732.5	17.00	16.18	0.648	0.000	1.21	0.783	/
Right Tilt	0	N/A	D1	1	0	20050/1720	17.00	16.10	0.586	0.000	1.23	0.721	/
	0	N/A	D1	1	0	20175/1732.5	17.00	16.18	0.668	0.020	1.21	0.807	78
	0	N/A	D1	1	0	20300/1745	17.00	16.11	0.594	0.103	1.23	0.729	/
Left Cheek	0	NA	D1	50%	0	20050/1720	17.00	16.17	0.326	0.010	1.21	0.395	/
Left Tilt	0	NA	D1	50%	0	20050/1720	17.00	16.17	0.398	-0.069	1.21	0.482	/
Right Cheek	0	N/A	D1	50%	0	20050/1720	17.00	16.17	0.527	0.057	1.21	0.638	/
Right Tilt	0	N/A	D1	50%	0	20050/1720	17.00	16.17	0.662	0.080	1.21	0.801	/
	0	N/A	D1	50%	50	20175/1732.5	17.00	16.14	0.609	0.020	1.22	0.742	/
	0	N/A	D1	50%	0	20300/1745	17.00	16.09	0.643	0.010	1.23	0.793	/
Right Tilt	0	N/A	D1	100%	0	20175/1732.5	17.00	16.15	0.654	0.112	1.22	0.795	/
Right Tilt SIM 2	0	N/A	D1	1	0	20175/1732.5	17.00	16.18	0.617	0.100	1.21	0.745	/
Right Tilt Battery 2	0	N/A	D1	1	0	20175/1732.5	17.00	16.18	0.598	0.060	1.21	0.722	/
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	50	20175/1732.5	23.00	22.20	0.279	0.125	1.20	0.335	/
Front Side	15	N/A	D2	1	50	20175/1732.5	23.00	22.20	0.252	0.121	1.20	0.303	/
Back Side	15	off	D2	50%	25	20175/1732.5	23.00	22.18	0.491	0.061	1.21	0.593	79
Front Side	15	N/A	D2	50%	25	20175/1732.5	23.00	22.18	0.287	0.170	1.21	0.347	/
Back Side SIM 2	15	off	D2	50%	25	20175/1732.5	23.00	22.18	0.475	0.103	1.21	0.574	/
Back Side Battery 2	15	off	D2	50%	25	20175/1732.5	23.00	22.18	0.488	0.082	1.21	0.589	/
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	0	20175/1732.5	17.00	16.18	0.137	0.155	1.21	0.165	/
Front Side	10	N/A	D4	1	0	20175/1732.5	17.00	16.18	0.130	0.023	1.21	0.157	/
Left Edge	10	N/A	D4	1	0	20175/1732.5	17.00	16.18	0.006	-0.166	1.21	0.007	/
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	D4	1	0	20175/1732.5	17.00	16.18	0.321	0.070	1.21	0.388	80
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	D4	50%	0	20050/1720	17.00	16.17	0.133	0.142	1.21	0.161	/
Front Side	10	N/A	D4	50%	0	20050/1720	17.00	16.17	0.123	0.172	1.21	0.149	/



Left Edge	10	N/A	D4	50%	0	20050/1720	17.00	16.17	0.006	0.044	1.21	0.007	/
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	D4	50%	0	20050/1720	17.00	16.17	0.309	-0.035	1.21	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 SIM 2	10	on	D4	1	0	20175/1732.5	17.00	16.18	0.319	0.125	1.21	0.385	/
Top Edge Battery 2	10	on	D4	1	0	20175/1732.5	17.00	16.18	0.312	0.060	1.21	0.377	/

Additional SAR test at a conservative distance (triggering distance minus 1mm)

Back Side	15	off	D2	1	50	20175/1732.5	23.00	22.20	0.279	0.125	1.20	0.335	/
Top Edge	15	off	D2	1	50	20175/1732.5	23.00	22.20	0.662	0.080	1.20	0.796	/

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 (Distance 0mm)

Top Edge	0	on	D4	1	0	20175/1732.5	17.00	16.18	0.627	0.070	1.21	0.757	81
Top Edge	0	on	D4	50%	0	20050/1720	17.00	16.17	0.624	-0.035	1.21	0.755	/

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 $\geq$ 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	D4	1	0	20175/1732.5	23.00	17.00	0.165	3.98	0.659	NO
Front Side	10	N/A	D4	1	0	20175/1732.5	23.00	17.00	0.157	3.98	0.625	NO
Left Edge	10	N/A	D4	1	0	20175/1732.5	23.00	17.00	0.007	3.98	0.027	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	D4	1	0	20175/1732.5	23.00	17.00	0.388	3.98	1.543	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	D4	50%	0	20050/1720	23.00	17.00	0.161	3.98	0.641	NO
Front Side	10	N/A	D4	50%	0	20050/1720	23.00	17.00	0.149	3.98	0.593	NO
Left Edge	10	N/A	D4	50%	0	20050/1720	23.00	17.00	0.007	3.98	0.028	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	D4	50%	0	20050/1720	23.00	17.00	0.374	3.98	1.489	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 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	49	20450/829	23.00	22.00	0.347	-0.060	1.26	0.437	/
Left Tilt	0	N/A	D1	1	49	20450/829	23.00	22.00	0.306	0.000	1.26	0.385	/
Right Cheek	0	N/A	D1	1	49	20450/829	23.00	22.00	0.538	-0.030	1.26	0.677	82
Right Tilt	0	N/A	D1	1	49	20450/829	23.00	22.00	0.414	-0.100	1.26	0.521	/
Left Cheek	0	N/A	D1	50%	0	20525/836.5	23.00	21.99	0.367	0.000	1.26	0.463	/
Left Tilt	0	N/A	D1	50%	0	20525/836.5	23.00	21.99	0.322	0.000	1.26	0.406	/
Right Cheek	0	N/A	D1	50%	0	20525/836.5	23.00	21.99	0.471	-0.090	1.26	0.594	/
Right Tilt	0	N/A	D1	50%	0	20525/836.5	23.00	21.99	0.435	-0.060	1.26	0.549	/
Right Cheek SIM 2	0	N/A	D1	1	49	20450/829	23.00	22.00	0.526	0.136	1.26	0.662	/
Right Cheek Battery 2	0	N/A	D1	1	49	20450/829	23.00	22.00	0.497	0.109	1.26	0.626	/
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	0	20525/836.5	25.50	24.44	0.128	-0.060	1.28	0.163	83
Front Side	15	N/A	D2	1	0	20525/836.5	25.50	24.44	0.103	0.016	1.28	0.131	/
Back Side	15	off	D2	50%	13	20525/836.5	24.50	23.51	0.097	0.055	1.26	0.122	/
Front Side	15	N/A	D2	50%	13	20525/836.5	24.50	23.51	0.088	-0.014	1.26	0.111	/
Back Side SIM 2	15	off	D2	1	0	20525/836.5	25.50	24.44	0.115	0.067	1.28	0.147	/
Back Side Battery 2	15	off	D2	1	0	20525/836.5	25.50	24.44	0.109	0.100	1.28	0.139	/
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	49	20450/829	23.00	22.00	0.110	-0.032	1.26	0.138	/
Front Side	10	N/A	D4	1	49	20450/829	23.00	22.00	0.098	0.106	1.26	0.123	/
Left Edge	10	N/A	D4	1	49	20450/829	23.00	22.00	0.000	0.155	1.26	0.000	/
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	D4	1	49	20450/829	23.00	22.00	0.094	0.035	1.26	0.118	/
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	D4	50%	0	20525/836.5	23.00	21.99	0.137	0.028	1.26	0.173	84
Front Side	10	N/A	D4	50%	0	20525/836.5	23.00	21.99	0.116	0.032	1.26	0.146	/
Left Edge	10	N/A	D4	50%	0	20525/836.5	23.00	21.99	0.000	-0.065	1.26	0.000	/
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	D4	50%	0	20525/836.5	23.00	21.99	0.115	0.138	1.26	0.145	/
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	D4	1	49	20450/829	23.00	22.00	0.121	0.103	1.26	0.152	/



SIM 2													
Back Side Battery 2	10	on	D4	1	49	20450/829	23.00	22.00	0.110	0.070	1.26	0.138	/

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 $\geq 50\%$ 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	D4	1	49	20450/829	25.50	23.00	0.138	1.78	0.246	NO
Front Side	10	N/A	D4	1	49	20450/829	25.50	23.00	0.123	1.78	0.219	NO
Left Edge	10	N/A	D4	1	49	20450/829	25.50	23.00	0.000	1.78	0.000	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	D4	1	49	20450/829	25.50	23.00	0.118	1.78	0.210	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	D4	50%	0	20525/836.5	24.50	23.00	0.173	1.41	0.244	NO
Front Side	10	N/A	D4	50%	0	20525/836.5	24.50	23.00	0.146	1.41	0.207	NO
Left Edge	10	N/A	D4	50%	0	20525/836.5	24.50	23.00	0.000	1.41	0.000	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	D4	50%	0	20525/836.5	24.50	23.00	0.145	1.41	0.205	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	0	21350/2560	17.00	15.69	0.161	-0.030	1.35	0.218	/
Left Tilt	0	N/A	D1	1	0	21350/2560	17.00	15.69	0.176	-0.044	1.35	0.238	/
Right Cheek	0	N/A	D1	1	0	21350/2560	17.00	15.69	0.421	0.029	1.35	0.569	/
Right Tilt	0	N/A	D1	1	0	21350/2560	17.00	15.69	0.430	0.040	1.35	0.581	85
Left Cheek	0	N/A	D1	50%	25	21350/2560	17.00	15.84	0.143	-0.022	1.31	0.187	/
Left Tilt	0	N/A	D1	50%	25	21350/2560	17.00	15.84	0.178	-0.020	1.31	0.232	/
Right Cheek	0	N/A	D1	50%	25	21350/2560	17.00	15.84	0.421	0.056	1.31	0.550	/
Right Tilt	0	N/A	D1	50%	25	21350/2560	17.00	15.84	0.429	0.032	1.31	0.560	/
Right Tilt SIM 2	0	N/A	D1	1	0	21350/2560	17.00	15.69	0.415	0.056	1.35	0.561	/
Right Tilt Battery 2	0	N/A	D1	1	0	21350/2560	17.00	15.69	0.425	0.069	1.35	0.575	/
Right Tilt	0	N/A	D1	1	99	20850/2510	17.00	15.60	0.408	-0.051	1.38	0.218	/
				1	0	21048/2529.8							
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	99	20850/2510	25.50	24.45	0.374	-0.032	1.27	0.476	86
Front Side	15	N/A	D2	1	99	20850/2510	25.50	24.45	0.296	0.016	1.27	0.377	/
Back Side	15	off	D2	50%	0	21350/2560	24.50	23.73	0.258	0.020	1.19	0.308	/
Front Side	15	N/A	D2	50%	0	21350/2560	24.50	23.73	0.256	0.022	1.19	0.306	/
Back Side SIM 2	15	off	D2	1	99	20850/2510	25.50	24.45	0.365	0.129	1.27	0.465	/
Back Side Battery 2	15	off	D2	1	99	20850/2510	25.50	24.45	0.341	0.066	1.27	0.434	/
Back Side	15	N/A	D2	1	99	20850/2510	25.50	24.13	0.359	-0.037	1.37	0.237	/
				1	0	21048/2529.8							
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	0	21350/2560	17.00	15.69	0.043	0.064	1.35	0.058	/
Front Side	10	N/A	D4	1	0	21350/2560	17.00	15.69	0.040	-0.115	1.35	0.054	/
Left Edge	10	N/A	D4	1	0	21350/2560	17.00	15.69	0.049	0.122	1.35	0.066	/
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	D4	1	0	21350/2560	17.00	15.69	0.210	-0.027	1.35	0.284	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	D4	50%	25	21350/2560	17.00	15.84	0.049	0.032	1.31	0.064	/
Front Side	10	N/A	D4	50%	25	21350/2560	17.00	15.84	0.041	0.176	1.31	0.054	/
Left Edge	10	N/A	D4	50%	25	21350/2560	17.00	15.84	0.049	0.143	1.31	0.064	/



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	D4	50%	25	21350/2560	17.00	15.84	0.207	0.025	1.31	0.270	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge SIM 2	10	on	D4	1	0	21350/2560	17.00	15.69	0.199	0.080	1.35	0.269	/
Top Edge Battery 2	10	on	D4	1	0	21350/2560	17.00	15.69	0.185	0.025	1.35	0.250	/
Top Edge	10	on	D4	1	99	20850/2510	17.00	15.60	0.190	-0.020	1.38	0.104	/
				1	0	21048/2529.8							

Additional SAR test at a conservative distance (triggering distance minus 1mm)

Top Edge	15	off	D2	1	99	20850/2510	25.50	24.45	0.492	-0.148	1.27	0.627	/
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	D4	1	0	21350/2560	17.00	15.69	0.362	-0.027	1.35	0.489	/
Top Edge	0	on	D4	50%	25	21350/2560	17.00	15.84	0.374	-0.033	1.31	0.489	88

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 $\geq 50\%$ 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	D4	1	0	21350/2560	25.50	17.00	0.058	7.08	0.412	NO
Front Side	10	N/A	D4	1	0	21350/2560	25.50	17.00	0.054	7.08	0.383	NO
Left Edge	10	N/A	D4	1	0	21350/2560	25.50	17.00	0.066	7.08	0.469	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	D4	1	0	21350/2560	25.50	17.00	0.284	7.08	2.010	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	D4	50%	25	21350/2560	25.50	17.00	0.064	7.08	0.453	NO
Front Side	10	N/A	D4	50%	25	21350/2560	25.50	17.00	0.054	7.08	0.379	NO
Left Edge	10	N/A	D4	50%	25	21350/2560	25.50	17.00	0.064	7.08	0.453	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	D4	50%	25	21350/2560	25.50	17.00	0.281	7.08	1.988	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	99	37850/2580	20.00	19.05	0.156	-0.104	1.24	0.194	/
Left Tilt	0	N/A	D1	1	99	37850/2580	20.00	19.05	0.179	-0.021	1.24	0.223	/
Right Cheek	0	N/A	D1	1	99	37850/2580	20.00	19.05	0.454	0.059	1.24	0.565	/
Right Tilt	0	N/A	D1	1	99	37850/2580	20.00	19.05	0.448	0.056	1.24	0.558	/
Left Cheek	0	N/A	D1	50%	50	37850/2580	20.00	19.17	0.164	-0.035	1.21	0.199	/
Left Tilt	0	N/A	D1	50%	50	37850/2580	20.00	19.17	0.189	-0.031	1.21	0.229	/
Right Cheek	0	N/A	D1	50%	50	37850/2580	20.00	19.17	0.485	0.030	1.21	0.587	89
Right Tilt	0	N/A	D1	50%	50	37850/2580	20.00	19.17	0.477	0.039	1.21	0.577	/
Right Cheek SIM 2	0	N/A	D1	50%	50	37850/2580	20.00	19.17	0.469	0.055	1.21	0.568	/
Right Cheek Battery 2	0	N/A	D1	50%	50	37850/2580	20.00	19.17	0.452	0.116	1.21	0.547	/
Right Cheek	0	N/A	D1	1	0	38150/2610	20.00	18.82	0.473	0.093	1.31	0.277	/
				1	99	37952/2590.2							
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	50	37850/2580	25.50	24.20	0.287	-0.120	1.35	0.388	90
Front Side	15	N/A	D2	1	50	37850/2580	25.50	24.20	0.114	0.013	1.35	0.154	/
Back Side	15	off	D2	50%	25	37850/2580	24.50	23.41	0.205	0.170	1.29	0.263	/
Front Side	15	N/A	D2	50%	25	37850/2580	24.50	23.41	0.092	0.056	1.29	0.118	/
Back Side SIM 2	15	off	D2	1	50	37850/2580	25.50	24.20	0.269	0.100	1.35	0.363	/
Back Side Battery 2	15	off	D2	1	50	37850/2580	25.50	24.20	0.274	0.039	1.35	0.370	/
Back Side	15	off	D2	1	99	37850/2580	25.50	24.33	0.266	0.083	1.31	0.177	/
				1	0	38048/2599.8							
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	99	37850/2580	20.00	19.05	0.081	-0.102	1.24	0.101	/
Front Side	10	N/A	D4	1	99	37850/2580	20.00	19.05	0.062	0.026	1.24	0.077	/
Left Edge	10	N/A	D4	1	99	37850/2580	20.00	19.05	0.076	-0.103	1.24	0.095	/
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	D4	1	99	37850/2580	20.00	19.05	0.197	0.156	1.24	0.245	/
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	D4	50%	50	37850/2580	20.00	19.17	0.078	0.173	1.21	0.094	/
Front Side	10	N/A	D4	50%	50	37850/2580	20.00	19.17	0.063	-0.024	1.21	0.076	/
Left Edge	10	N/A	D4	50%	50	37850/2580	20.00	19.17	0.074	0.165	1.21	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	N/A
Top Edge	10	on	D4	50%	50	37850/2580	20.00	19.17	0.252	-0.030	1.21	0.305	91
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 SIM 2	10	on	D4	50%	50	37850/2580	20.00	19.17	0.239	0.062	1.21	0.289	/
Top Edge Battery 2	10	on	D4	50%	50	37850/2580	20.00	19.17	0.245	0.058	1.21	0.297	/
Top Edge	10	on	D4	1	0	38150/2610	20.00	18.82	0.227	0.130	1.31	0.130	/
				1	99	37952/2590.2							

Additional SAR test at a conservative distance (triggering distance minus 1mm)

Top Edge	15	off	D2	1	50	37850/2580	25.50	24.20	0.395	-0.090	1.35	0.533	/
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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 $\geq 50\%$ 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	D4	1	99	37850/2580	25.50	20.00	0.101	3.55	0.358	NO
Front Side	10	N/A	D4	1	99	37850/2580	25.50	20.00	0.077	3.55	0.274	NO
Left Edge	10	N/A	D4	1	99	37850/2580	25.50	20.00	0.095	3.55	0.336	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	D4	1	99	37850/2580	25.50	20.00	0.245	3.55	0.870	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	D4	50%	50	37850/2580	24.50	20.00	0.094	2.82	0.266	NO
Front Side	10	N/A	D4	50%	50	37850/2580	24.50	20.00	0.076	2.82	0.215	NO
Left Edge	10	N/A	D4	50%	50	37850/2580	24.50	20.00	0.090	2.82	0.252	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	D4	50%	50	37850/2580	24.50	20.00	0.305	2.82	0.860	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	0	40140/2545	21.00	20.14	0.164	0.010	1.22	0.200	/
Left Tilt	0	N/A	D1	1	0	40140/2545	21.00	20.14	0.211	-0.028	1.22	0.257	/
Right Cheek	0	N/A	D1	1	0	40140/2545	21.00	20.14	0.550	0.170	1.22	0.670	/
Right Tilt	0	N/A	D1	1	0	40140/2545	21.00	20.14	0.588	0.047	1.22	0.717	92
Left Cheek	0	N/A	D1	50%	25	40140/2545	21.00	20.27	0.160	-0.057	1.18	0.189	/
Left Tilt	0	N/A	D1	50%	25	40140/2545	21.00	20.27	0.214	-0.100	1.18	0.253	/
Right Cheek	0	N/A	D1	50%	25	40140/2545	21.00	20.27	0.543	0.043	1.18	0.642	/
Right Tilt	0	N/A	D1	50%	25	40140/2545	21.00	20.27	0.586	0.042	1.18	0.693	/
Right Tilt SIM 2	0	N/A	D1	1	0	40140/2545	21.00	20.14	0.576	0.065	1.22	0.702	/
Right Tilt Battery 2	0	N/A	D1	1	0	40140/2545	21.00	20.14	0.559	0.106	1.22	0.681	/
Body-worn SAR (QPSK)													
Back Side	15	off	D2	1	99	40400/2571	25.50	24.40	0.260	-0.028	1.29	0.335	93
Front Side	15	N/A	D2	1	99	40400/2571	25.50	24.40	0.118	0.056	1.29	0.152	/
Back Side	15	off	D2	50%	25	41140/2645	24.50	23.37	0.198	0.050	1.30	0.257	/
Front Side	15	N/A	D2	50%	25	41140/2645	24.50	23.37	0.095	0.057	1.30	0.123	/
Back Side SIM 2	15	off	D2	1	99	40400/2571	25.50	24.40	0.253	0.100	1.29	0.326	/
Back Side Battery 2	15	off	D2	1	99	40400/2571	25.50	24.40	0.238	0.132	1.29	0.307	/
Hotspot SAR(QPSK)													
Back Side	10	on	D4	1	99	40400/2571	20.00	19.13	0.080	0.064	1.22	0.098	/
Front Side	10	N/A	D4	1	99	40400/2571	20.00	19.13	0.065	0.032	1.22	0.079	/
Left Edge	10	N/A	D4	1	99	40400/2571	20.00	19.13	0.081	0.016	1.22	0.099	/
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	D4	1	99	40400/2571	20.00	19.13	0.258	-0.037	1.22	0.315	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	N/A	N/A
Back Side	10	on	D4	50%	0	40140/2545	20.00	19.32	0.075	0.163	1.17	0.088	/
Front Side	10	N/A	D4	50%	0	40140/2545	20.00	19.32	0.066	0.024	1.17	0.077	/
Left Edge	10	N/A	D4	50%	0	40140/2545	20.00	19.32	0.080	0.189	1.17	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	D4	50%	0	40140/2545	20.00	19.32	0.247	0.172	1.17	0.289	/
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	D4	1	99	40400/2571	20.00	19.13	0.240	0.142	1.22	0.293	/



SIM 2													
Top Edge Battery 2	10	on	D4	1	99	40400/2571	20.00	19.13	0.250	0.159	1.22	0.305	/
Additional SAR test at a conservative distance (triggering distance minus 1mm)													
Top Edge	15	off	D2	1	99	40400/2571	25.50	24.40	0.416	-0.160	1.29	0.536	/
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 $\geq$ 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	D4	1	99	40400/2571	25.50	20.00	0.098	3.55	0.347	NO
Front Side	10	N/A	D4	1	99	40400/2571	25.50	20.00	0.079	3.55	0.282	NO
Left Edge	10	N/A	D4	1	99	40400/2571	25.50	20.00	0.099	3.55	0.351	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	D4	1	99	40400/2571	25.50	20.00	0.315	3.55	1.118	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	D4	50%	0	40140/2545	24.50	20.00	0.088	2.82	0.247	NO
Front Side	10	N/A	D4	50%	0	40140/2545	24.50	20.00	0.077	2.82	0.218	NO
Left Edge	10	N/A	D4	50%	0	40140/2545	24.50	20.00	0.094	2.82	0.264	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	D4	50%	0	40140/2545	24.50	20.00	0.289	2.82	0.814	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 (Ant 1)											
Left Cheek	D1	802.11b	99.0%	1/2412	20.00	18.44	0.401	0.120	1.45	0.580	/
	D1	802.11b	99.0%	6/2437	20.00	18.73	0.635	0.110	1.35	0.859	/
	D1	802.11b	99.0%	11/2462	20.00	18.85	0.667	0.024	1.32	0.878	95
Left Tilt	D1	802.11b	99.0%	11/2462	20.00	18.85	0.607	0.120	1.32	0.799	/
Right Cheek	D1	802.11b	99.0%	11/2462	20.00	18.85	0.258	-0.040	1.32	0.340	/
Right Tilt	D1	802.11b	99.0%	11/2462	20.00	18.85	0.267	0.010	1.32	0.351	/
Left Cheek Battery 2	D1	802.11b	99.0%	11/2462	20.00	18.85	0.596	-0.020	1.32	0.785	/
Head SAR (Ant 2)											
Left Cheek	D1	802.11b	99.0%	1/2412	20.00	18.91	0.115	0.027	1.30	0.149	/
Left Tilt	D1	802.11b	99.0%	1/2412	20.00	18.91	0.109	0.030	1.30	0.142	/
Right Cheek	D1	802.11b	99.0%	1/2412	20.00	18.91	0.474	0.090	1.30	0.615	/
Right Tilt	D1	802.11b	99.0%	1/2412	20.00	18.91	0.400	0.010	1.30	0.519	/
Right Cheek Battery 2	D1	802.11b	99.0%	1/2412	20.00	18.91	0.420	0.038	1.30	0.545	/
Head SAR (MIMO)											
Left Cheek	D1	802.11b	99.0%	11/2462	23.00	21.87	0.501	0.112	1.31	0.656	/
Left Tilt	D1	802.11b	99.0%	11/2462	23.00	21.87	0.510	0.032	1.31	0.668	/
Right Cheek	D1	802.11b	99.0%	11/2462	23.00	21.87	0.584	0.020	1.31	0.765	/
Right Tilt	D1	802.11b	99.0%	11/2462	23.00	21.87	0.532	0.015	1.31	0.697	/
Right Cheek Battery 2	D1	802.11b	99.0%	11/2462	23.00	21.87	0.571	0.075	1.31	0.748	/
Head SAR (For WWAN+WiFi2.4GHz+WiFi5GHz)											
Left Cheek	D4	802.11b	99.0%	11/2462	16.00	14.96	0.266	0.110	1.28	0.341	/
Left Tilt	D4	802.11b	99.0%	11/2462	16.00	14.96	0.187	0.100	1.28	0.240	/
Right Cheek	D4	802.11b	99.0%	11/2462	16.00	14.96	0.168	0.020	1.28	0.216	/
Right Tilt	D4	802.11b	99.0%	11/2462	16.00	14.96	0.159	0.031	1.28	0.204	/
Body-worn SAR (Distance 15mm) (Ant 1)											
Back Side	D2	802.11b	99.0%	11/2462	20.00	18.85	0.099	-0.048	1.32	0.130	96
Front Side	D2	802.11b	99.0%	11/2462	20.00	18.85	0.047	0.131	1.32	0.062	/
Back Side Battery 2	D2	802.11b	99.0%	11/2462	20.00	18.85	0.088	0.100	1.32	0.116	/
Body-worn SAR (Distance 15mm) (Ant 2)											
Back Side	D2	802.11b	99.0%	1/2412	20.00	18.91	0.069	0.054	1.30	0.089	/
Front Side	D2	802.11b	99.0%	1/2412	20.00	18.91	0.007	-0.102	1.30	0.008	/



Back Side Battery 2	D2	802.11b	99.0%	1/2412	20.00	18.91	0.065	0.070	1.30	0.084	/
Body-worn SAR (Distance 15mm) (MIMO)											
Back Side	D2	802.11b	99.0%	11/2462	23.00	21.87	0.098	0.036	1.31	0.128	/
Front Side	D2	802.11b	99.0%	11/2462	23.00	21.87	0.064	0.024	1.31	0.084	/
Back Side Battery 2	D2	802.11b	99.0%	11/2462	23.00	21.87	0.090	0.010	1.31	0.118	/
Hotspot SAR (Distance 10mm) (Ant 1)											
Back Side	D2	802.11b	99.0%	11/2462	20.00	18.85	0.097	0.157	1.32	0.128	/
Front Side	D2	802.11b	99.0%	11/2462	20.00	18.85	0.107	0.024	1.32	0.141	/
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	D2	802.11b	99.0%	11/2462	20.00	18.85	0.046	-0.135	1.32	0.061	/
Top Edge	D2	802.11b	99.0%	11/2462	20.00	18.85	0.266	0.080	1.32	0.350	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	D2	802.11b	99.0%	11/2462	20.00	18.85	0.254	0.051	1.32	0.334	/
Hotspot SAR (Distance 10mm) (Ant 2)											
Back Side	D2	802.11b	99.0%	1/2412	20.00	18.91	0.097	0.049	1.30	0.126	/
Front Side	D2	802.11b	99.0%	1/2412	20.00	18.91	0.084	0.188	1.30	0.109	/
Left Edge	D2	802.11b	99.0%	1/2412	20.00	18.91	0.147	0.010	1.30	0.191	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	D2	802.11b	99.0%	1/2412	20.00	18.91	0.051	-0.010	1.30	0.066	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Left Edge Battery 2	D2	802.11b	99.0%	1/2412	20.00	18.91	0.132	0.022	1.30	0.171	/
Hotspot SAR (Distance 10mm) (MIMO)											
Back Side	D2	802.11b	99.0%	11/2462	23.00	21.87	0.180	0.011	1.31	0.236	/
Front Side	D2	802.11b	99.0%	11/2462	23.00	21.87	0.135	0.035	1.31	0.177	/
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	D2	802.11b	99.0%	11/2462	23.00	21.87	0.054	0.026	1.31	0.071	/
Top Edge	D2	802.11b	99.0%	11/2462	23.00	21.87	0.198	0.041	1.31	0.259	/
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	D2	802.11b	99.0%	11/2462	23.00	21.87	0.179	0.033	1.31	0.235	/
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)
SISO							
802.11g	Left Cheek	11/2462	0.878	20.00	17.5	0.56	0.494
802.11n HT20	Left Cheek	11/2462	0.878	20.00	14.5	0.28	0.247
802.11n HT40	Left Cheek	11/2462	0.878	20.00	12.5	0.18	0.156
MIMO							
802.11g	Right Cheek	11/2462	0.765	23.00	19.50	0.45	0.342
802.11n HT20	Right Cheek	11/2462	0.765	23.00	16.50	0.22	0.171
802.11n HT40	Right Cheek	11/2462	0.765	23.00	15.50	0.18	0.136
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 (Ant 1)											
Left Cheek	D1	802.11a	98.0%	36/5180	18.50	17.62	0.596	0.045	1.25	0.745	/
Left Tilt	D1	802.11a	98.0%	36/5180	18.50	17.62	0.721	0.047	1.25	0.901	98
	D1	802.11a	98.0%	40/5200	18.50	17.55	0.685	-0.100	1.27	0.870	/
	D1	802.11a	98.0%	48/5240	18.50	17.49	0.715	0.030	1.29	0.921	/
Right Cheek	D1	802.11a	98.0%	36/5180	18.50	17.62	0.482	0.046	1.25	0.602	/
Right Tilt	D1	802.11a	98.0%	36/5180	18.50	17.62	0.536	0.048	1.25	0.670	/
Left Tilt	D3	802.11ac VHT40	96.0%	38/5190	17.50	16.62	0.369	0.024	1.28	0.471	/
Right Tilt	D3	802.11ac VHT40	96.0%	38/5190	17.50	16.62	0.322	0.083	1.28	0.411	/
Left Tilt Battery 2	D1	802.11a	98.0%	36/5180	18.50	17.62	0.693	0.050	1.25	0.866	/
Head SAR (Ant 2)											
Left Cheek	D1	802.11a	98.0%	36/5180	18.50	17.63	0.376	0.021	1.25	0.469	/
Left Tilt	D1	802.11a	98.0%	36/5180	18.50	17.63	0.278	0.062	1.25	0.347	/
Right Cheek	D1	802.11a	98.0%	36/5180	18.50	17.63	0.183	0.071	1.25	0.228	/
Right Tilt	D1	802.11a	98.0%	36/5180	18.50	17.63	0.206	0.071	1.25	0.257	/
Left Cheek Battery 2	D1	802.11a	98.0%	36/5180	18.50	17.63	0.368	0.065	1.25	0.459	/
Head SAR (MIMO)											
Left Cheek	D1	802.11a	98.0%	36/5180	21.50	20.64	0.337	0.110	1.25	0.420	/
Left Tilt	D1	802.11a	98.0%	36/5180	21.50	20.64	0.351	0.120	1.25	0.437	/
Right Cheek	D1	802.11a	98.0%	36/5180	21.50	20.64	0.157	0.020	1.25	0.195	/
Right Tilt	D1	802.11a	98.0%	36/5180	21.50	20.64	0.244	0.034	1.25	0.304	/
Left Tilt Battery 2	D1	802.11a	98.0%	36/5180	21.50	20.64	0.348	0.060	1.25	0.433	/
Hotspot SAR (Distance 10mm) (Ant 1)											
Back Side	D2	802.11a	98.0%	36/5180	18.50	17.62	0.196	0.125	1.25	0.245	/
Front Side	D2	802.11a	98.0%	36/5180	18.50	17.62	0.119	0.034	1.25	0.149	/
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	D2	802.11a	98.0%	36/5180	18.50	17.62	0.033	-0.101	1.25	0.041	/
Top Edge	D2	802.11a	98.0%	36/5180	18.50	17.62	0.451	0.093	1.25	0.564	99
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	D2	802.11a	98.0%	36/5180	18.50	17.62	0.436	0.100	1.25	0.545	/
Hotspot SAR (Distance 10mm) (Ant 2)											
Back Side	D2	802.11a	98.0%	36/5180	18.50	17.63	0.217	0.103	1.25	0.271	/



Front Side	D2	802.11a	98.0%	36/5180	18.50	17.63	0.047	0.025	1.25	0.059	/
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	D2	802.11a	98.0%	36/5180	18.50	17.63	0.215	0.144	1.25	0.268	/
Top Edge	D2	802.11a	98.0%	36/5180	18.50	17.63	0.176	0.032	1.25	0.219	/
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	D2	802.11a	98.0%	36/5180	18.50	17.63	0.192	0.100	1.25	0.239	/
Hotspot SAR (Distance 10mm) (MIMO)											
Back Side	D2	802.11a	98.0%	36/5180	21.50	20.64	0.408	0.103	1.25	0.508	/
Front Side	D2	802.11a	98.0%	36/5180	21.50	20.64	0.086	0.024	1.25	0.107	/
Left Edge	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Right Edge	D2	802.11a	98.0%	36/5180	21.50	20.64	0.203	0.036	1.25	0.253	/
Top Edge	D2	802.11a	98.0%	36/5180	21.50	20.64	0.300	0.046	1.25	0.374	/
Bottom Edge	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Back Side Battery 2	D2	802.11a	98.0%	36/5180	21.50	20.64	0.401	0.100	1.25	0.499	/
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 (Ant 1)											
Left Cheek	D1	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.620	0.154	1.22	0.757	/
Left Tilt	D1	802.11ac-VHT40	96.0%	54/5270	18.50	17.52	0.668	0.040	1.31	0.872	/
	D1	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.672	0.107	1.22	0.821	100
Right Cheek	D1	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.473	0.102	1.22	0.578	/
Right Tilt	D1	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.528	0.054	1.22	0.645	/
Left Tilt	D3	802.11ac VHT80	91.0%	58/5290	17.50	16.81	0.494	0.114	1.29	0.636	/
Right Tilt	D3	802.11ac VHT80	91.0%	58/5290	17.50	16.81	0.360	0.109	1.29	0.464	/
Left Tilt Battery 2	D1	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.628	-0.050	1.22	0.767	/
Head SAR (Ant 2)											
Left Cheek	D1	802.11nHT40	96.0%	54/5270	18.50	17.42	0.481	0.170	1.34	0.643	/
Left Tilt	D1	802.11nHT40	96.0%	54/5270	18.50	17.42	0.403	0.052	1.34	0.538	/
Right Cheek	D1	802.11nHT40	96.0%	54/5270	18.50	17.42	0.235	0.038	1.34	0.314	/
Right Tilt	D1	802.11nHT40	96.0%	54/5270	18.50	17.42	0.274	0.180	1.34	0.366	/
Left Cheek Battery 2	D1	802.11nHT40	96.0%	54/5270	18.50	17.42	0.469	0.022	1.34	0.626	/
Head SAR (MIMO)											
Left Cheek	D1	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.432	0.032	1.29	0.556	/
Left Tilt	D1	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.507	0.014	1.29	0.653	/
Right Cheek	D1	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.281	0.055	1.29	0.362	/
Right Tilt	D1	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.360	0.041	1.29	0.464	/
Left Tilt Battery 2	D1	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.493	0.021	1.29	0.635	/
Body-worn SAR (Distance 15mm) (Ant 1)											
Back Side	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.061	0.196	1.22	0.074	/
Front Side	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.041	-0.043	1.22	0.050	/
Back Side Battery 2	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.057	0.150	1.22	0.070	/
Body-worn SAR (Distance 15mm) (Ant 2)											
Back Side	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.132	0.108	1.34	0.176	/



Front Side	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.117	0.020	1.34	0.156	/
Back Side Battery 2	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.128	0.067	1.34	0.171	/
Body-worn SAR (Distance 15mm) (MIMO)											
Back Side	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.174	0.080	1.29	0.224	101
Front Side	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.142	0.000	1.29	0.183	/
Back Side Battery 2	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.151	0.100	1.29	0.195	/
Test Position	Power Reducti on	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) (Ant 1)											
Back Side	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.282	0.113	1.22	0.344	/
Front Side	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.300	0.056	1.22	0.366	/
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	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.114	0.142	1.22	0.139	/
Top Edge	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.460	0.053	1.22	0.562	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Top Edge Battery 2	D2	802.11ac VHT40	96.0%	62/5310	18.50	17.81	0.453	0.064	1.22	0.553	/
Product Specific 10-g SAR (Distance 0mm)											
Back Side	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.658	-0.150	1.34	0.879	/
Front Side	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.105	0.131	1.34	0.140	/
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	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.394	0.064	1.34	0.526	/
Top Edge	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.233	0.031	1.34	0.311	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Back Side Battery 2	D2	802.11nHT40	96.0%	54/5270	18.50	17.42	0.637	0.040	1.34	0.851	/
Product Specific 10-g SAR (Distance 0mm) (MIMO)											
Back Side	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.783	0.010	1.29	1.009	102
Front Side	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.300	0.110	1.29	0.386	/
Left Edge	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Right Edge	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.632	0.060	1.29	0.814	/
Top Edge	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.753	0.012	1.29	0.970	/
Bottom Edge	N/A	NA	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Back Side Battery 2	D2	802.11ac-VHT40	96.0%	62/5310	21.50	20.58	0.739	0.050	1.29	0.952	/
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 (Ant 1)											
Left Cheek	D1	802.11a	98.0%	100/5500	18.50	17.64	0.648	0.063	1.24	0.806	/
Left Tilt	D1	802.11a	98.0%	100/5500	18.50	17.64	0.675	0.065	1.24	0.840	103
	D1	802.11a	98.0%	132/5660	18.50	17.34	0.642	-0.010	1.33	0.856	/
	D1	802.11a	98.0%	144/5720	18.50	17.30	0.635	0.142	1.35	0.854	/
Right Cheek	D1	802.11a	98.0%	100/5500	18.50	17.64	0.448	0.033	1.24	0.557	/
Right Tilt	D1	802.11a	98.0%	100/5500	18.50	17.64	0.493	0.068	1.24	0.613	/
Left Cheek	D3	802.11ac-VHT80	91.0%	106/5530	17.50	16.64	0.314	0.031	1.34	0.421	/
Left Tilt	D3	802.11ac-VHT80	91.0%	106/5530	17.50	16.64	0.364	0.057	1.34	0.488	/
Right Tilt	D3	802.11ac-VHT80	91.0%	106/5530	17.50	16.64	0.256	0.030	1.34	0.343	/
Left Tilt Battery 2	D1	802.11a	98.0%	100/5500	18.50	17.64	0.652	0.730	1.24	0.811	/
Head SAR (Ant 2)											
Left Cheek	D1	802.11a	98.0%	100/5500	18.50	17.89	0.386	0.064	1.17	0.453	/
Left Tilt	D1	802.11a	98.0%	100/5500	18.50	17.89	0.436	0.028	1.17	0.512	/
Right Cheek	D1	802.11a	98.0%	100/5500	18.50	17.89	0.244	0.064	1.17	0.287	/
Right Tilt	D1	802.11a	98.0%	100/5500	18.50	17.89	0.303	0.048	1.17	0.356	/
Left Tilt Battery 2	D1	802.11a	98.0%	100/5500	18.50	17.89	0.415	0.035	1.17	0.487	/
Head SAR (MIMO)											
Left Cheek	D1	802.11a	98.0%	100/5500	21.50	20.78	0.579	0.023	1.21	0.698	/
	D1	802.11a	98.0%	132/5660	21.50	20.32	0.652	0.069	1.34	0.874	/
	D1	802.11a	98.0%	144/5720	21.50	20.20	0.524	-0.012	1.38	0.721	/
Left Tilt	D1	802.11a	98.0%	100/5500	21.50	20.78	0.590	0.025	1.21	0.711	/
Right Cheek	D1	802.11a	98.0%	100/5500	21.50	20.78	0.352	0.064	1.21	0.424	/
Right Tilt	D1	802.11a	98.0%	100/5500	21.50	20.78	0.309	0.115	1.21	0.372	/
Left Cheek	D3	802.11a	98.0%	116/5580	20.50	19.32	0.454	0.137	1.34	0.608	/
Left Cheek Battery 2	D1	802.11a	98.0%	100/5500	21.50	20.78	0.637	0.070	1.21	0.768	/
Body-worn SAR (Distance 15mm) (Ant 1)											
Back Side	D2	802.11a	98.0%	100/5500	18.50	17.64	0.040	0.063	1.24	0.050	/
Front Side	D2	802.11a	98.0%	100/5500	18.50	17.64	0.039	0.010	1.24	0.048	/
Back Side Battery 2	D2	802.11a	98.0%	100/5500	18.50	17.64	0.037	0.020	1.24	0.046	/
Body-worn SAR (Distance 15mm) (Ant 2)											
Back Side	D2	802.11a	98.0%	100/5500	18.50	17.89	0.196	0.040	1.17	0.230	104



Front Side	D2	802.11a	98.0%	100/5500	18.50	17.89	0.171	0.110	1.17	0.201	/
Back Side Battery 2	D2	802.11a	98.0%	100/5500	18.50	17.89	0.183	0.100	1.17	0.215	/
Body-worn SAR (Distance 15mm) (MIMO)											
Back Side	D2	802.11a	98.0%	100/5500	21.50	20.78	0.160	0.163	1.21	0.193	/
Front Side	D2	802.11a	98.0%	100/5500	21.50	20.78	0.142	0.020	1.21	0.171	/
Back Side Battery 2	D2	802.11a	98.0%	100/5500	21.50	20.78	0.155	0.031	1.21	0.187	/
Test Position	Power Reducti on	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) (Ant 1)											
Back Side	D2	802.11a	98.0%	100/5500	18.50	17.64	0.152	0.051	1.24	0.189	/
Front Side	D2	802.11a	98.0%	100/5500	18.50	17.64	0.276	0.032	1.24	0.343	/
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	D2	802.11a	98.0%	100/5500	18.50	17.64	0.072	-0.166	1.24	0.090	/
Top Edge	D2	802.11a	98.0%	100/5500	18.50	17.64	0.316	0.053	1.24	0.393	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Top Edge Battery 2	D2	802.11a	98.0%	100/5500	18.50	17.64	0.307	0.027	1.24	0.382	/
Product Specific 10-g SAR (Distance 0mm) (Ant 2)											
Back Side	D2	802.11a	98.0%	100/5500	18.50	17.89	0.737	0.076	1.17	0.865	105
Front Side	D2	802.11a	98.0%	100/5500	18.50	17.89	0.146	0.054	1.17	0.171	/
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	D2	802.11a	98.0%	100/5500	18.50	17.89	0.454	0.056	1.17	0.533	/
Top Edge	D2	802.11a	98.0%	100/5500	18.50	17.89	0.413	0.036	1.17	0.485	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A
Back Side Battery 2	D2	802.11a	98.0%	100/5500	18.50	17.89	0.729	0.025	1.17	0.856	/
Product Specific 10-g SAR (Distance 0mm) (MIMO)											
Back Side	D2	802.11a	98.0%	100/5500	21.50	20.78	0.661	0.060	1.21	0.797	/
Front Side	D2	802.11a	98.0%	100/5500	21.50	20.78	0.325	0.113	1.21	0.392	/
Left Edge	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Right Edge	D2	802.11a	98.0%	100/5500	21.50	20.78	0.679	0.024	1.21	0.818	/
Top Edge	D2	802.11a	98.0%	100/5500	21.50	20.78	0.445	0.106	1.21	0.536	/
Bottom Edge	N/A	N/A	NA	NA	NA	NA	NA	NA	NA	NA	N/A
Right Edge Battery 2	D2	802.11a	98.0%	100/5500	21.50	20.78	0.638	0.180	1.21	0.769	/
Note: 1. The value with blue color is the maximum SAR Value of each test band.											

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 (Ant 1)											
Left Cheek	D1	802.11a	98.0%	149/5745	16.50	15.72	0.767	0.112	1.22	0.937	/
	D1	802.11a	98.0%	157/5785	16.50	15.79	0.828	0.044	1.20	0.995	106
	D1	802.11a	98.0%	165/5825	16.50	15.49	0.705	0.011	1.29	0.908	/
Left Tilt	D1	802.11a	98.0%	149/5745	16.50	15.72	0.792	0.010	1.22	0.967	/
	D1	802.11a	98.0%	157/5785	16.50	15.79	0.826	0.115	1.20	0.993	/
	D1	802.11a	98.0%	165/5825	16.50	15.49	0.681	-0.068	1.29	0.877	/
Right Cheek	D1	802.11a	98.0%	157/5785	16.50	15.79	0.440	0.030	1.20	0.529	/
Right Tilt	D1	802.11a	98.0%	157/5785	16.50	15.79	0.443	0.022	1.20	0.532	/
Left Cheek	D3	802.11a	98.0%	157/5785	15.50	14.88	0.446	0.065	1.18	0.525	/
Left Tilt	D3	802.11a	98.0%	157/5785	15.50	14.88	0.484	0.126	1.18	0.570	/
Right Cheek	D3	802.11a	98.0%	157/5785	15.50	14.88	0.338	0.034	1.18	0.398	/
Right Tilt	D3	802.11a	98.0%	157/5785	15.50	14.88	0.376	0.027	1.18	0.443	/
Left Cheek Battery 2	D1	802.11a	98.0%	157/5785	16.50	15.79	0.756	0.020	1.20	0.908	/
Left Cheek Repeated	D1	802.11a	98.0%	157/5785	16.50	15.79	0.819	-0.039	1.20	0.984	/
Head SAR (Ant 2)											
Left Cheek	D1	802.11a	98.0%	149/5745	16.50	15.70	0.074	0.035	1.23	0.090	/
Left Tilt	D1	802.11a	98.0%	149/5745	16.50	15.70	0.057	0.041	1.23	0.070	/
Right Cheek	D1	802.11a	98.0%	149/5745	16.50	15.70	0.056	0.032	1.23	0.069	/
Right Tilt	D1	802.11a	98.0%	149/5745	16.50	15.70	0.045	0.014	1.23	0.055	/
Left Cheek Battery 2	D1	802.11a	98.0%	149/5745	16.50	15.70	0.069	-0.090	1.23	0.085	/
Head SAR (MIMO)											
Left Cheek	D1	802.11a	98.0%	149/5745	19.50	18.72	0.788	0.064	1.22	0.962	/
Left Tilt	D1	802.11a	98.0%	149/5745	19.50	18.72	0.623	0.031	1.22	0.761	/
Right Cheek	D1	802.11a	98.0%	149/5745	19.50	18.72	0.395	0.021	1.22	0.482	/
Right Tilt	D1	802.11a	98.0%	149/5745	19.50	18.72	0.438	0.024	1.22	0.535	/
Left Cheek	D3	802.11a	98.0%	149/5745	18.50	17.73	0.440	0.039	1.22	0.536	/
Left Cheek Battery 2	D1	802.11a	98.0%	149/5745	19.50	18.72	0.765	1.000	1.22	0.934	/
Hotspot SAR(Distance 10mm) (Ant 1)											
Back Side	D2	802.11a	98.0%	157/5785	18.50	17.66	0.141	-0.030	1.24	0.175	/
Front Side	D2	802.11a	98.0%	157/5785	18.50	17.66	0.275	0.021	1.24	0.340	/
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	D2	802.11a	98.0%	157/5785	18.50	17.66	0.082	0.036	1.24	0.102	/



Top Edge	D2	802.11a	98.0%	157/5785	18.50	17.66	0.203	0.088	1.24	0.251	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front Side Battery 2	D2	802.11a	98.0%	157/5785	18.50	17.66	0.205	0.150	1.24	0.254	/
Hotspot SAR(Distance 10mm) (Ant 2)											
Back Side	D2	802.11a	98.0%	149/5745	18.50	17.69	0.329	0.075	1.23	0.405	/
Front Side	D2	802.11a	98.0%	149/5745	18.50	17.69	0.070	0.012	1.23	0.086	/
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	D2	802.11a	98.0%	149/5745	18.50	17.69	0.223	0.044	1.23	0.274	/
Top Edge	D2	802.11a	98.0%	149/5745	18.50	17.69	0.188	-0.106	1.23	0.231	/
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	D2	802.11a	98.0%	149/5745	18.50	17.69	0.307	0.045	1.23	0.377	/
Hotspot SAR(Distance 10mm) (MIMO)											
Back Side	D2	802.11a	98.0%	149/5745	21.50	20.63	0.380	0.106	1.25	0.474	/
Front Side	D2	802.11a	98.0%	149/5745	21.50	20.63	0.362	0.010	1.25	0.452	/
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	D2	802.11a	98.0%	149/5745	21.50	20.63	0.259	0.060	1.25	0.323	/
Top Edge	D2	802.11a	98.0%	149/5745	21.50	20.63	0.411	0.043	1.25	0.513	107
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	D2	802.11a	98.0%	149/5745	21.50	20.63	0.397	0.062	1.25	0.495	/
Note: 1. The value with blue color is the maximum SAR Value of each test band.											

Measurement Variability

Test Position	Channel/ Frequency(MHz)	MAX Measured SAR _{1g} (W/kg)	1 st Repeated SAR _{1g} (W/kg)	Ratio
Left Cheek	157/5785	0.828	0.819	1.01
Note: 1) A second repeated measurement was performed 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.				

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	76.0%	39/2441	13.50	12.78	0.139	0.031	1.55	0.216	/
Left Tilt	DH5	76.0%	39/2441	13.50	12.78	0.149	0.080	1.55	0.231	108
Right Cheek	DH5	76.0%	39/2441	13.50	12.78	0.116	0.103	1.55	0.180	/
Right Tilt	DH5	76.0%	39/2441	13.50	12.78	0.118	0.114	1.55	0.183	/
Left Tilt Battery 2	DH5	76.0%	39/2441	13.50	12.78	0.142	0.120	1.55	0.221	/
Body-worn SAR (Distance 15mm)										
Back Side	DH5	76.0%	39/2441	13.50	12.78	0.052	-0.050	1.55	0.080	109
Front Side	DH5	76.0%	39/2441	13.50	12.78	0.046	0.015	1.55	0.071	/
Back Side Battery 2	DH5	76.0%	39/2441	13.50	12.78	0.050	0.060	1.55	0.078	/
Hotspot SAR(Distance 10mm)										
Back Side	DH5	76.0%	39/2441	13.50	12.78	0.052	-0.050	1.55	0.080	/
Front Side	DH5	76.0%	39/2441	13.50	12.78	0.046	0.015	1.55	0.071	/
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	76.0%	39/2441	13.50	12.78	0.031	0.110	1.55	0.048	/
Top Edge	DH5	76.0%	39/2441	13.50	12.78	0.055	0.026	1.55	0.085	110
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge Battery 2	DH5	76.0%	39/2441	13.50	12.78	0.049	0.030	1.55	0.076	/
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	13.50	5	0.376
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
WLAN2.4G Ant1+WLAN 2.4G Ant2	Yes	Yes	Yes	Yes
WLAN5G Ant1+BT	Yes	Yes	Yes	Yes
WLAN5G Ant2+BT	Yes	Yes	Yes	Yes
WLAN5G Ant1+WLAN5G Ant2	Yes	Yes	Yes	Yes
WLAN5G Ant1+WLAN5G Ant2 + BT	Yes	Yes	Yes	Yes
WWAN + Bluetooth	Yes	Yes	Yes	Yes
WWAN + WLAN2.4GHz SISO/MIMO	Yes	Yes	Yes	Yes
WWAN + WLAN5GHz SISO/MIMO	Yes	Yes	Yes	Yes
WWAN + Bluetooth + WLAN2.4GHz SISO/MIMO	NA	NA	NA	NA
WWAN + Bluetooth + WLAN5GHz SISO/MIMO	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 $< 1.6\text{W/kg}$, simultaneously transmission SAR measurement is not necessary.
 - ii) $\text{SPLSR} = (\text{SAR1} + \text{SAR2})^{1.5} / (\text{min. separation distance, mm})$, 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 $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

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

SAR _{1g} (W/kg)		GSM	GSM	WCDMA	WCDMA	WCDMA	LTE 2	LTE 4	LTE 5	LTE 7	LTE 38	LTE 41	MAX.
Test Position		850	1900	2	4	5							SAR _{1g}
Head	Left Cheek	0.090	0.052	0.114	0.081	0.094	0.121	0.071	0.102	0.055	0.039	0.042	0.121
	Left Tilt	0.072	0.026	0.049	0.072	0.069	0.090	0.029	0.072	0.043	0.032	0.035	0.090
	Right Cheek	0.067	0.041	0.080	0.077	0.054	0.094	0.081	0.145	0.063	0.070	0.068	0.145
	Right Tilt	0.055	0.036	0.037	0.060	0.044	0.119	0.056	0.079	0.076	0.056	0.047	0.119
Body worn	Back Side	0.134	0.472	0.541	0.531	0.135	0.674	0.517	0.186	0.497	0.386	0.335	0.674
	Front Side	0.113	0.216	0.375	0.269	0.119	0.345	0.260	0.136	0.455	0.190	0.170	0.455
Hotspot	Back Side	0.240	0.382	0.359	0.269	0.219	0.375	0.260	0.290	0.572	0.254	0.273	0.572
	Front Side	0.206	0.204	0.186	0.140	0.191	0.193	0.143	0.208	0.279	0.129	0.117	0.279
	Left Edge	0.033	0.003	0.006	0.006	0.006	0.012	0.009	0.013	0.077	0.007	0.110	0.110
	Right Edge	0.082	0.014	0.006	0.008	0.066	0.009	0.008	0.071	0.091	0.011	0.009	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
	Bottom Edge	0.222	0.490	0.628	0.414	0.218	0.556	0.377	0.282	0.779	0.700	0.688	0.779
Product Specific 10-g SAR	Back Side	N/A	N/A	1.084	0.702	N/A	0.493	N/A	N/A	1.272	N/A	N/A	1.272
	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	1.528	1.281	N/A	1.263	1.035	N/A	0.482	0.702	0.598	1.528

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

SAR _{1g} (W/kg)		GSM	GSM	WCDMA	WCDMA	WCDMA	LTE 2	LTE 4	LTE 5	LTE 7	LTE 38	LTE 41	MAX.
Test Position		850	1900	2	4	5							SAR _{1g}
Head	Left Cheek	0.332	0.515	0.482	0.460	0.310	0.413	0.423	0.463	0.218	0.199	0.200	0.515
	Left Tilt	0.299	0.388	0.421	0.550	0.247	0.549	0.534	0.406	0.238	0.229	0.257	0.550
	Right Cheek	0.661	0.788	0.645	0.751	0.362	0.718	0.783	0.677	0.569	0.587	0.670	0.788
	Right Tilt	0.631	0.756	0.626	0.756	0.294	0.769	0.807	0.549	0.581	0.577	0.717	0.807
Body worn	Back Side	0.155	0.420	0.342	0.265	0.120	0.280	0.593	0.163	0.476	0.388	0.335	0.593
	Front Side	0.106	0.159	0.269	0.408	0.115	0.260	0.347	0.131	0.377	0.154	0.152	0.408
Hotspot	Back Side	0.208	0.401	0.222	0.184	0.203	0.208	0.165	0.173	0.064	0.101	0.098	0.401
	Front Side	0.166	0.352	0.179	0.174	0.148	0.200	0.157	0.146	0.054	0.077	0.079	0.352
	Left Edge	0.060	0.069	0.009	0.005	0.059	0.008	0.007	0.000	0.066	0.095	0.099	0.099
	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	0.154	0.460	0.177	0.481	0.129	0.519	0.388	0.145	0.284	0.305	0.315	0.519
	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
Product Specific 10-g SAR	Back 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
	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	0.845	N/A	1.257	0.757	N/A	0.489	N/A	N/A	1.257
	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

The maximum SAR_{1g} Value for Wi-Fi 2.4G

SAR _{1g/10g} (W/kg)		Wi-Fi 2.4G Ant 1	Wi-Fi 2.4G Ant 2	Wi-Fi 2.4G MIMO	MAX. Σ SAR _{1g}
Test Position					
Head	Left, Cheek	0.878	0.149	0.656	0.878
	Left, Tilt	0.799	0.142	0.668	0.799
	Right, Cheek	0.340	0.615	0.765	0.765
	Right, Tilt	0.351	0.519	0.697	0.697
Body worn	Back Side	0.130	0.089	0.128	0.130
	Front Side	0.062	0.008	0.084	0.084
Hotspot	Back Side	0.128	0.126	0.236	0.236
	Front Side	0.141	0.109	0.177	0.177
	Left Edge	N/A	0.191	N/A	0.191
	Right Edge	0.061	N/A	0.071	0.071
	Top Edge	0.350	0.066	0.259	0.350
	Bottom Edge	N/A	N/A	N/A	N/A

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

2. MAX. Σ SAR_{1g/10g} = Unlicensed SAR_{MAX} + Licensed SAR_{MAX}

The maximum SAR_{1g} Value for Wi-Fi 5G Ant 2

SAR _{1g/10g} (W/kg)		Wi-Fi 5G U-NII-1	Wi-Fi 5G U-NII-2A	Wi-Fi 5G U-NII-2C	Wi-Fi 5G U-NII-3	MAX. Σ SAR _{1g}
Test Position						
Head	Left, Cheek	0.469	0.643	0.453	0.090	0.643
	Left, Tilt	0.347	0.538	0.512	0.070	0.538
	Right, Cheek	0.228	0.314	0.287	0.069	0.314
	Right, Tilt	0.257	0.366	0.356	0.055	0.366
Body worn	Back Side	N/A	0.176	0.230	N/A	0.230
	Front Side	N/A	0.156	0.201	N/A	0.201
Hotspot	Back Side	0.271	N/A	N/A	0.405	0.405
	Front Side	0.059	N/A	N/A	0.086	0.086
	Left Edge	N/A	N/A	N/A	N/A	N/A
	Right Edge	0.268	N/A	N/A	0.274	0.274
	Top Edge	0.219	N/A	N/A	0.231	0.231
	Bottom Edge	N/A	N/A	N/A	N/A	N/A
Product Specific 10-g SAR	Back Side	N/A	0.879	0.865	N/A	0.879
	Front Side	N/A	0.140	0.171	N/A	0.171
	Left Edge	N/A	N/A	N/A	N/A	N/A
	Right Edge	N/A	0.526	0.533	N/A	0.533
	Top Edge	N/A	0.311	0.485	N/A	0.485
	Bottom Edge	N/A	N/A	N/A	N/A	N/A

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

2. MAX. Σ SAR_{1g/10g} = Unlicensed SAR_{MAX} + Licensed SAR_{MAX}

The maximum SAR_{1g} Value for Wi-Fi 5G

SAR _{1g/10g} (W/kg) Test Position		Wi-Fi 5G U-NII-1			Wi-Fi 5G U-NII-2A			Wi-Fi 5G U-NII-2C			Wi-Fi 5G U-NII-3			MAX. ΣSAR _{1g}
		Ant 1	Ant 2	MIMO	Ant 1	Ant 2	MIMO	Ant 1	Ant 2	MIMO	Ant 1	Ant 2	MIMO	
Head	Left, Cheek	0.745	0.469	0.420	0.757	0.643	0.556	0.421	0.453	0.608	0.525	0.090	0.536	0.757
	Left, Tilt	0.471	0.347	0.437	0.636	0.538	0.653	0.488	0.512	0.711	0.570	0.070	0.761	0.761
	Right, Cheek	0.602	0.228	0.195	0.578	0.314	0.362	0.557	0.287	0.424	0.398	0.069	0.482	0.602
	Right, Tilt	0.411	0.257	0.304	0.464	0.366	0.464	0.343	0.356	0.372	0.443	0.055	0.535	0.535
Body worn	Back Side	N/A	N/A	N/A	0.074	0.176	0.224	0.050	0.230	0.193	N/A	N/A	N/A	0.230
	Front Side	N/A	N/A	N/A	0.050	0.156	0.183	0.048	0.201	0.171	N/A	N/A	N/A	0.201
Hotspot	Back Side	0.245	0.271	0.508	N/A	N/A	N/A	N/A	N/A	N/A	0.175	0.405	0.474	0.508
	Front Side	0.149	0.059	0.107	N/A	N/A	N/A	N/A	N/A	N/A	0.340	0.086	0.452	0.452
	Left Edge	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	0.041	0.268	0.253	N/A	N/A	N/A	N/A	N/A	N/A	0.102	0.274	0.323	0.323
	Top Edge	0.564	0.219	0.374	N/A	N/A	N/A	N/A	N/A	N/A	0.251	0.231	0.513	0.564
	Bottom Edge	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Product Specific 10-g SAR	Back Side	N/A	N/A	N/A	0.344	0.879	1.009	0.189	0.865	0.797	N/A	N/A	N/A	1.009
	Front Side	N/A	N/A	N/A	0.366	0.140	0.386	0.343	0.171	0.392	N/A	N/A	N/A	0.392
	Left Edge	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	NA	N/A	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A	0.139	0.526	0.814	0.090	0.533	0.818	N/A	N/A	N/A	0.818
	Top Edge	N/A	N/A	N/A	0.562	0.311	0.970	0.393	0.485	0.536	N/A	N/A	N/A	0.970
	Bottom Edge	N/A	N/A	N/A	N/A	N/A	NA	N/A	N/A	NA	N/A	N/A	N/A	N/A

Note: 1.The value with blue color is the maximum ΣSAR_{1g/10g} Value.
2.MAX. ΣSAR_{1g/10g} =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}



About Wi-Fi, BT and WWAN

SAR _{1g/10g} (W/kg) Test Position		Main- antenna	Second- Antenna	Wi-Fi 2.4G	Wi-Fi 5G	Wi-Fi 2.4G Ant 1	Wi-Fi 5G Ant 2	BT	MAX. Σ SAR _{1g}		
		1	2	3	4	5	6	7	Max (1,2) +3	Max (1,2) +4+7	Max (1,2) +5+6
Head	Left, Cheek	0.121	0.515	0.878	0.757	0.341	0.643	0.216	1.393	1.488	1.499
	Left, Tilt	0.090	0.550	0.799	0.761	0.240	0.538	0.231	1.349	1.542	1.328
	Right, Cheek	0.145	0.788	0.765	0.602	0.216	0.314	0.180	1.553	1.570	1.318
	Right, Tilt	0.119	0.807	0.697	0.535	0.204	0.366	0.183	1.504	1.525	1.377
Body worn	Back Side	0.674	0.593	0.130	0.230	0.130	0.230	0.080	0.804	0.984	1.034
	Front Side	0.455	0.408	0.084	0.201	0.062	0.201	0.071	0.539	0.727	0.718
Hotspot	Back Side	0.572	0.401	0.236	0.508	0.128	0.405	0.080	0.808	1.160	1.105
	Front Side	0.279	0.352	0.177	0.452	0.141	0.086	0.071	0.529	0.875	0.579
	Left Edge	0.110	0.099	0.191	N/A	N/A	N/A	N/A	0.301	0.110	0.110
	Right Edge	0.091	N/A	0.071	0.323	0.061	0.274	0.048	0.162	0.462	0.426
	Top Edge	N/A	0.519	0.350	0.564	0.350	0.231	0.085	0.869	1.168	1.100
	Bottom Edge	0.779	N/A	N/A	N/A	N/A	N/A	N/A	0.779	0.779	0.779
Product Specific 10-g SAR	Back Side	1.272	N/A	N/A	1.009	N/A	0.879	0.376	1.272	2.657	2.151
	Front Side	N/A	N/A	N/A	0.392	N/A	0.171	0.376	N/A	0.768	0.171
	Left Edge	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	0.818	N/A	0.533	0.376	N/A	1.194	0.533
	Top Edge	N/A	1.257	N/A	0.970	N/A	0.485	0.376	1.257	2.603	1.742
	Bottom Edge	1.528	N/A	N/A	N/A	N/A	N/A	N/A	1.528	1.528	1.528

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

2. MAX. Σ SAR_{1g/10g} = Unlicensed SAR_{MAX} + Licensed SAR_{MAX}

MAX. Σ SAR_{1g} = 1.570W/kg < 1.6W/kg and MAX. Σ SAR_{10g} = 2.657W/kg < 4 W/kg, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi, BT and WWAN 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: 1/4/2021

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.88 \text{ S/m}$; $\epsilon_r = 41.4$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

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

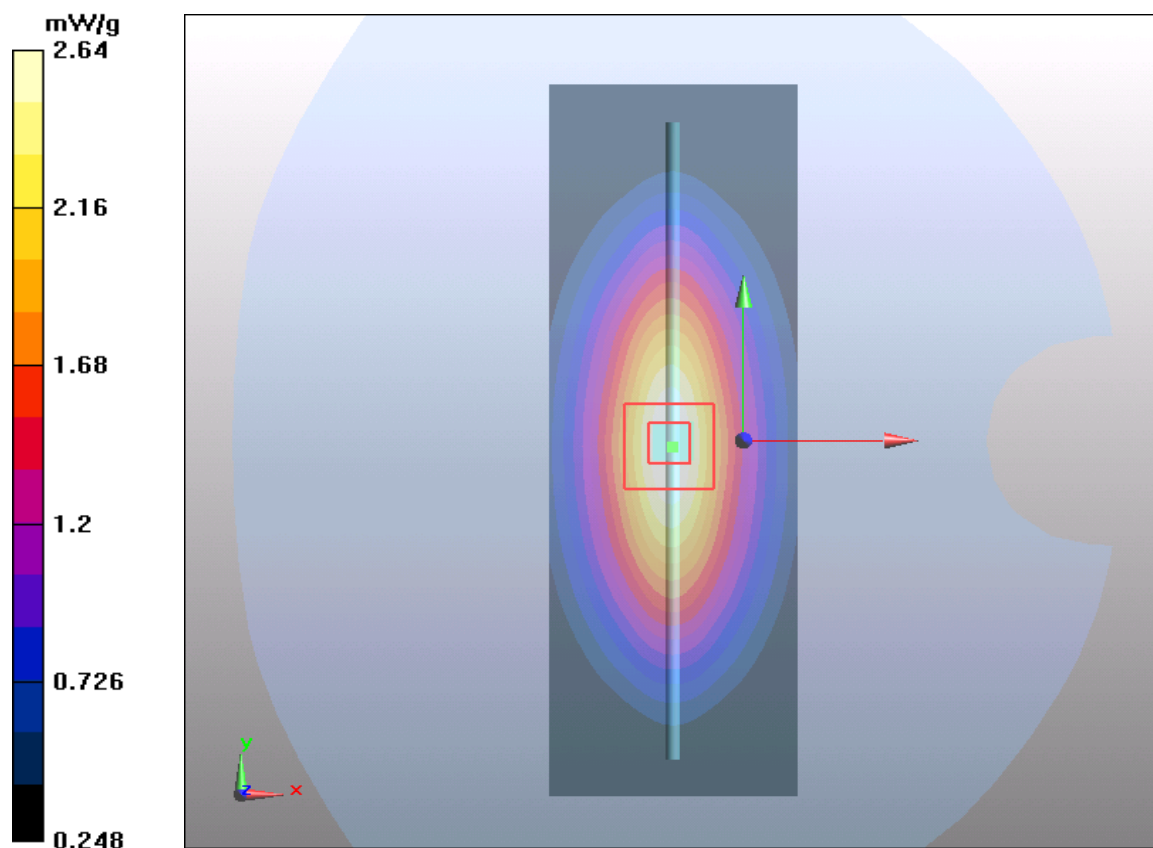
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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: 1/5/2021

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.87 \text{ S/m}$; $\epsilon_r = 41.3$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C

Liquid Temperature: 21.5°C

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

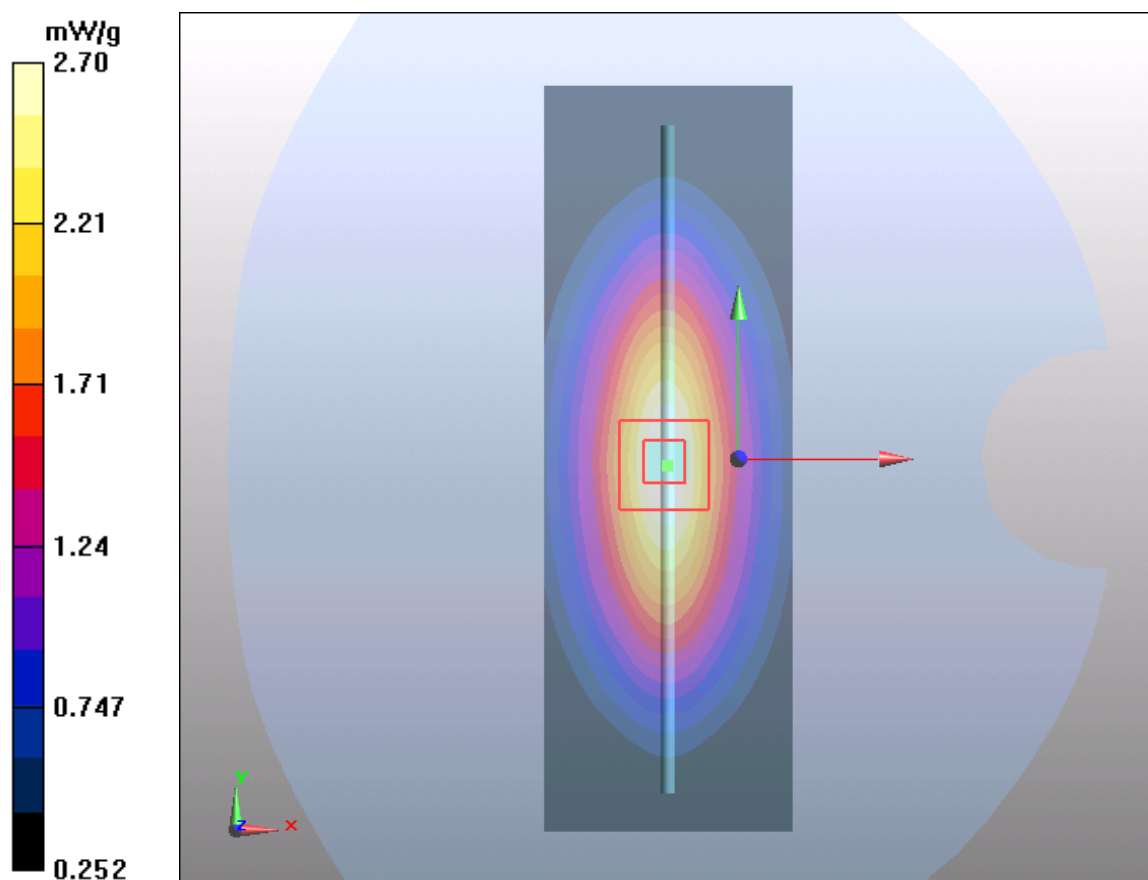
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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: 1/12/2021

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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

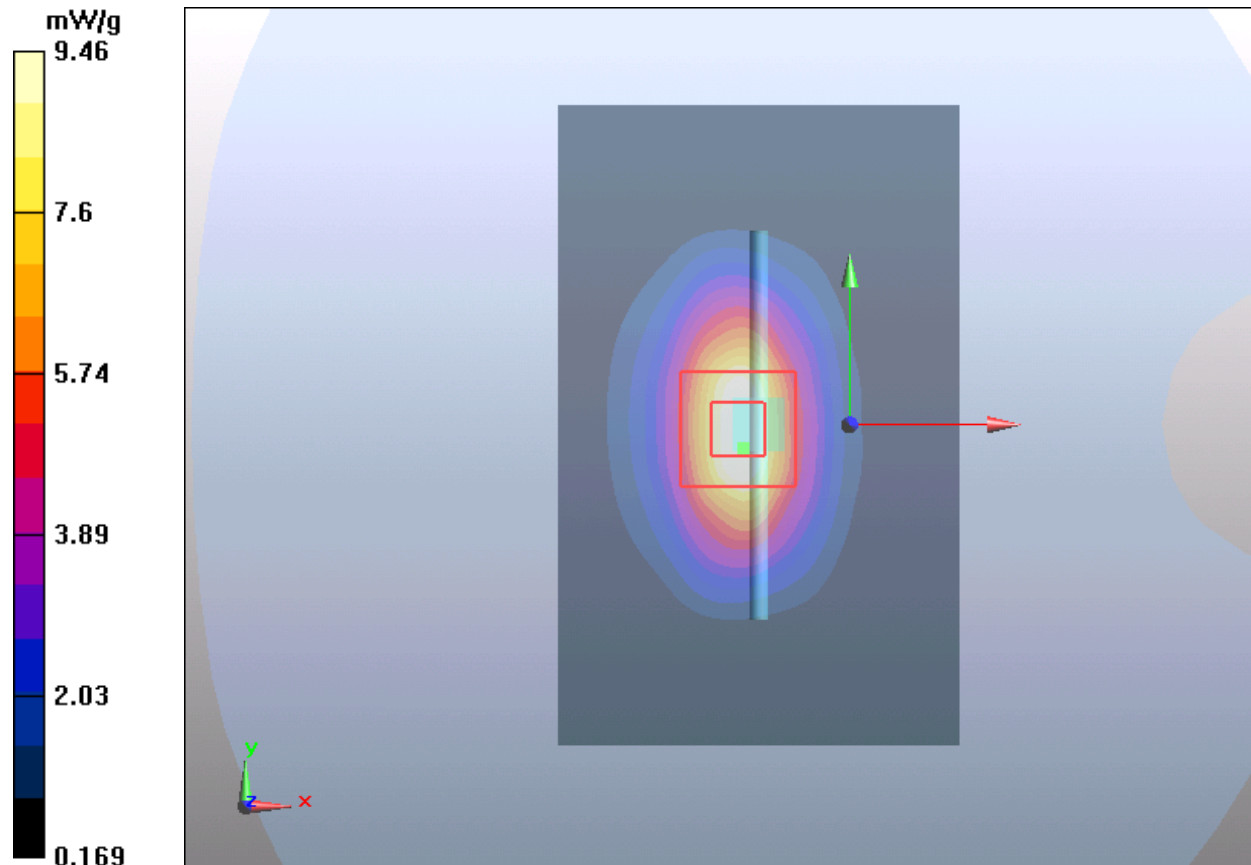
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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: 1/13/2021

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.34$ S/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

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

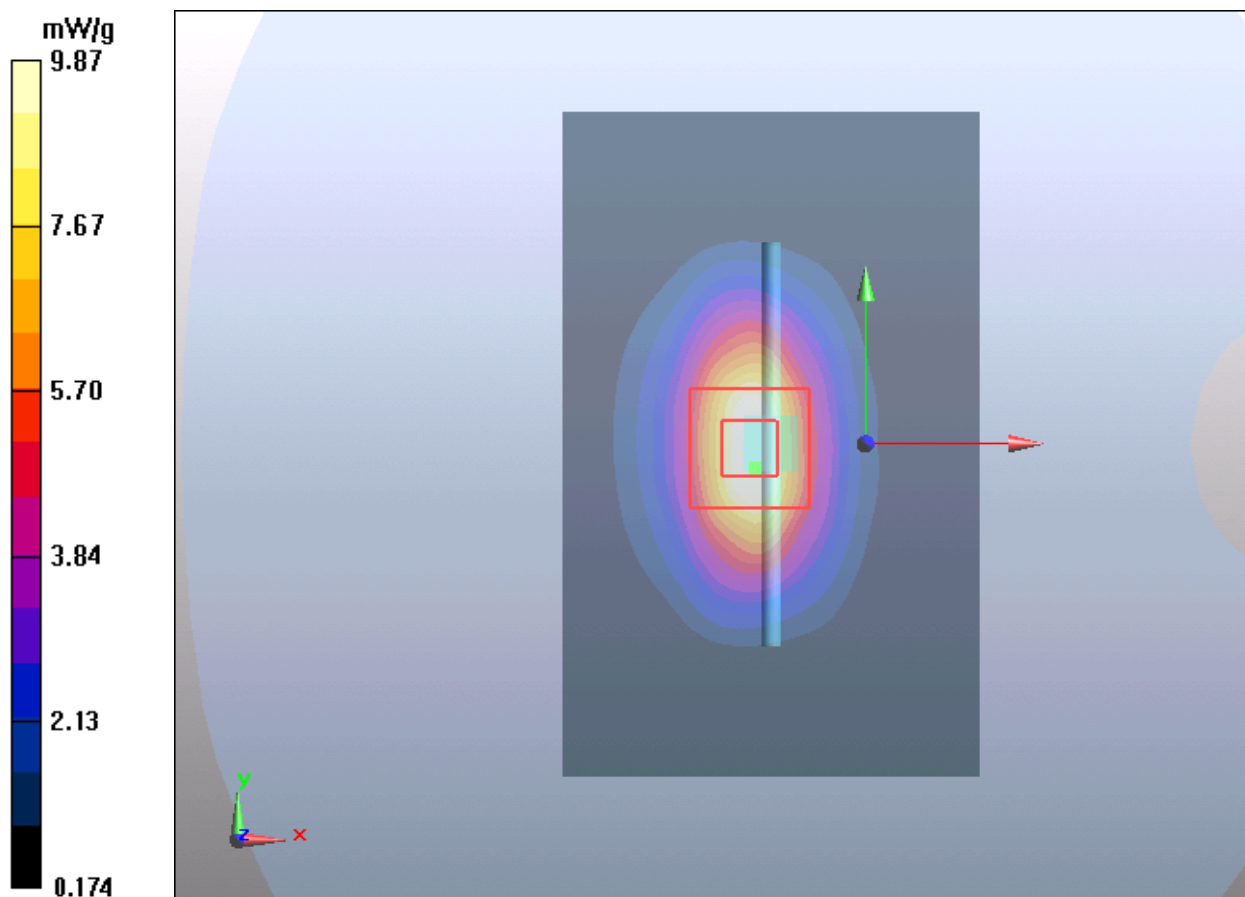
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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: 12/20/2020

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.41$ S/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

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

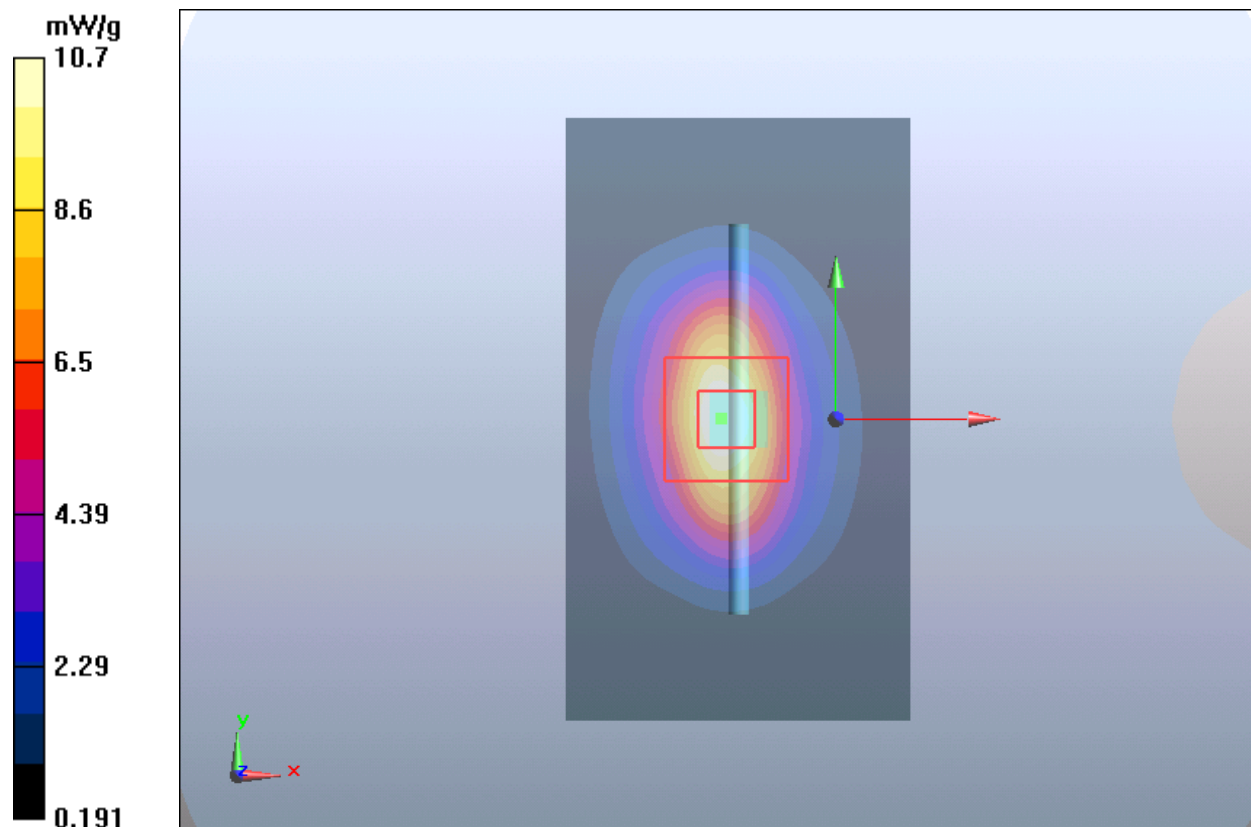
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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: 12/21/2020

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ S/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

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

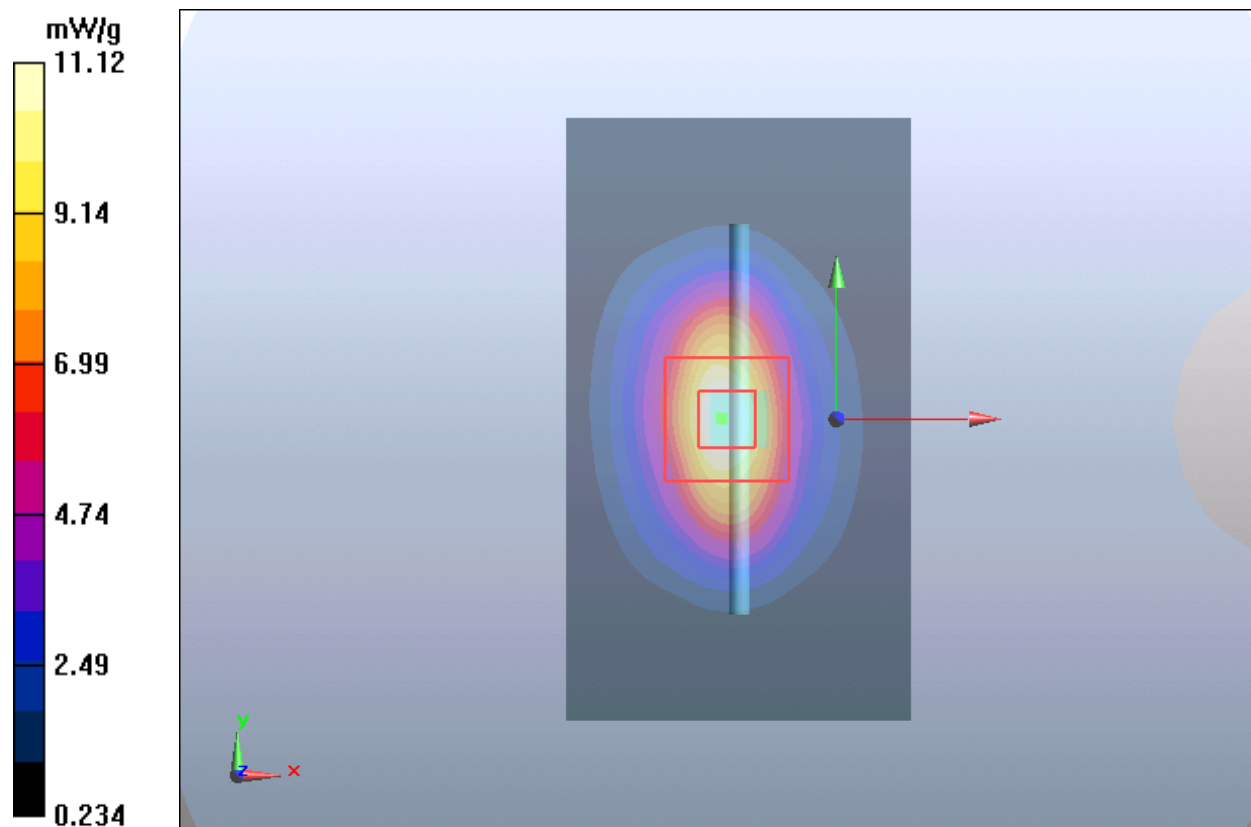
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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: 12/22/2020

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.40$ mho/m; $\epsilon_r = 40.0$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

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,

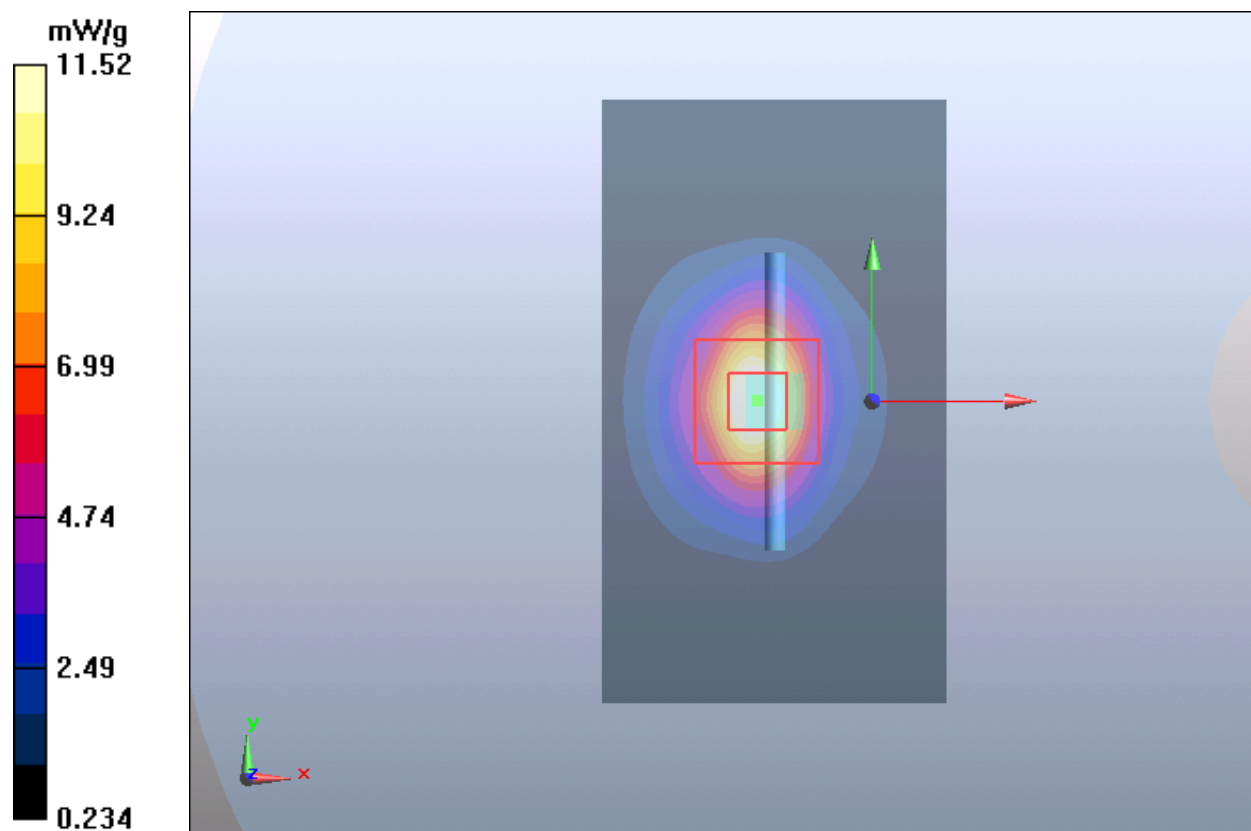
dz=5mm

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: 12/23/2020

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.34$ mho/m; $\epsilon_r = 40.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

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,

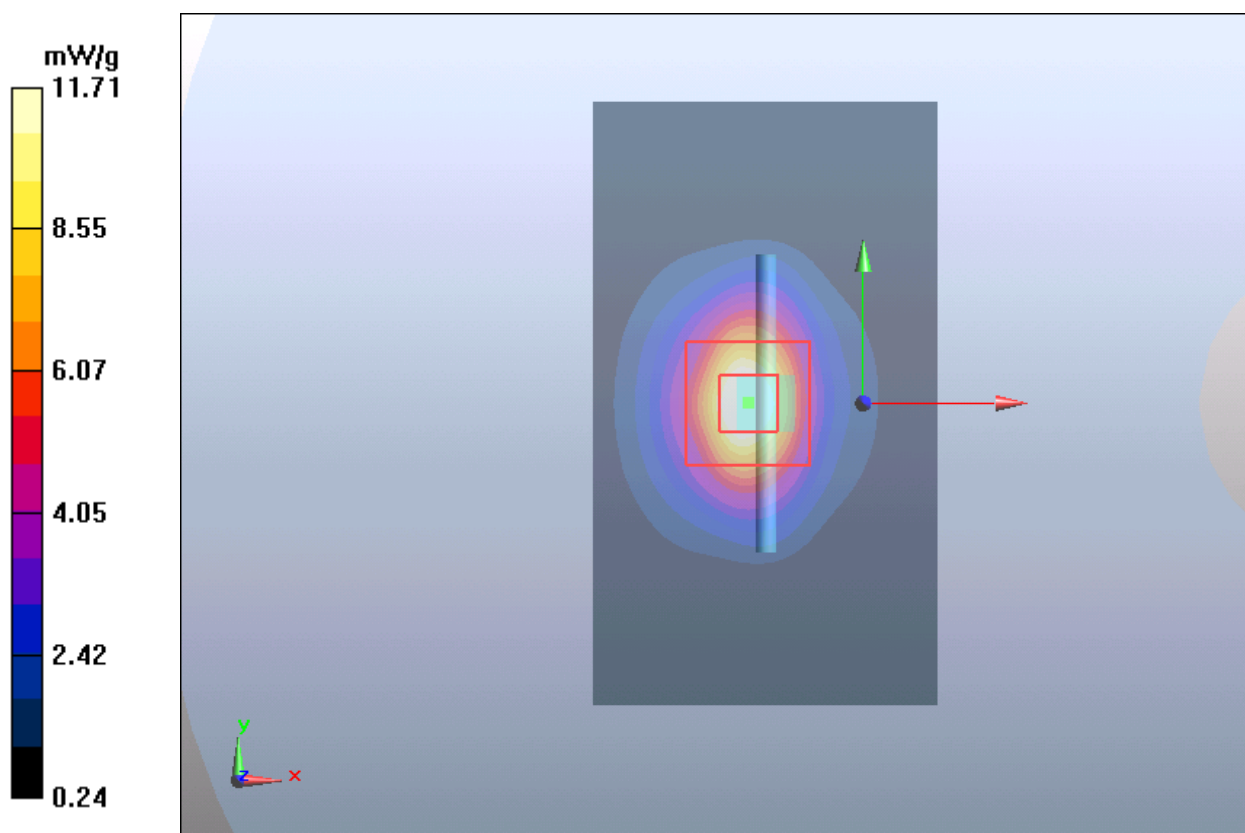
dz=5mm

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: 1/6/2021

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

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.81$ S/m; $\epsilon_r = 38.6$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

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

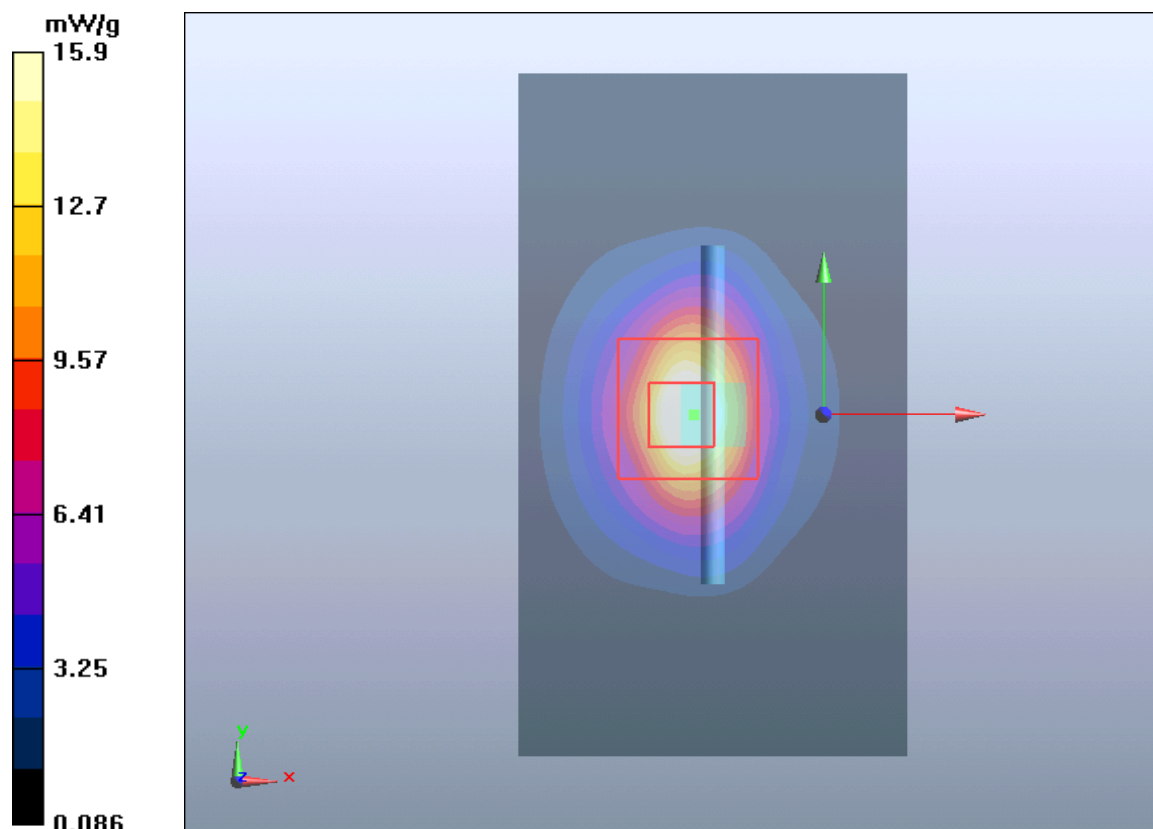
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 12/25/2020

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.01$ S/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³

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

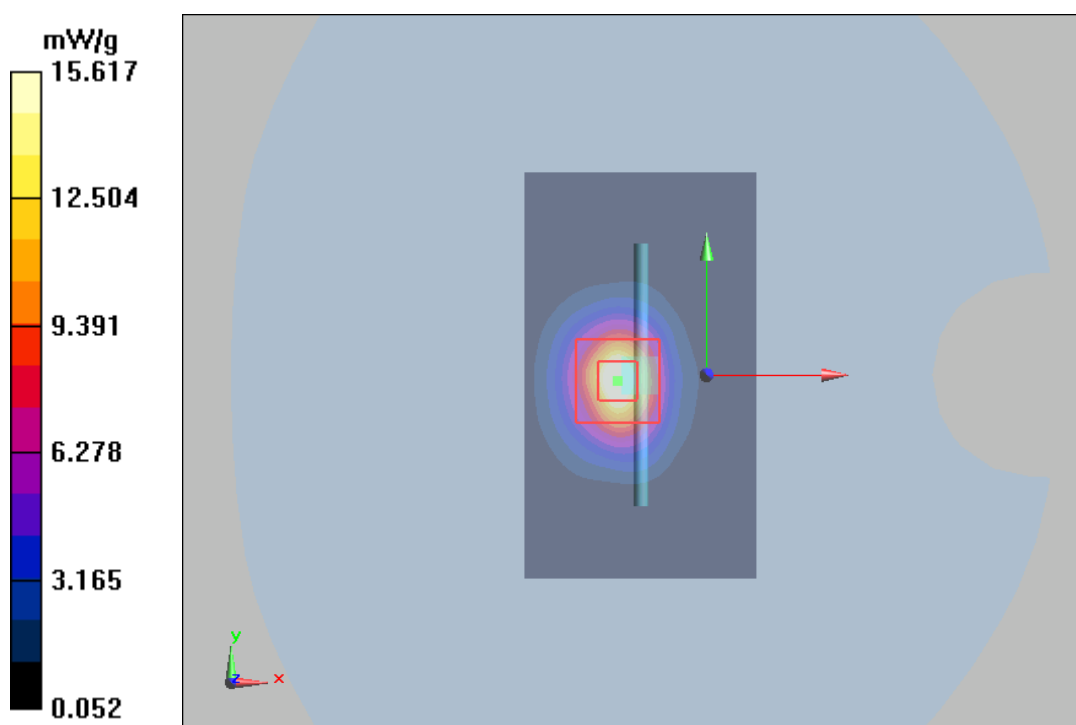
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 12/27/2020

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 38.4$; $\rho = 1000$ kg/m³

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

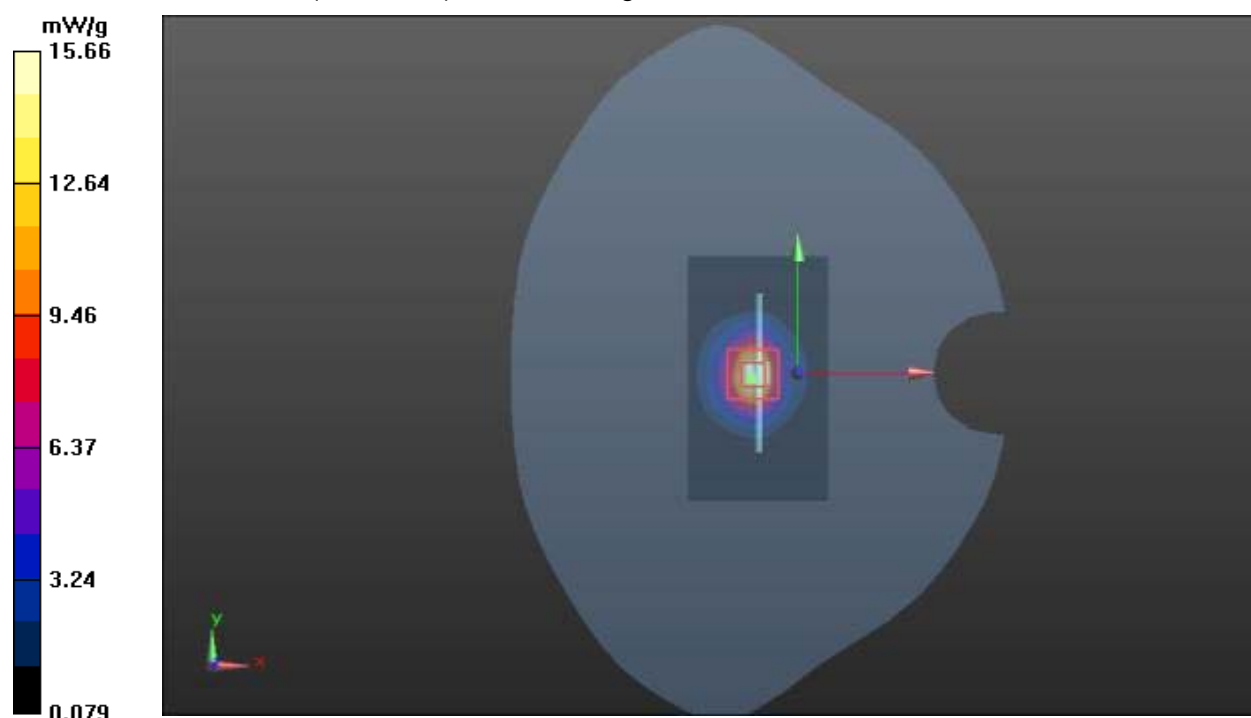
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 12/28/2020

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³

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

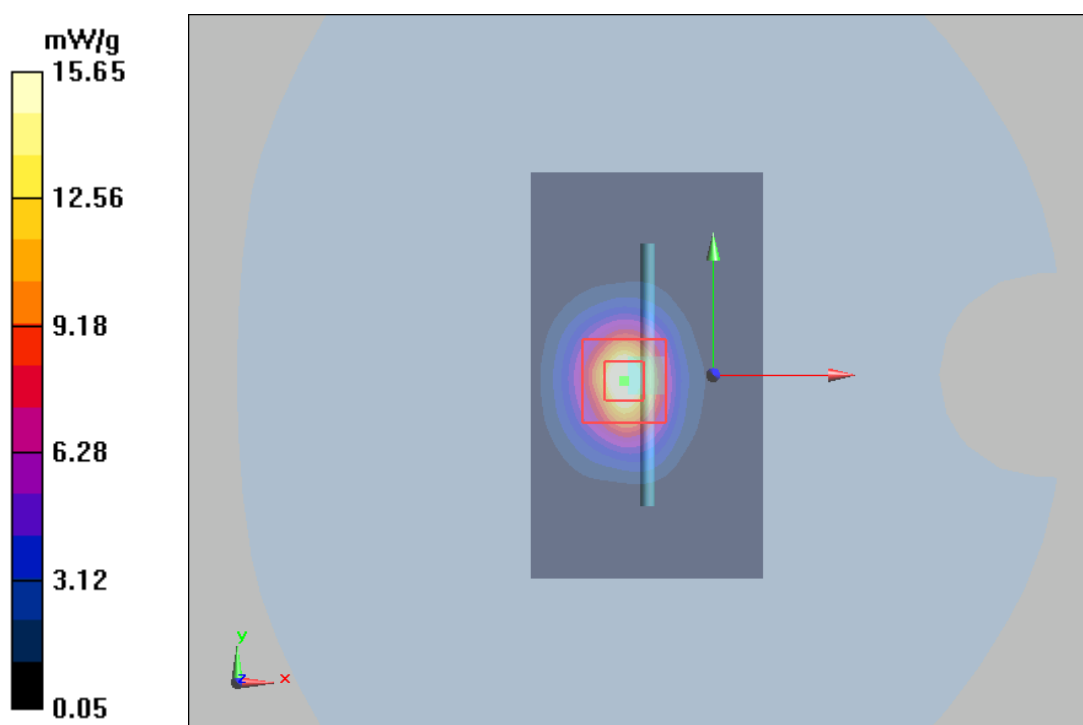
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 12/29/2020

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 38.5$; $\rho = 1000$ kg/m³

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

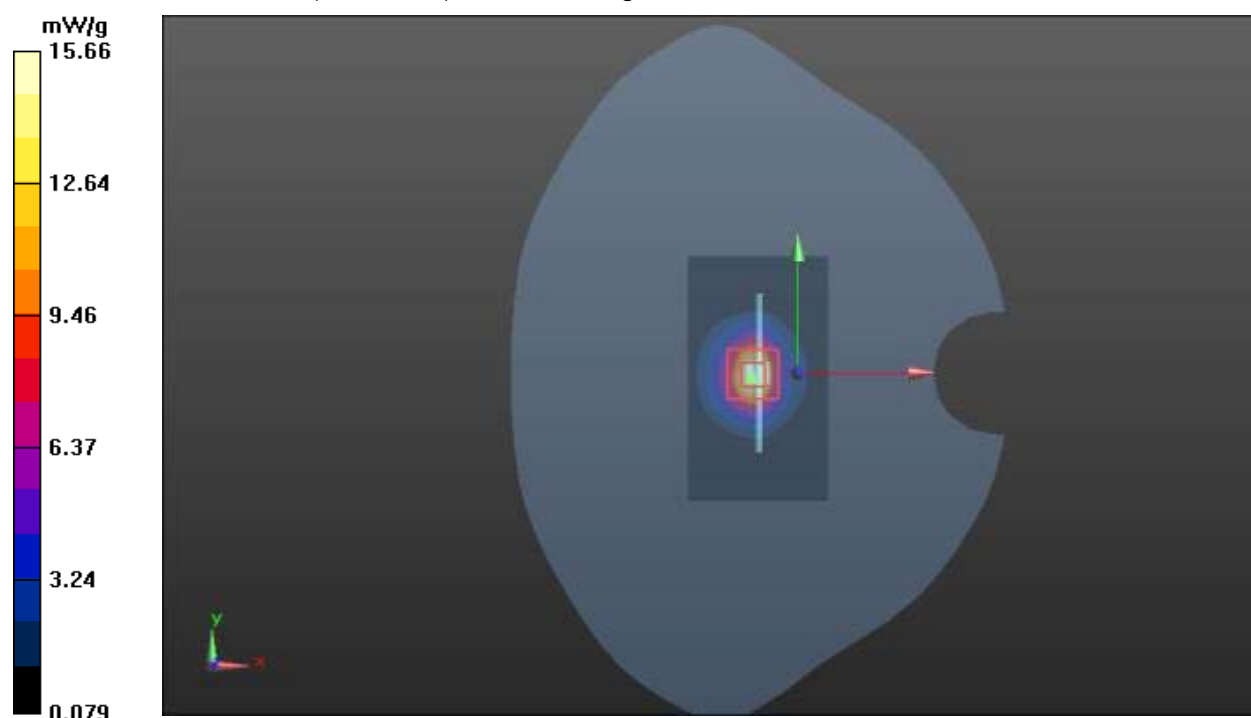
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 12/30/2020

Communication System: CW; Frequency: 2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 38.2$; $\rho = 1000$ kg/m³

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

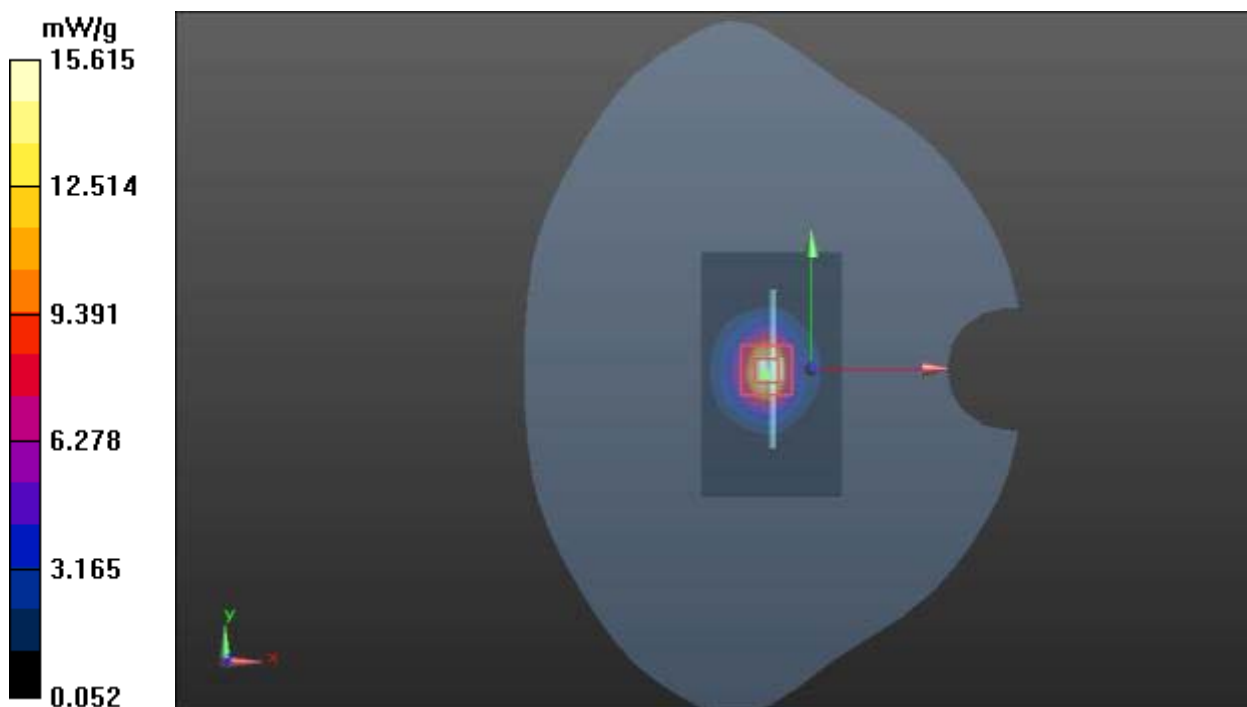
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 1/15/2021

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

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.80$ S/m; $\epsilon_r = 35.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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

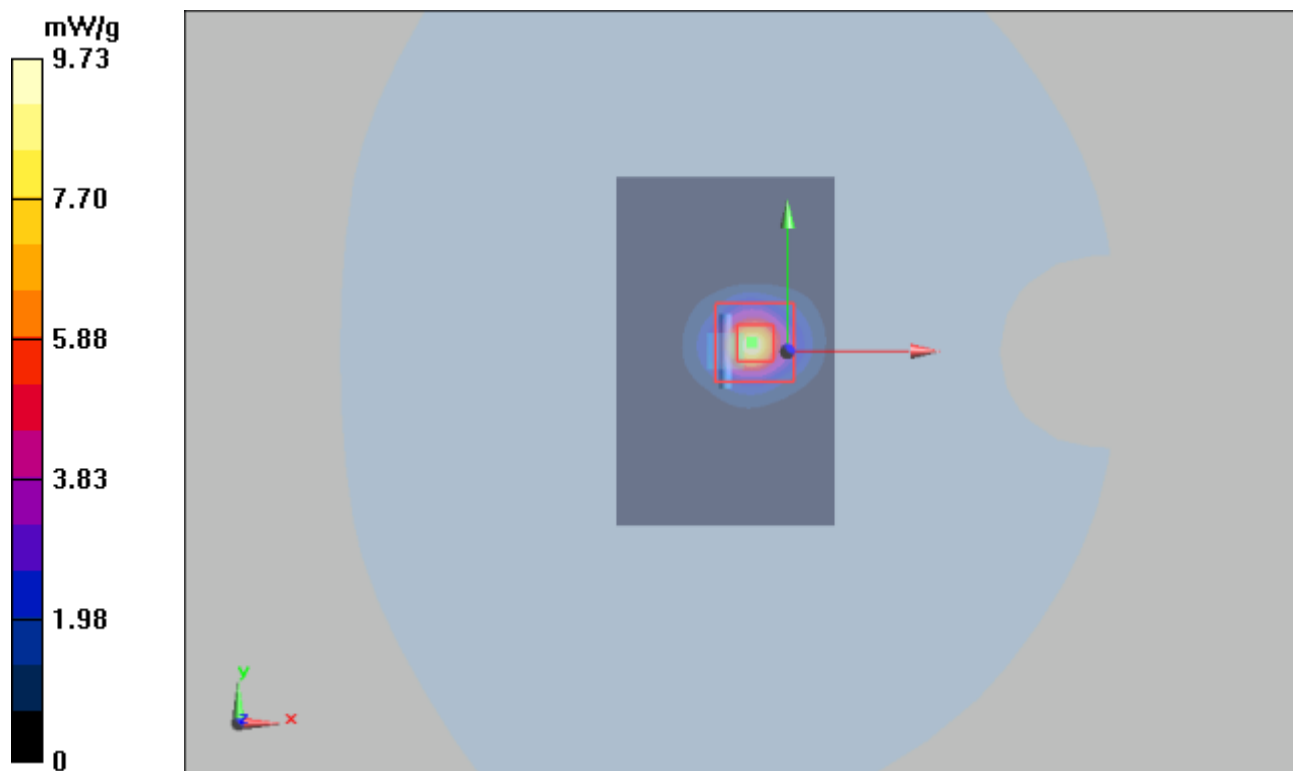
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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: 1/14/2021

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

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 34.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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

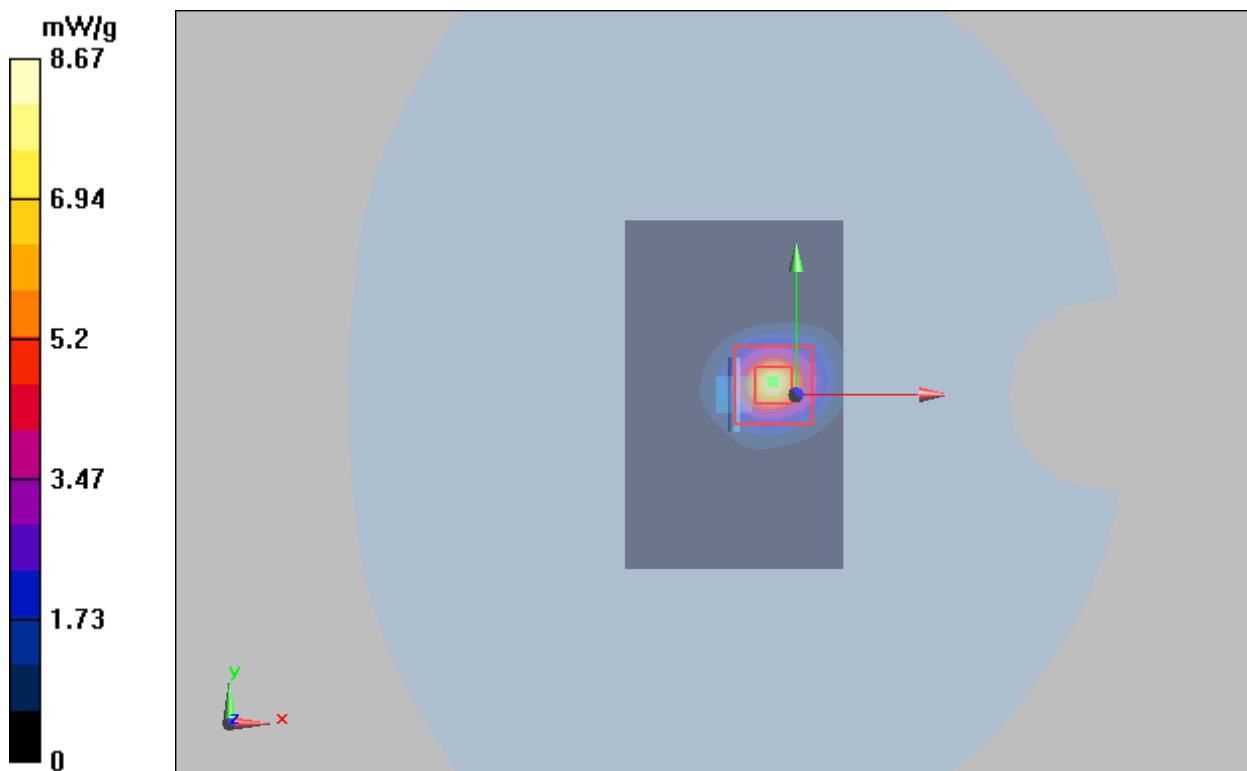
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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: 1/16/2021

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

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.21$ S/m; $\epsilon_r = 34.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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

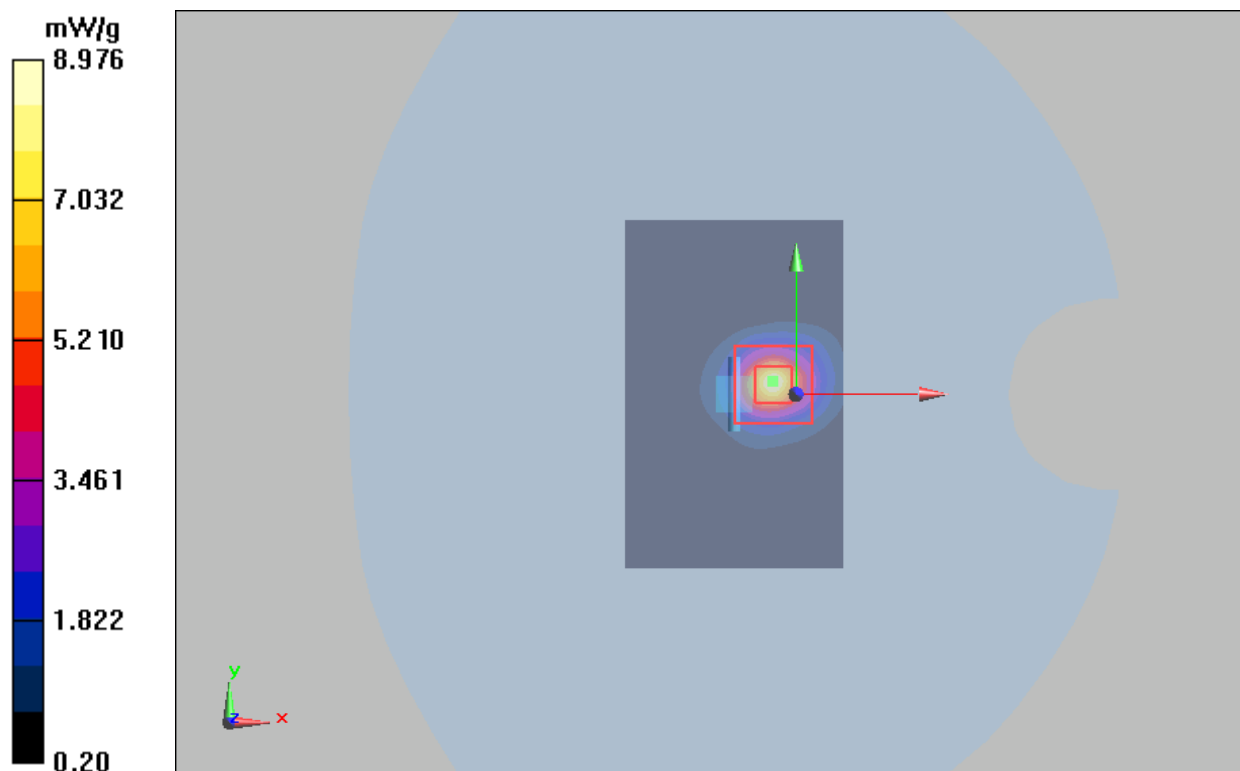
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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 Left Cheek Middle (Main-Antenna)

Date: 1/4/2021

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left 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)

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

Maximum value of SAR (measured) = 0.0728 W/kg

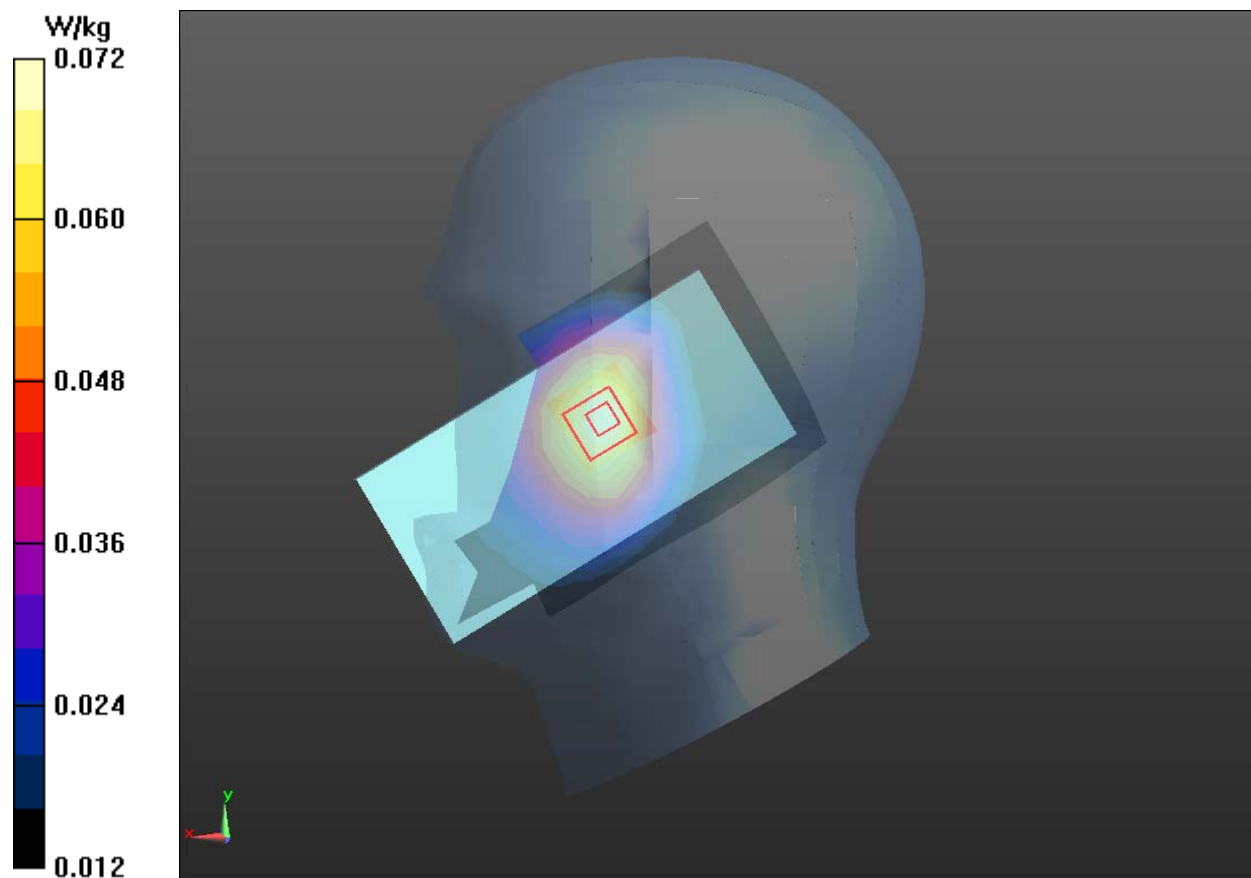
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.564 V/m; Power Drift = 0.101 dB

Peak SAR (extrapolated) = 0.0830 W/kg

SAR(1 g) = 0.069 W/kg; SAR(10 g) = 0.054 W/kg

Maximum value of SAR (measured) = 0.072 W/kg



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

Date: 1/4/2021

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.106 W/kg

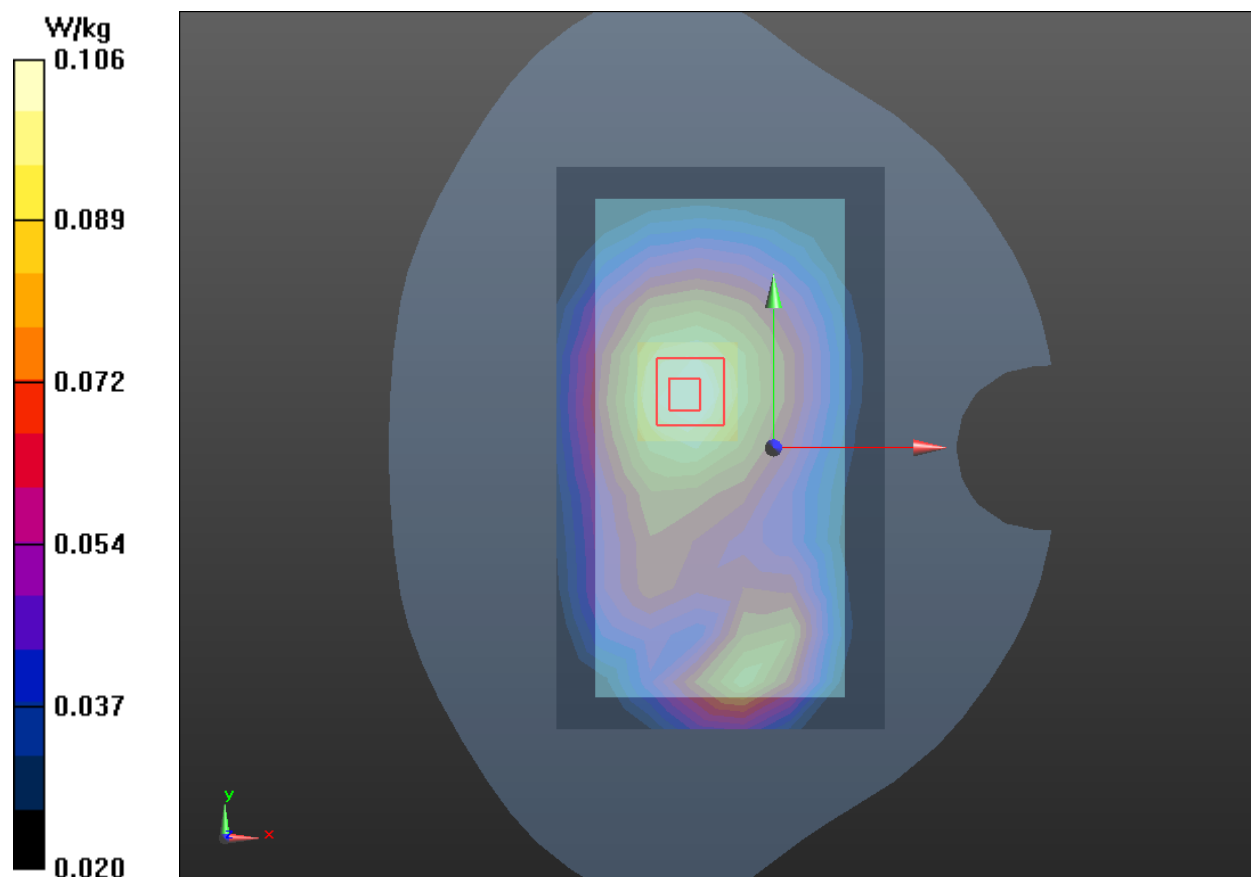
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.940 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.126 W/kg

SAR(1 g) = 0.102 W/kg; SAR(10 g) = 0.079 W/kg

Maximum value of SAR (measured) = 0.106 W/kg



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

Date: 1/4/2021

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.186 W/kg

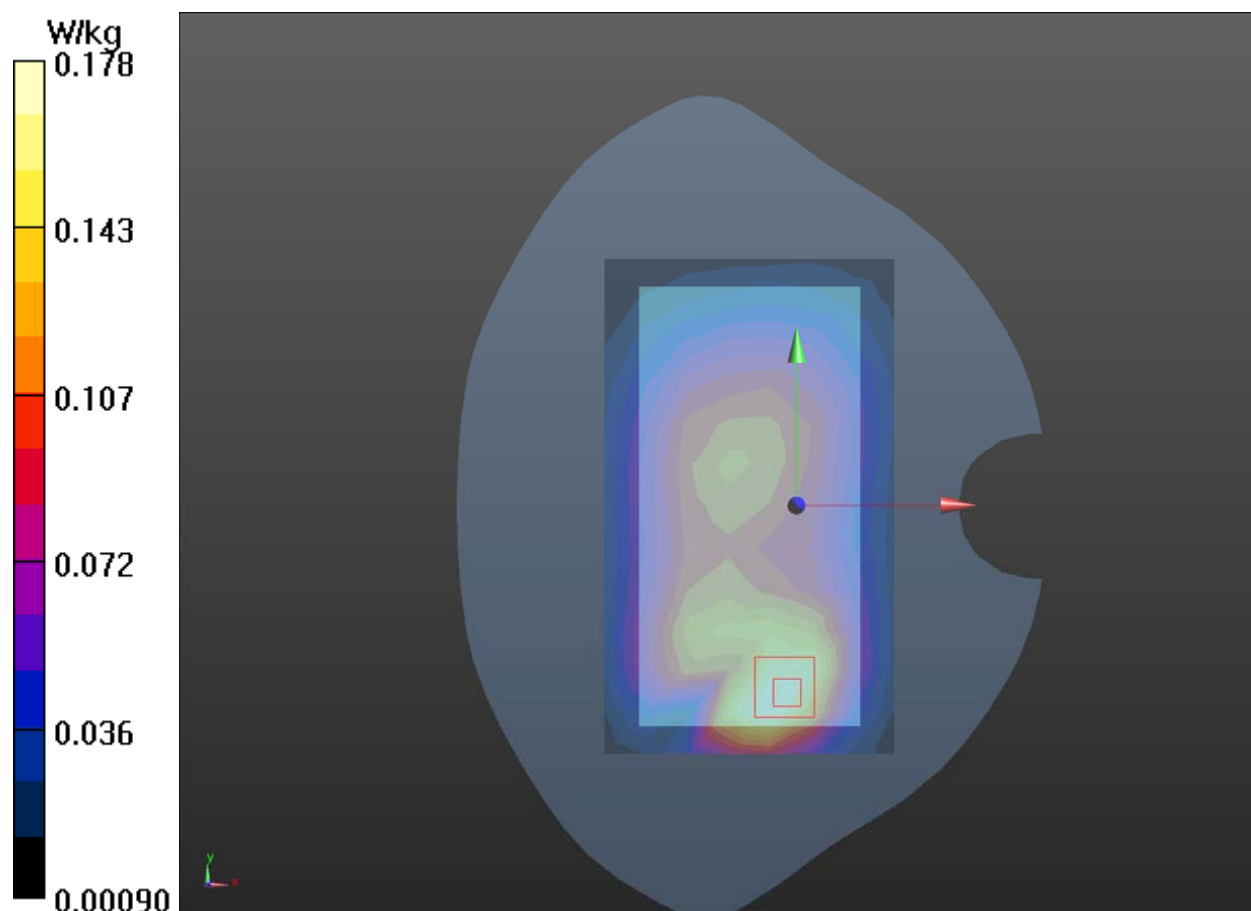
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.53 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 0.286 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.178 W/kg



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

Date: 12/20/2020

Communication System: UID 0, GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left 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 Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.046 W/kg

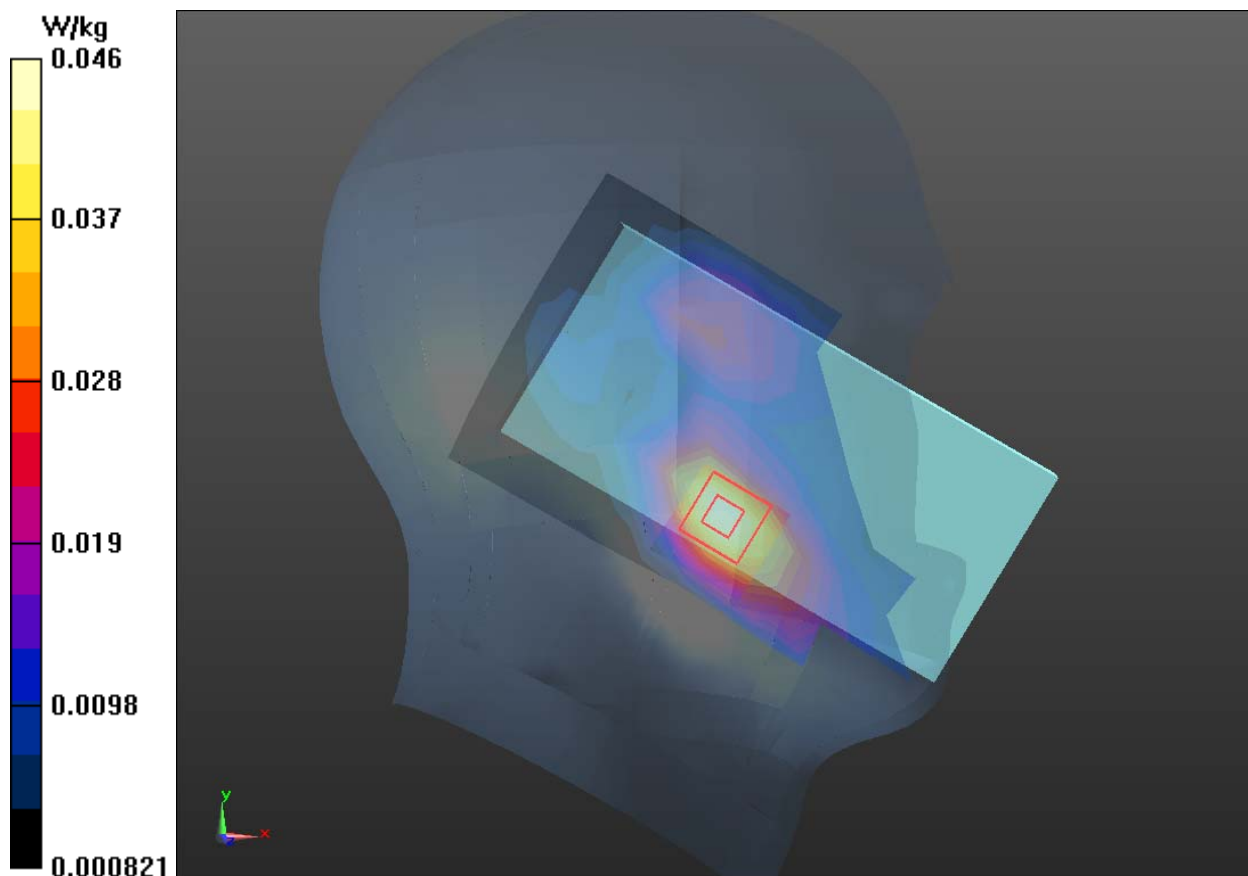
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.268 V/m; Power Drift = 0.173 dB

Peak SAR (extrapolated) = 0.067 W/kg

SAR(1 g) = 0.043 W/kg; SAR(10 g) = 0.026 W/kg

Maximum value of SAR (measured) = 0.046 W/kg



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

Date: 12/20/2020

Communication System: UID 0, GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.430 W/kg

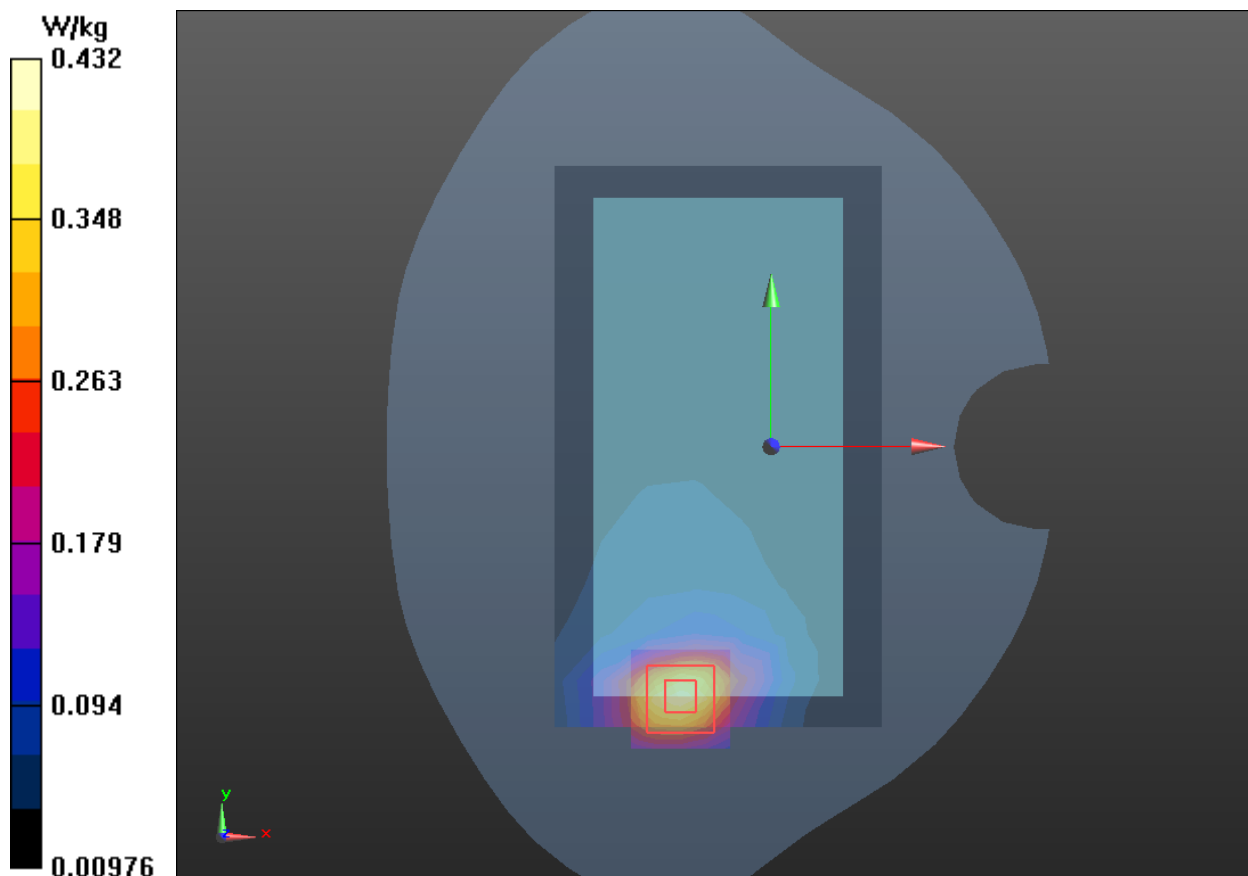
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.042 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 0.857 W/kg

SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.219 W/kg

Maximum value of SAR (measured) = 0.432 W/kg



Plot 23 GSM 1900 GPRS (4Txslots) Bottom Edge Middle (Main-Antenna, Distance 10mm)

Date: 12/20/2020

Communication System: UID 0, GPRS 4TX (0); Frequency: 1880 MHz; Duty Cycle: 1:2.07491

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.488 W/kg

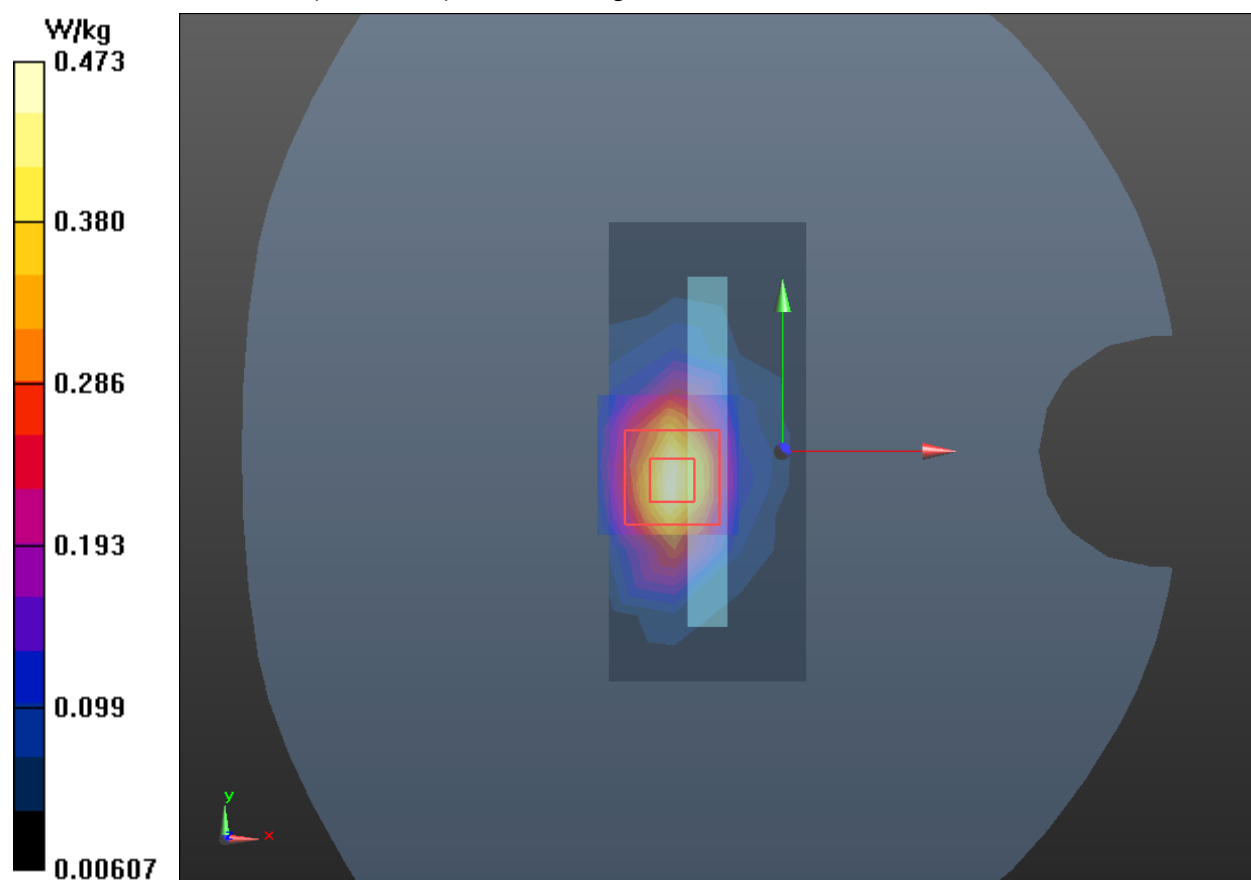
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.71 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.774 W/kg

SAR(1 g) = 0.434 W/kg; SAR(10 g) = 0.224 W/kg

Maximum value of SAR (measured) = 0.473 W/kg



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

Date: 12/20/2020

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left 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 Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.098 W/kg

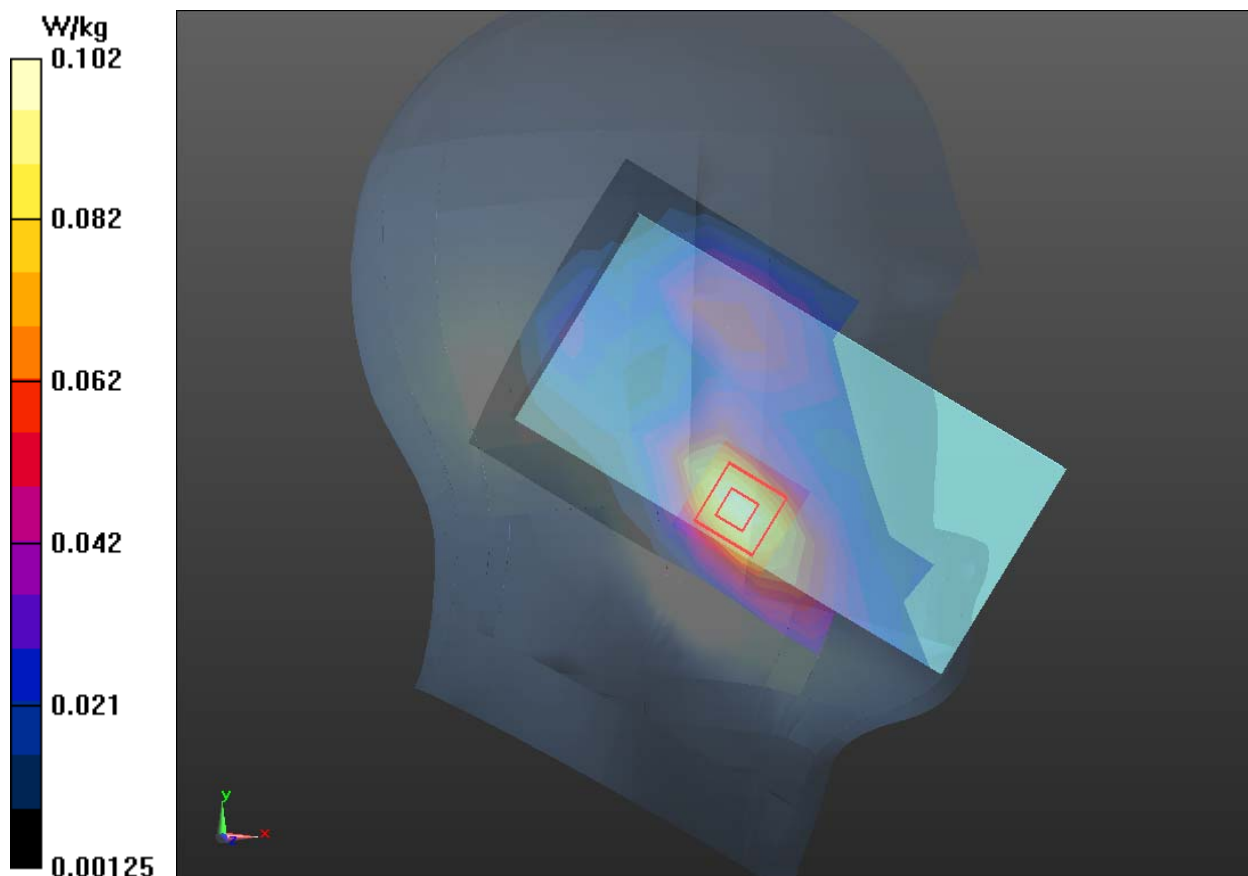
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.897 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.057 W/kg

Maximum value of SAR (measured) = 0.102 W/kg



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

Date: 12/20/2020

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.475 W/kg

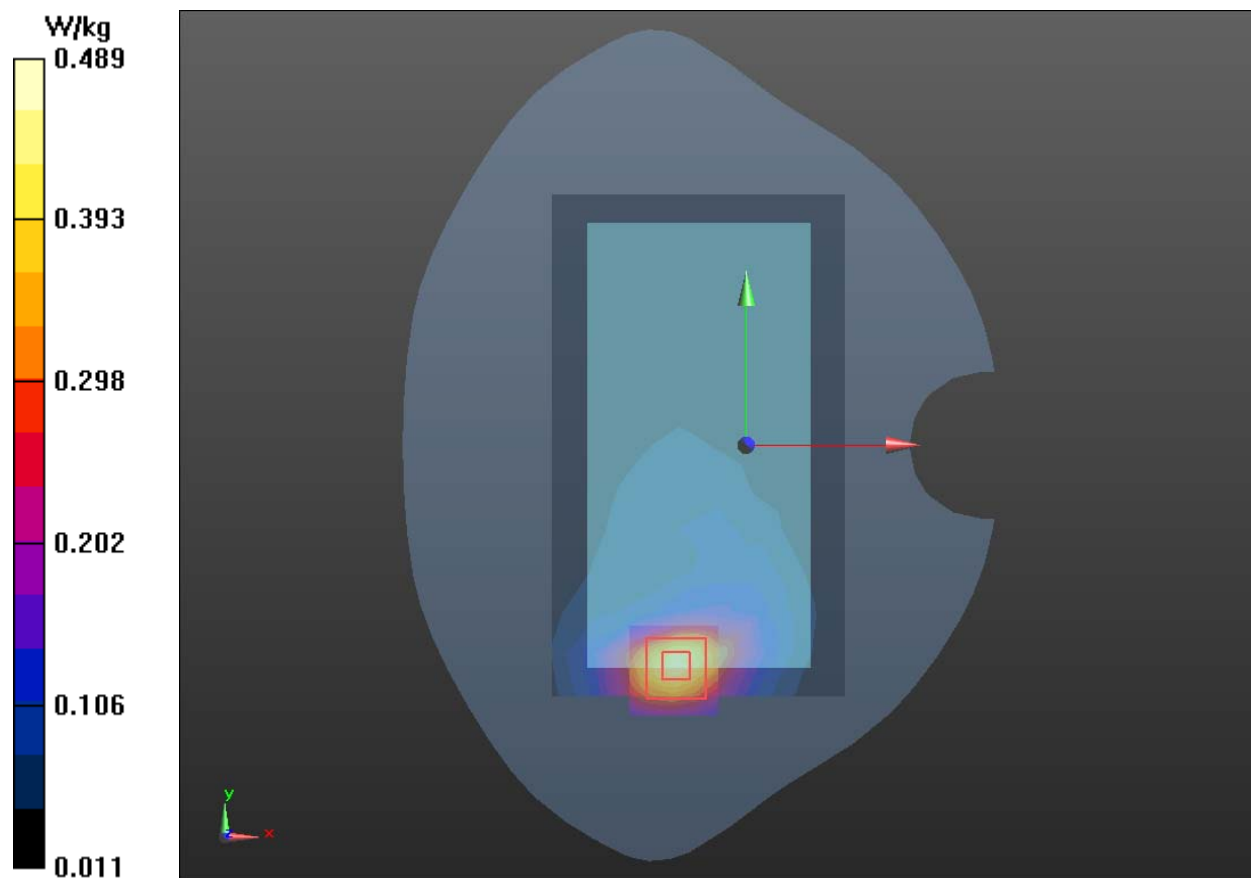
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.060 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.748 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.250 W/kg

Maximum value of SAR (measured) = 0.489 W/kg



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

Date: 12/20/2020

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.589 W/kg

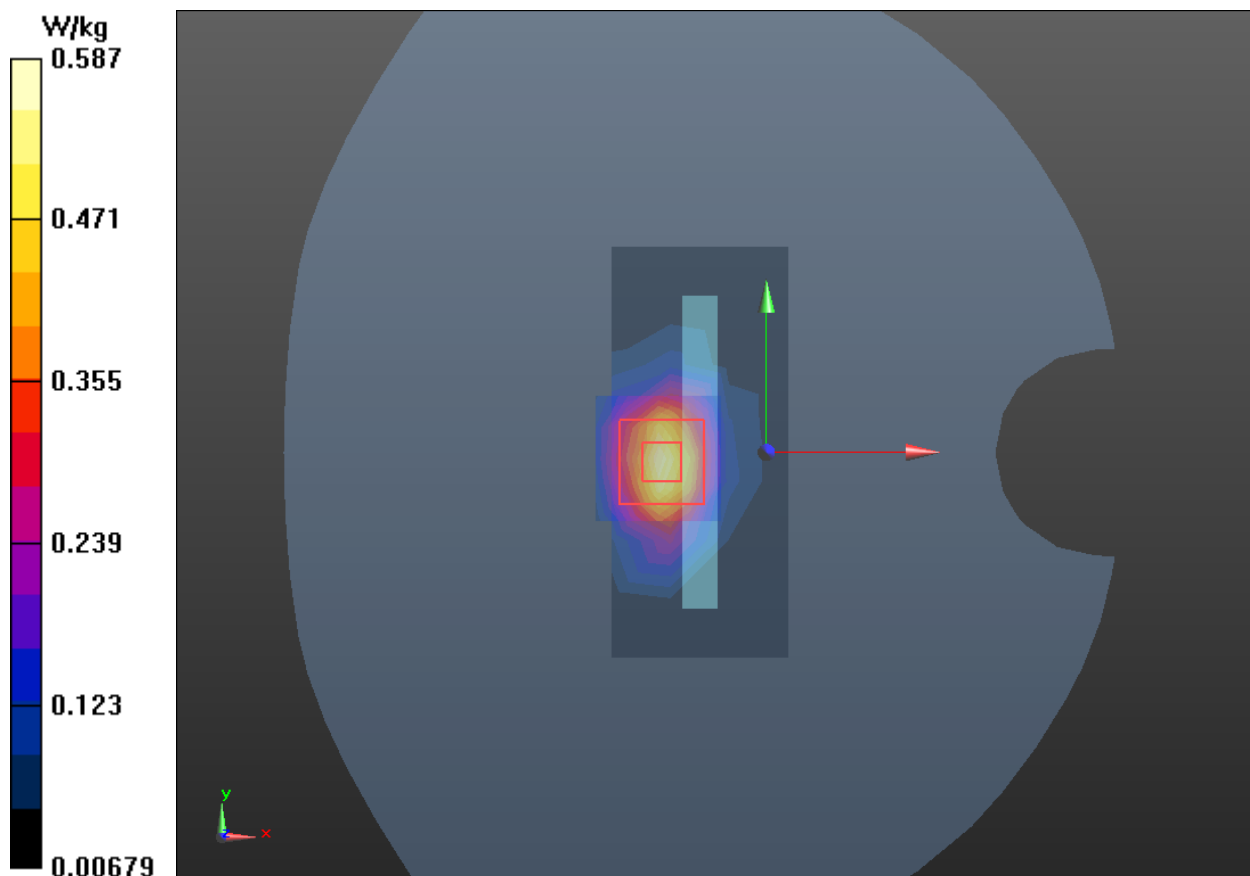
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.40 V/m; Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.945 W/kg

SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.268 W/kg

Maximum value of SAR (measured) = 0.587 W/kg



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

Date: 12/21/2020

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 3.16 W/kg

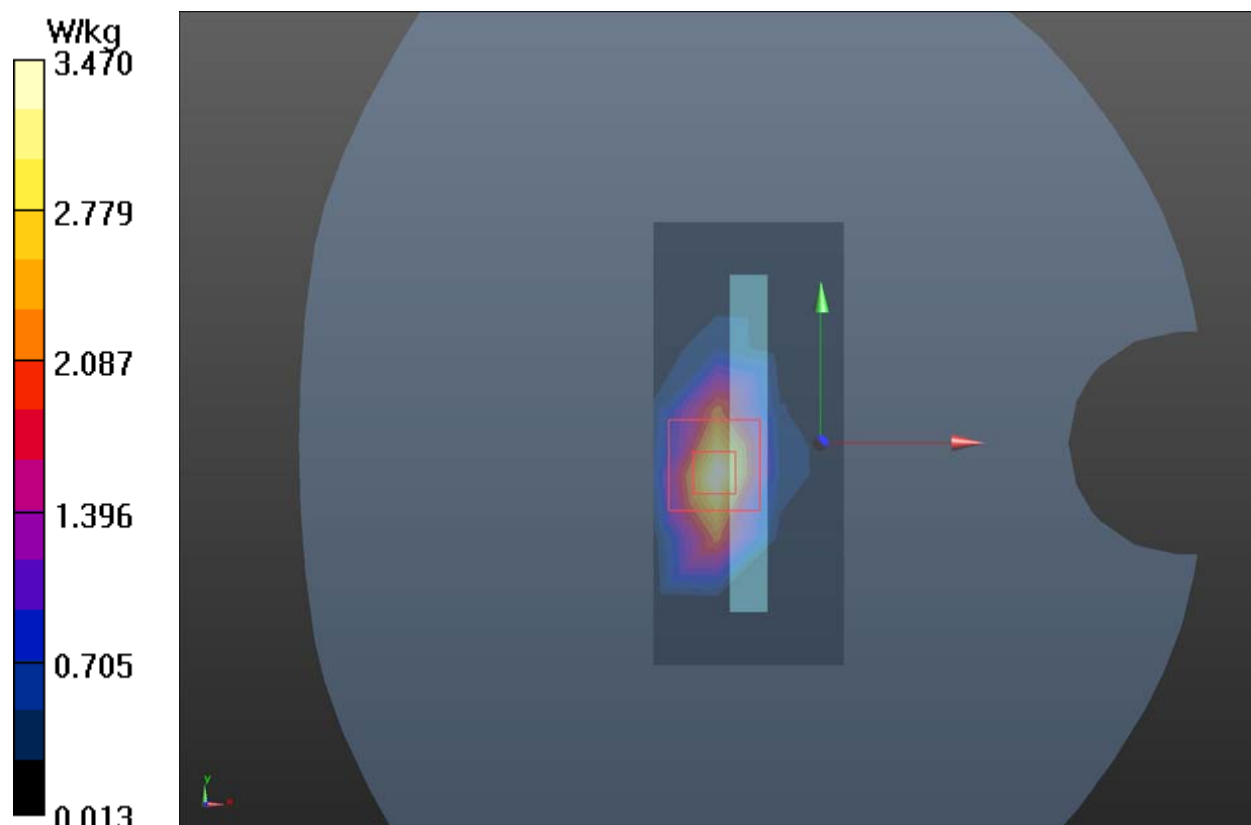
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.47 V/m; Power Drift = 0.093 dB

Peak SAR (extrapolated) = 6.65 W/kg

SAR(1 g) = 2.950 W/kg; SAR(10 g) = 1.280 W/kg

Maximum value of SAR (measured) = 3.47 W/kg



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

Date: 1/12/2021

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 39.365$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left 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)

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

Maximum value of SAR (measured) = 0.074 W/kg

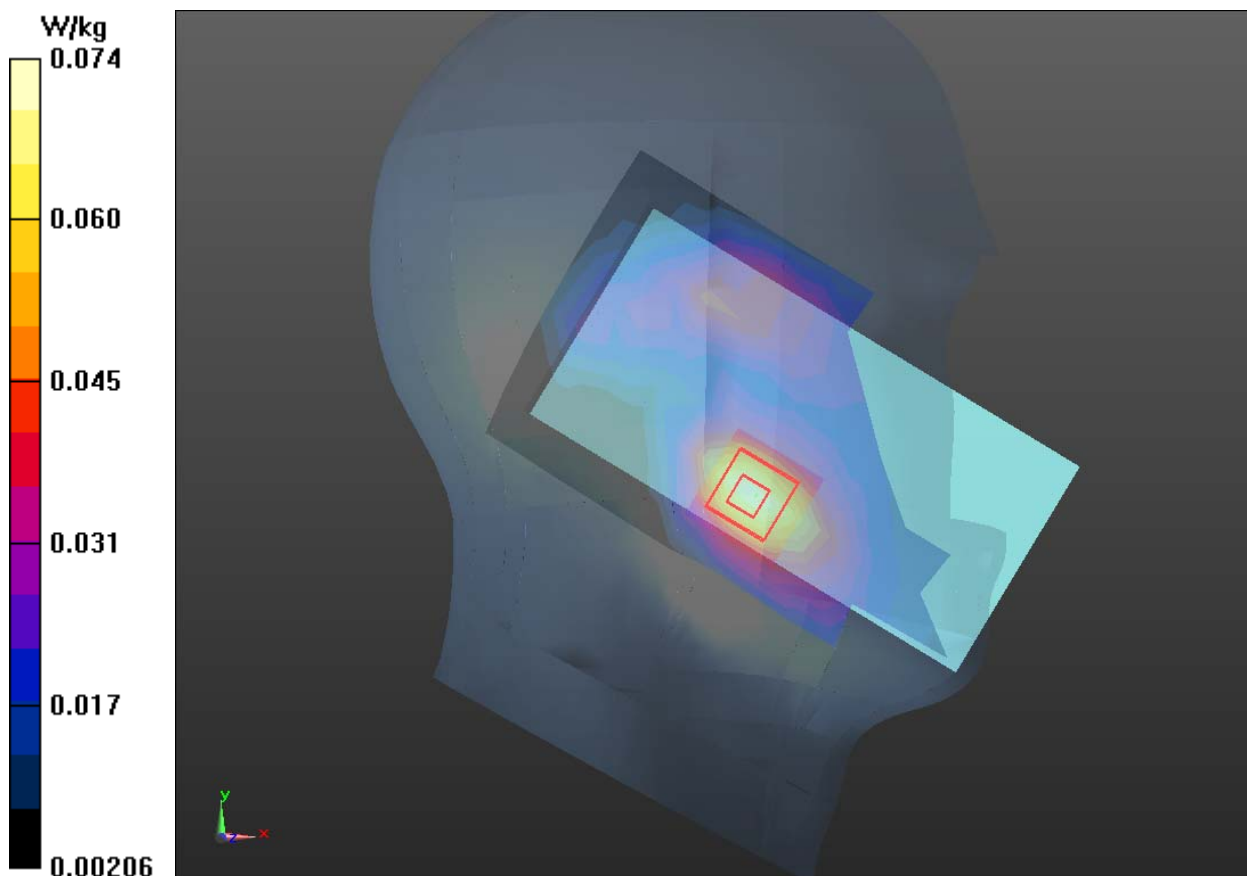
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.535 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.069 W/kg; SAR(10 g) = 0.043 W/kg

Maximum value of SAR (measured) = 0.074 W/kg



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

Date: 1/12/2021

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 39.365$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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)

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

Maximum value of SAR (measured) = 0.478 W/kg

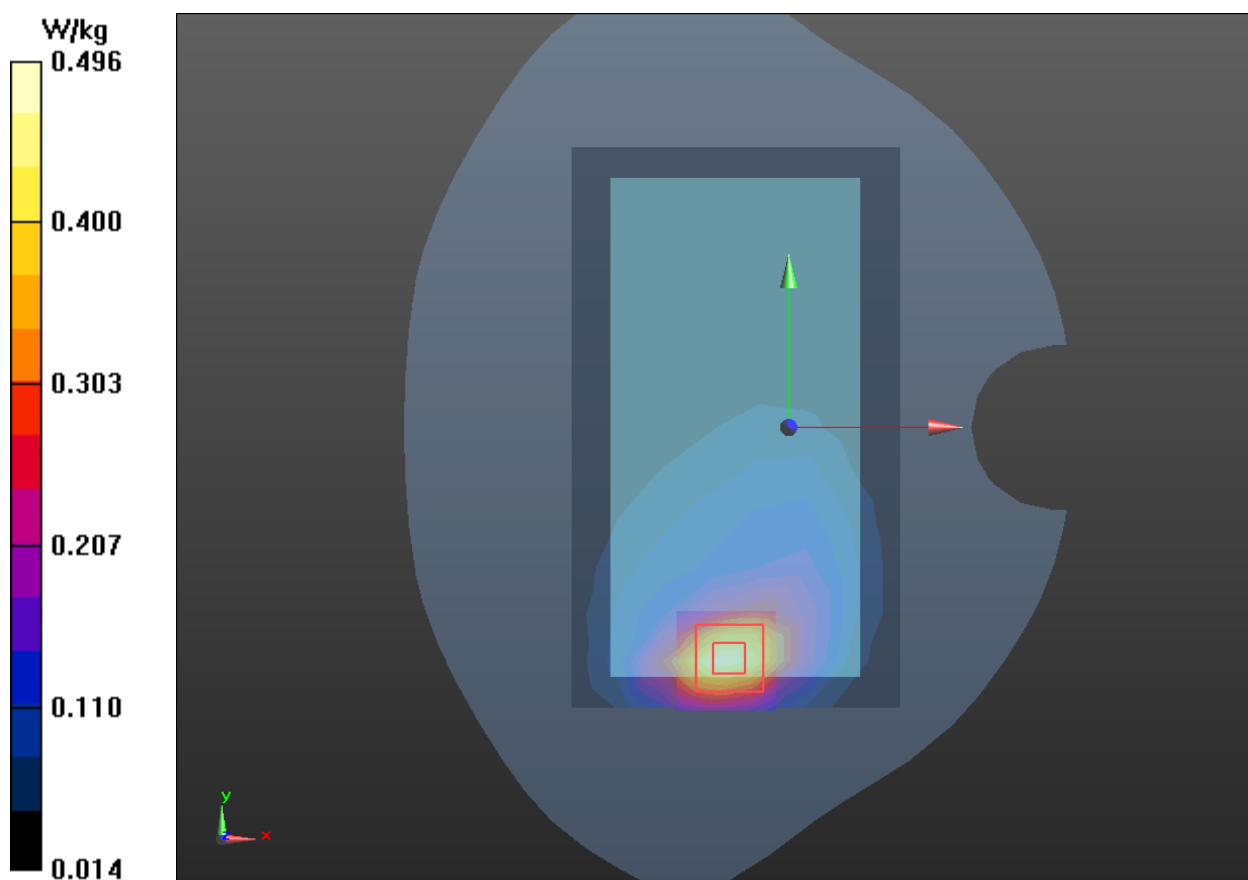
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.529 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.719 W/kg

SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.261 W/kg

Maximum value of SAR (measured) = 0.496 W/kg



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

Date: 1/12/2021

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 39.365$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.380 W/kg

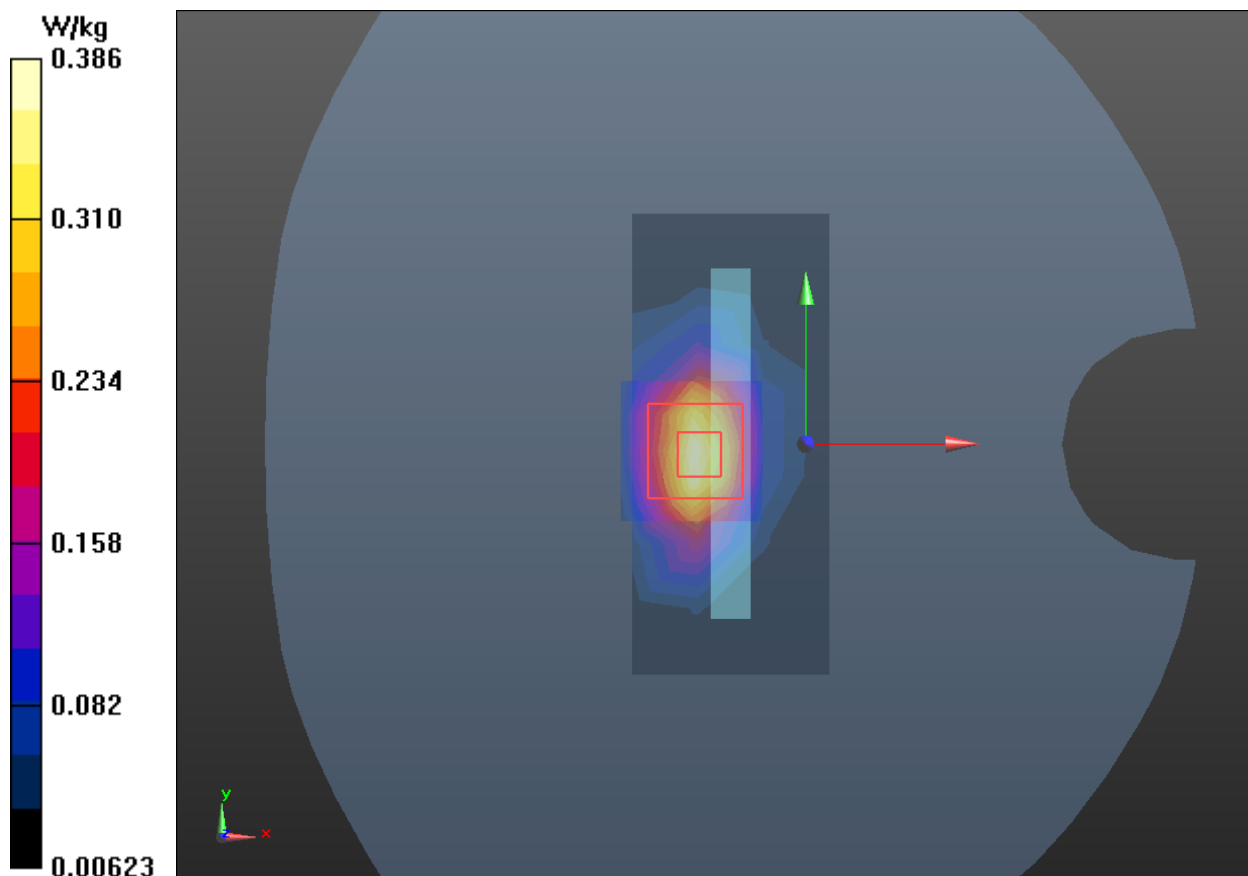
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.91 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 0.610 W/kg

SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.183 W/kg

Maximum value of SAR (measured) = 0.386 W/kg



Plot 31 UMTS Band IV Bottom Edge Middle (Main-Antenna, Distance 0mm)

Date: 1/12/2021

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1732.6$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 39.365$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 2.67 W/kg

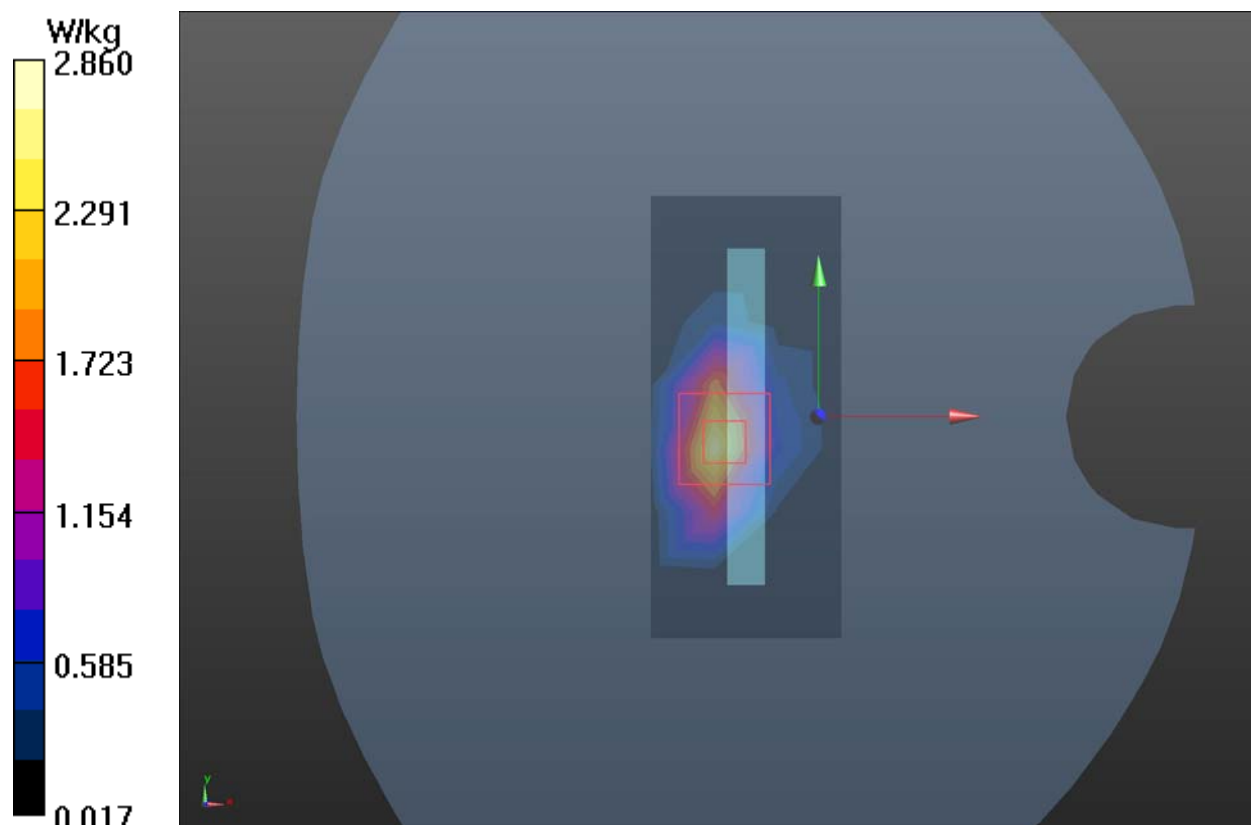
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 39.37 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 5.35 W/kg

SAR(1 g) = 2.44 W/kg; SAR(10 g) = 1.08 W/kg

Maximum value of SAR (measured) = 2.86 W/kg



Plot 32 UMTS Band V Left Cheek Middle (Main-Antenna)

Date: 1/4/2021

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left 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)

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

Maximum value of SAR (measured) = 0.083 W/kg

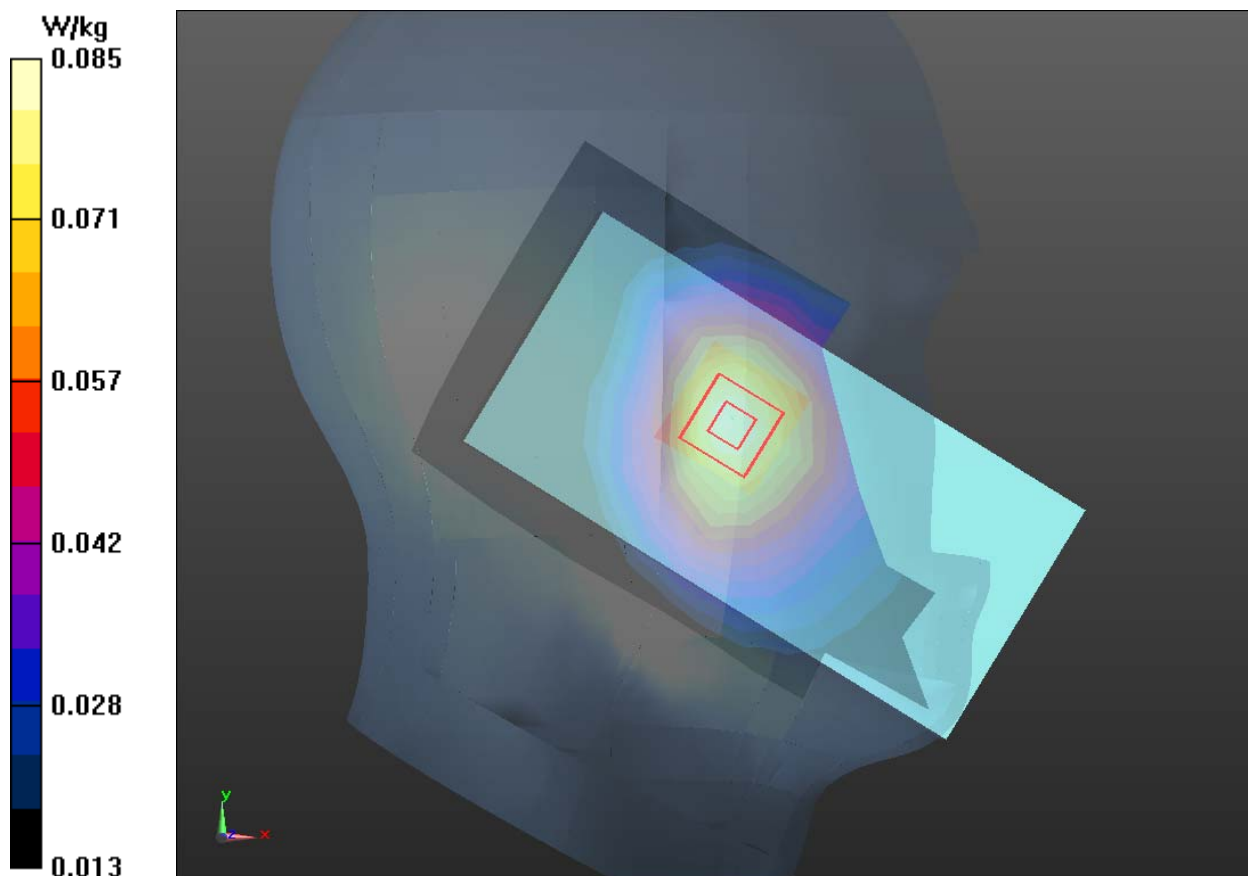
Left Cheek Middle /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.637 V/m; Power Drift = 0.188 dB

Peak SAR (extrapolated) = 0.099 W/kg

SAR(1 g) = 0.082 W/kg; SAR(10 g) = 0.063 W/kg

Maximum value of SAR (measured) = 0.085 W/kg



Plot 33 UMTS Band V Back Side Middle (Main-Antenna, Distance 15mm)

Date: 1/4/2021

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.121 W/kg

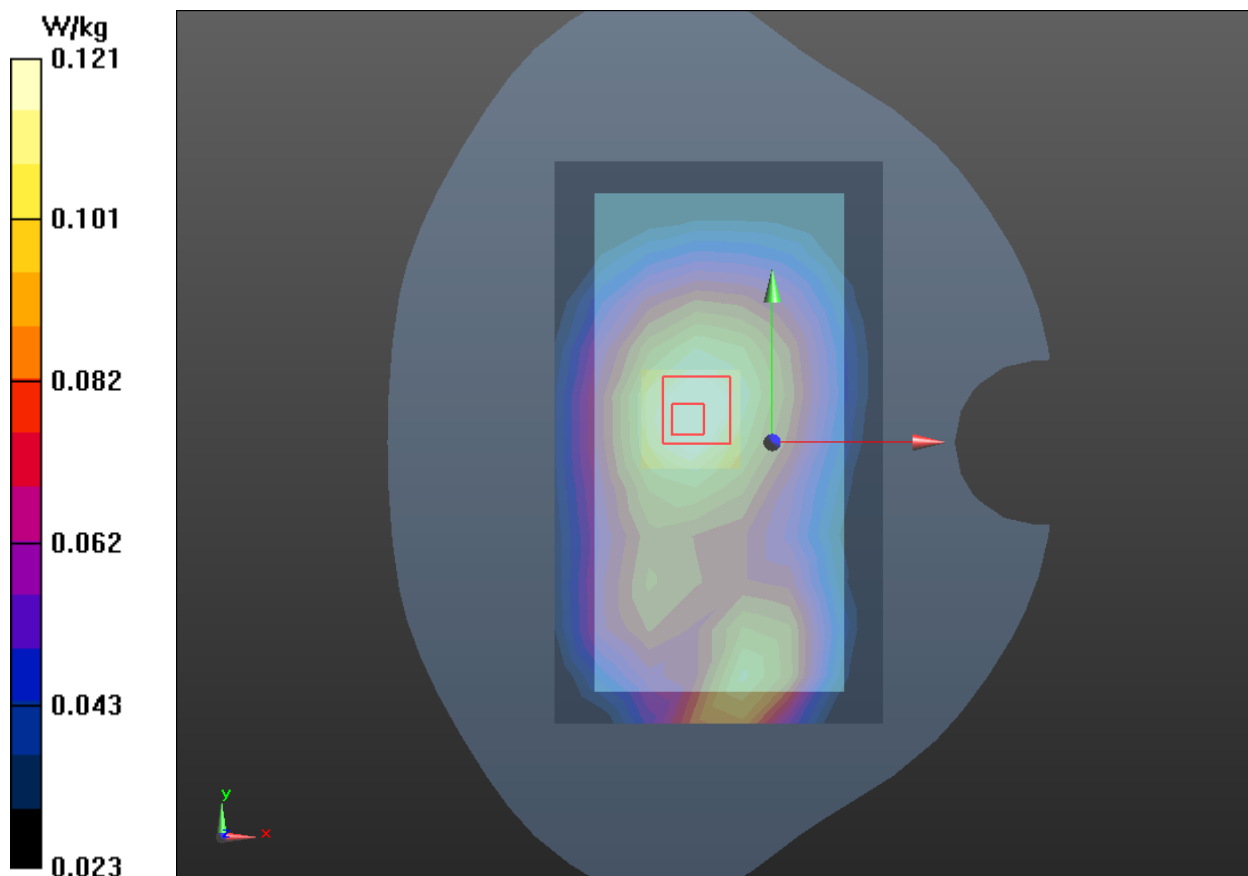
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.06 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.121 W/kg



Plot 34 UMTS Band V Back Side Middle (Main-Antenna, Distance 10mm)

Date: 1/4/2021

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.198 W/kg

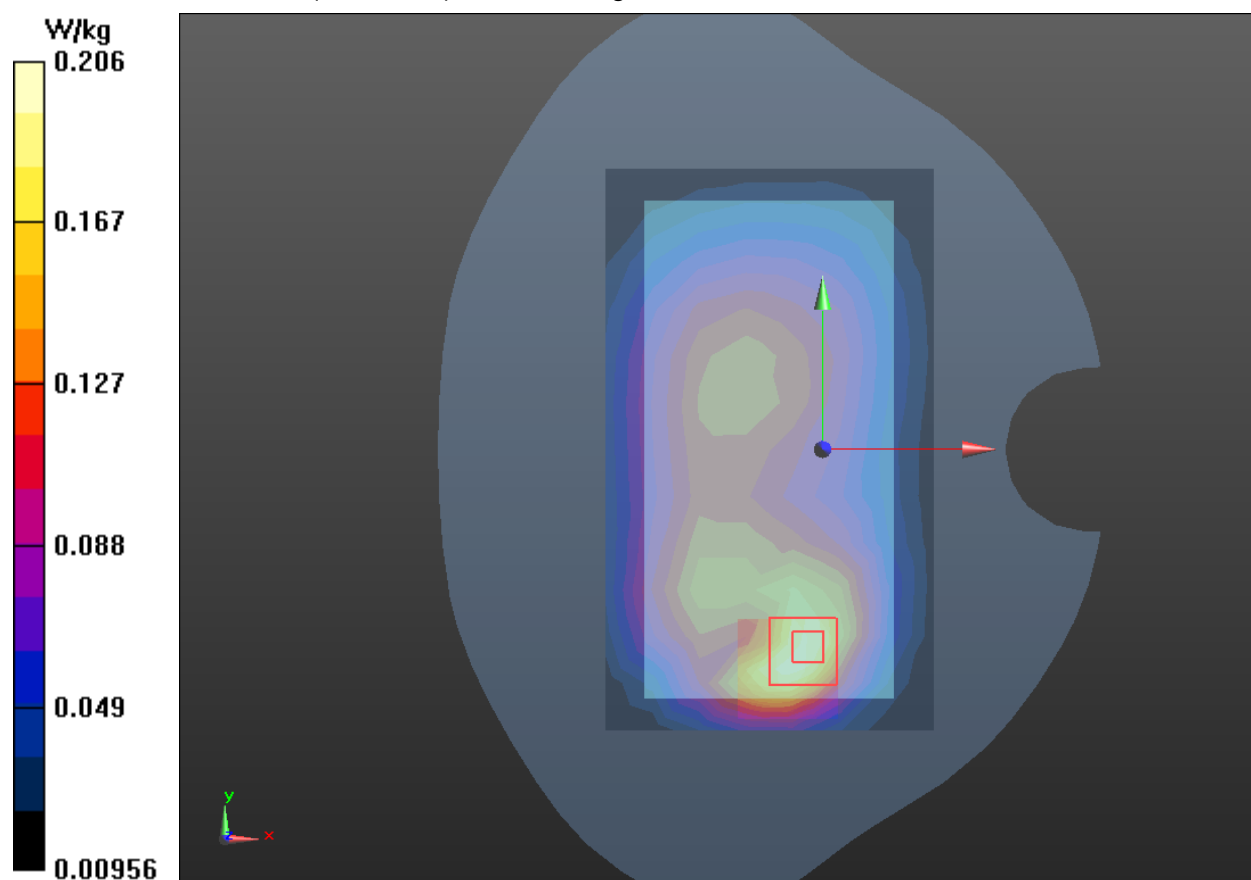
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.14 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.115 W/kg

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



Plot 35 LTE Band 2 1RB Left Cheek Middle (Main-Antenna)

Date: 12/21/2020

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left 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 Cheek Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.106 W/kg

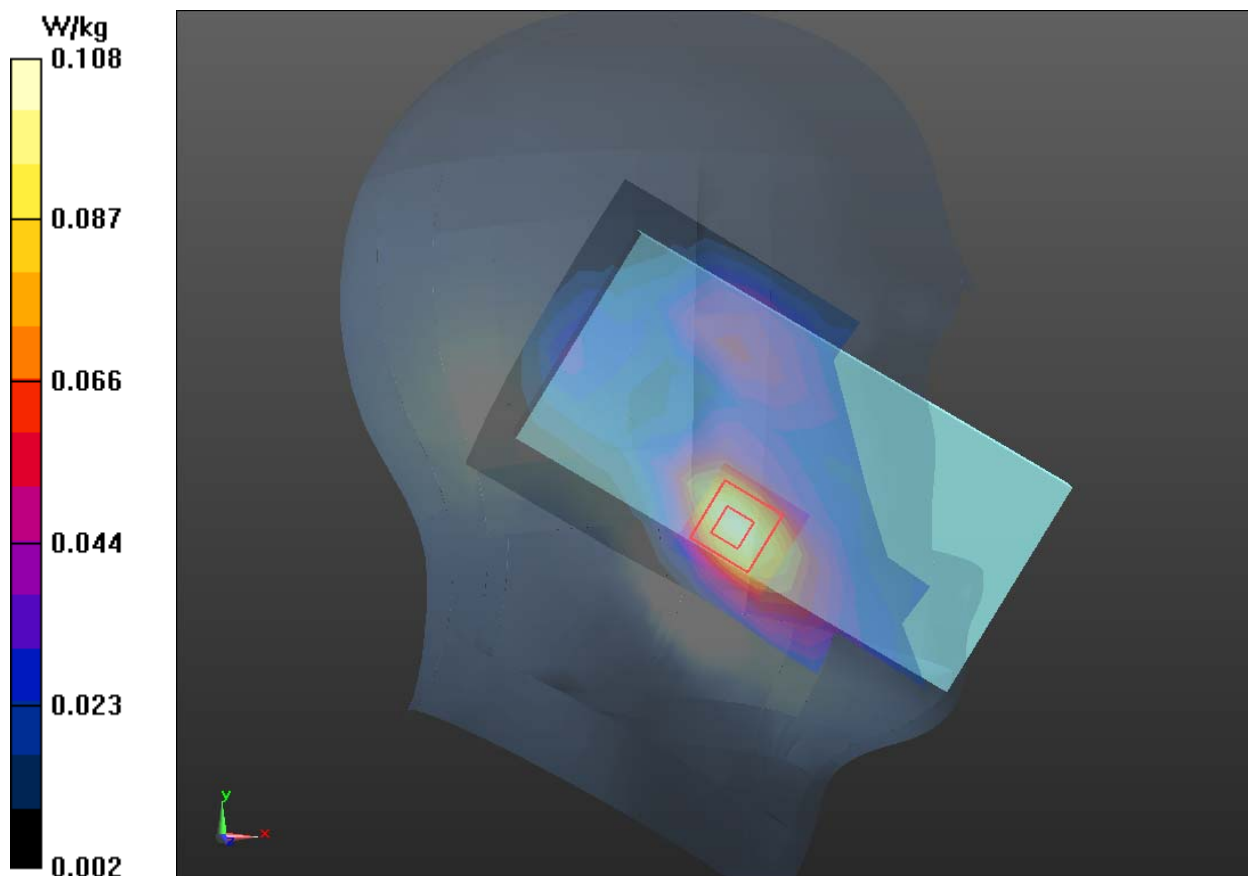
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.041 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.188 W/kg

SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.054 W/kg

Maximum value of SAR (measured) = 0.108 W/kg



Plot 36 LTE Band 2 50%RB Back Side Middle (Main-Antenna, Distance 15mm)

Date: 12/21/2020

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.585 W/kg

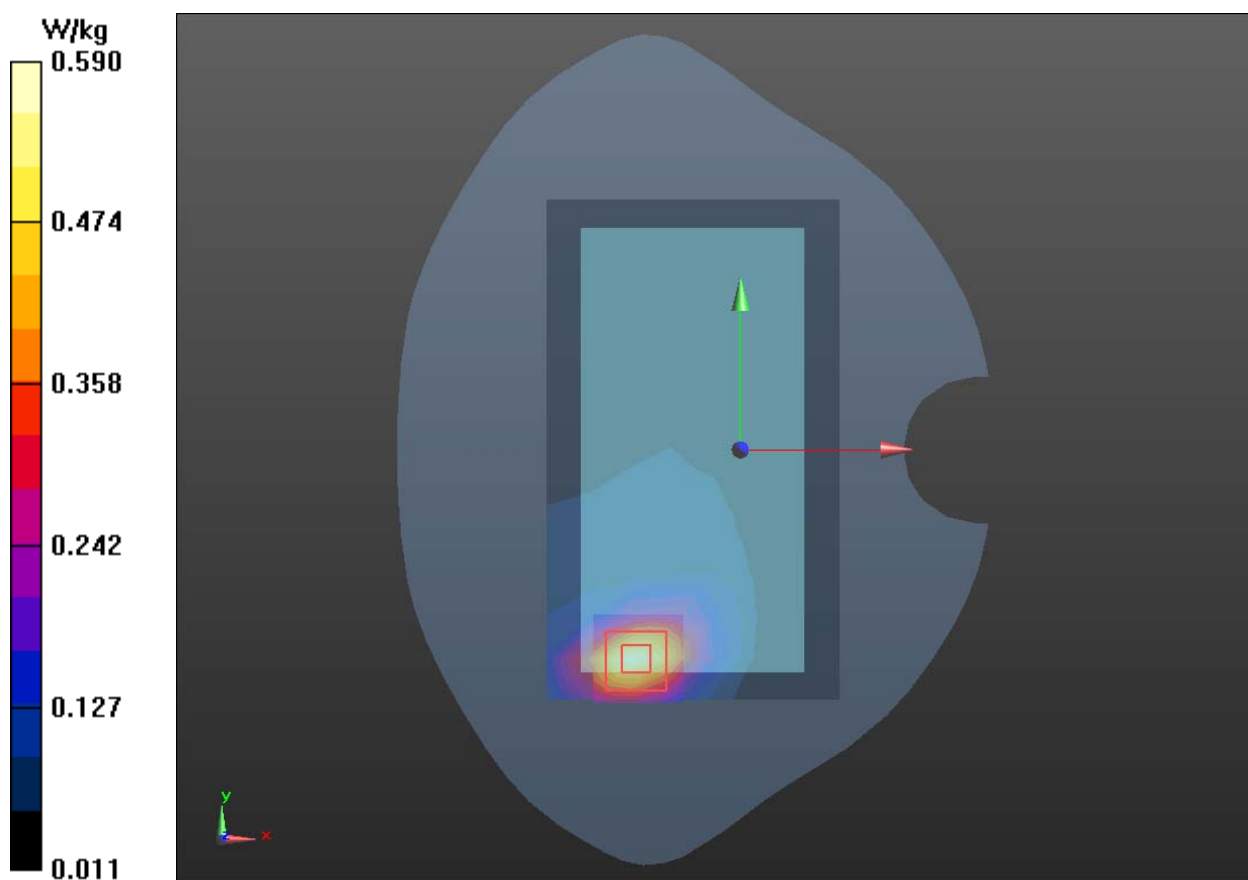
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.067 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.892 W/kg

SAR(1 g) = 0.532 W/kg; SAR(10 g) = 0.296 W/kg

Maximum value of SAR (measured) = 0.590 W/kg



Plot 37 LTE Band 2 50%RB Bottom Edge High (Main-Antenna, Distance 10mm)

Date: 12/21/2020

Communication System: UID 0, LTE (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.434$ S/m; $\epsilon_r = 38.861$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.496 W/kg

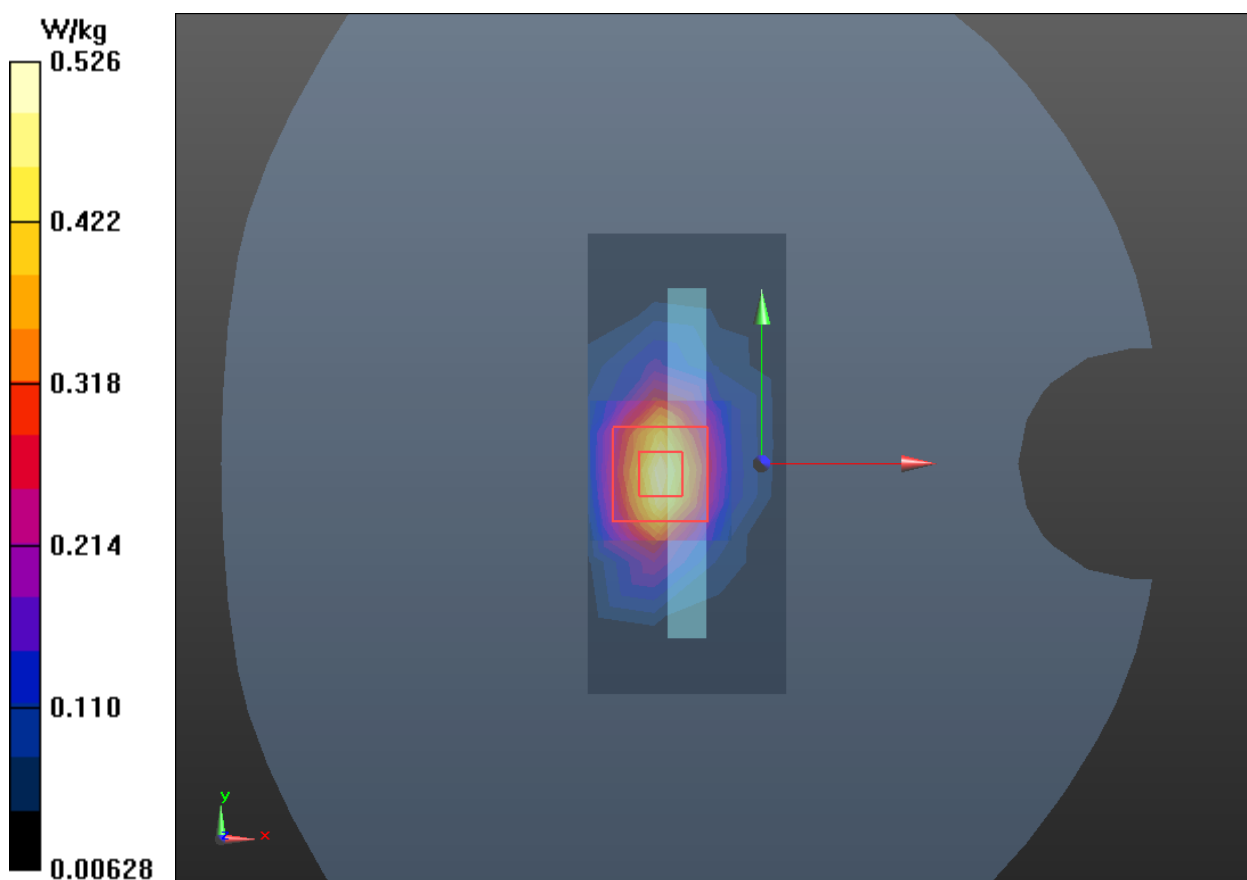
Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.39 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.850 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 0.526 W/kg



Plot 38 LTE Band 2 50%RB Bottom Edge Middle (Main-Antenna, Distance 0mm)

Date: 12/21/2020

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 2.52 W/kg

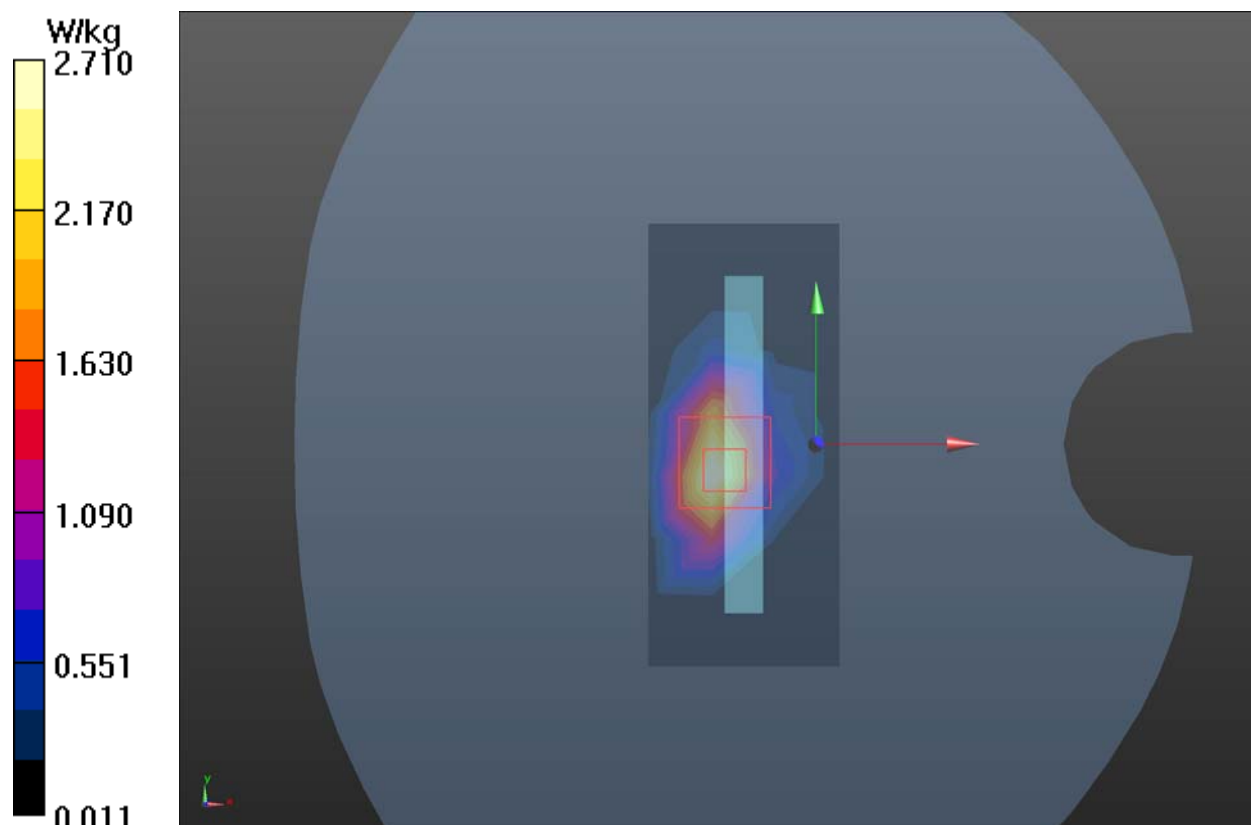
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 39.44 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 5.92 W/kg

SAR(1 g) = 2.410 W/kg; SAR(10 g) = 1.060 W/kg

Maximum value of SAR (measured) = 2.710 W/kg



Plot 39 LTE Band 4 1RB Right Cheek Middle (Main-Antenna)

Date: 1/12/2021

Communication System: UID 0, LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.313$ S/m; $\epsilon_r = 39.384$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.078 W/kg

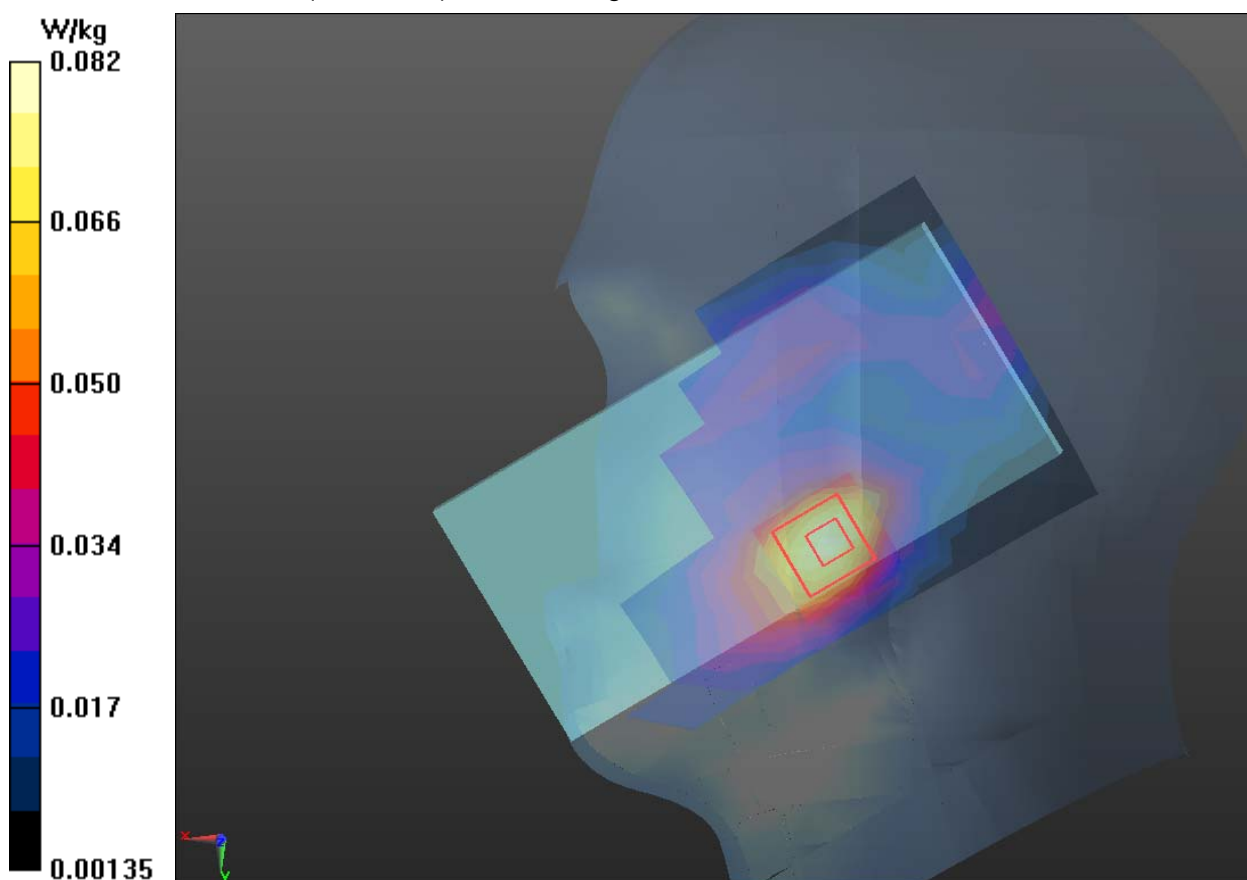
Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.812 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.113 W/kg

SAR(1 g) = 0.075 W/kg; SAR(10 g) = 0.064 W/kg

Maximum value of SAR (measured) = 0.082 W/kg



Plot 40 LTE Band 4 50%RB Back Side Middle (Main-Antenna, Distance 15mm)

Date: 1/12/2021

Communication System: UID 0, LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.313$ S/m; $\epsilon_r = 39.384$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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)

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

Maximum value of SAR (measured) = 0.418 W/kg

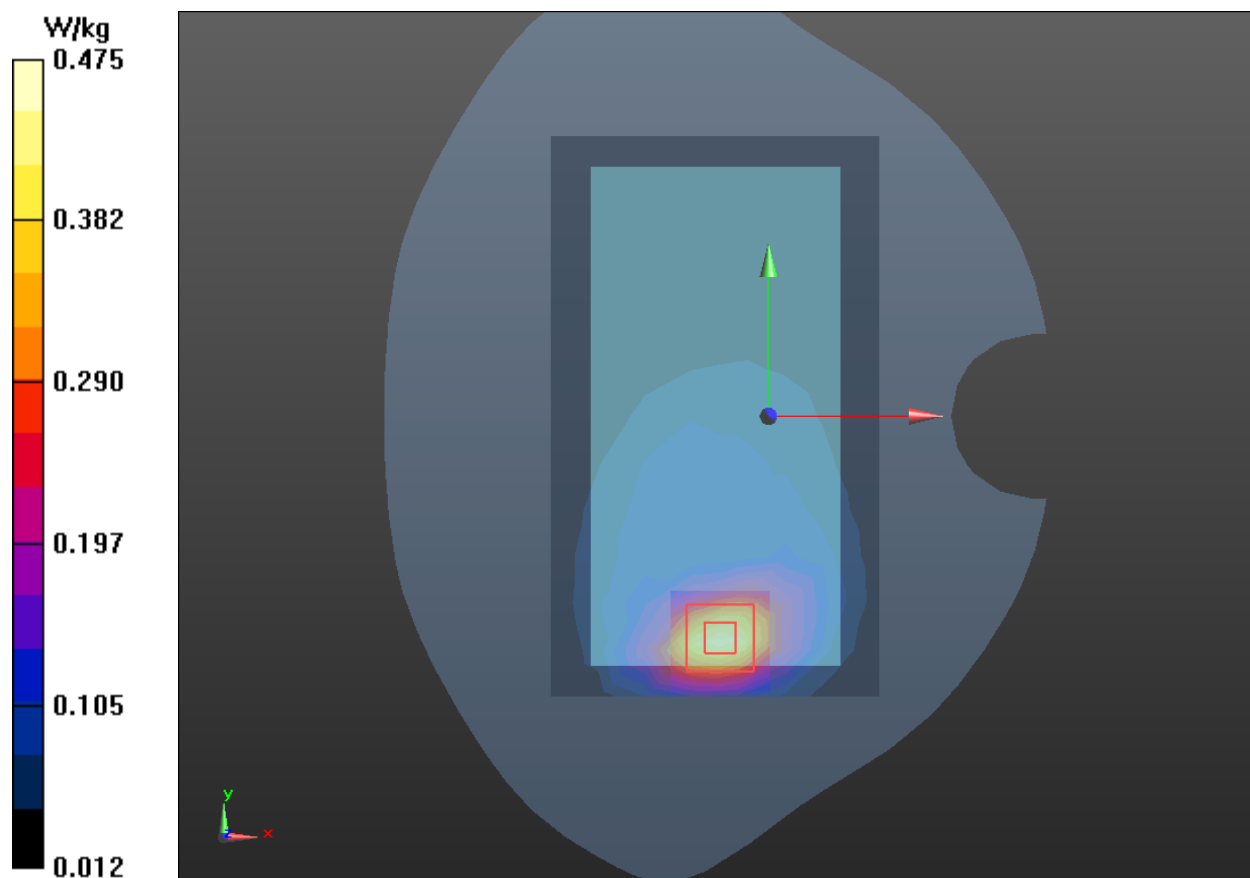
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.643 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.700 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.475 W/kg



Plot 41 LTE Band 4 50%RB Bottom Edge Middle (Main-Antenna, Distance 10mm)

Date: 1/12/2021

Communication System: UID 0, LTE (0); Frequency: 1732.5MHz;Duty Cycle: 1:1

Medium parameters used: $f = 1732.5\text{MHz}$; $\sigma = 1.323\text{ S/m}$; $\epsilon_r = 39.378$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

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) = 0.353 W/kg

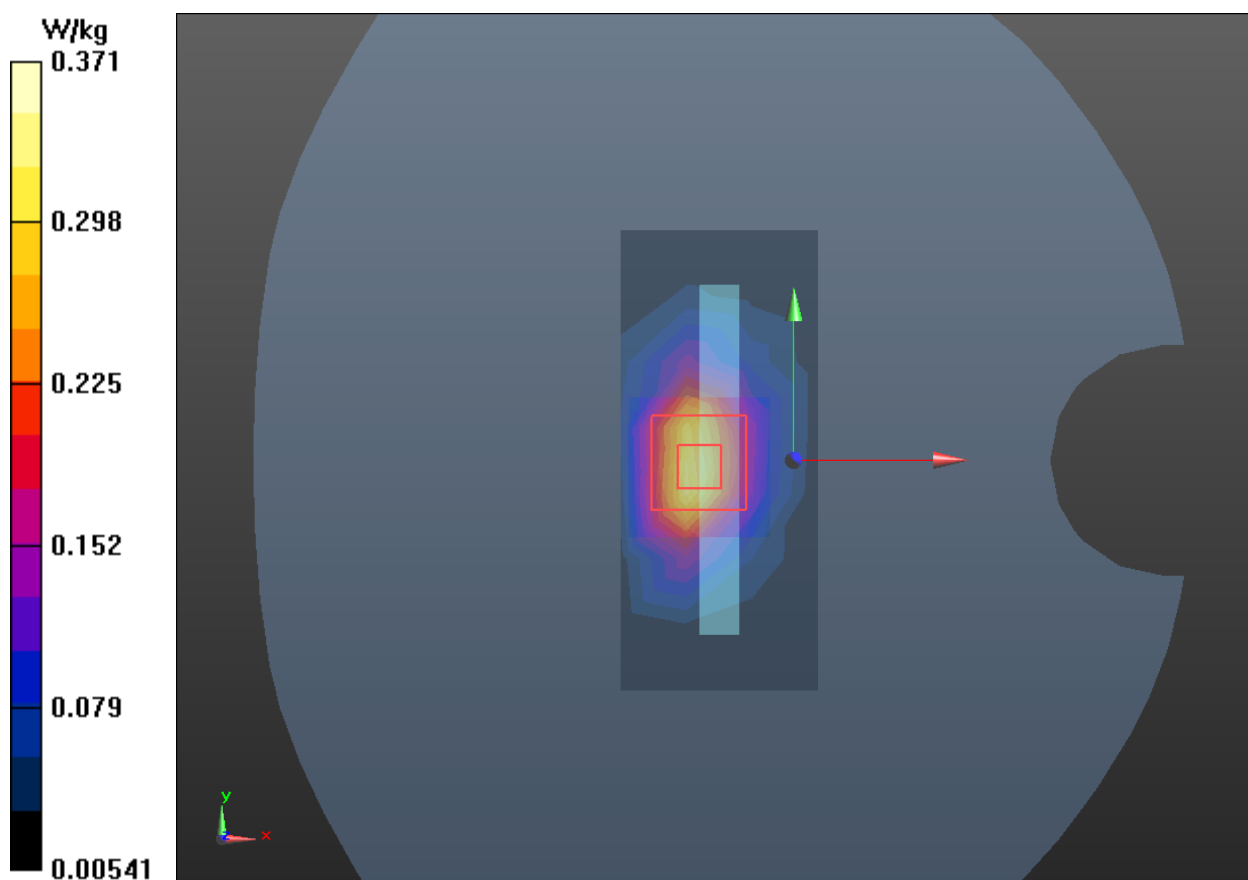
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.55 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.577 W/kg

SAR(1 g) = 0.312 W/kg; SAR(10 g) = 0.159 W/kg

Maximum value of SAR (measured) = 0.371 W/kg



Plot 42 LTE Band 4 1RB Bottom Edge High (Main-Antenna, Distance 0mm)

Date: 1/12/2021

Communication System: UID 0, LTE (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.323$ S/m; $\epsilon_r = 39.378$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 High/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

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

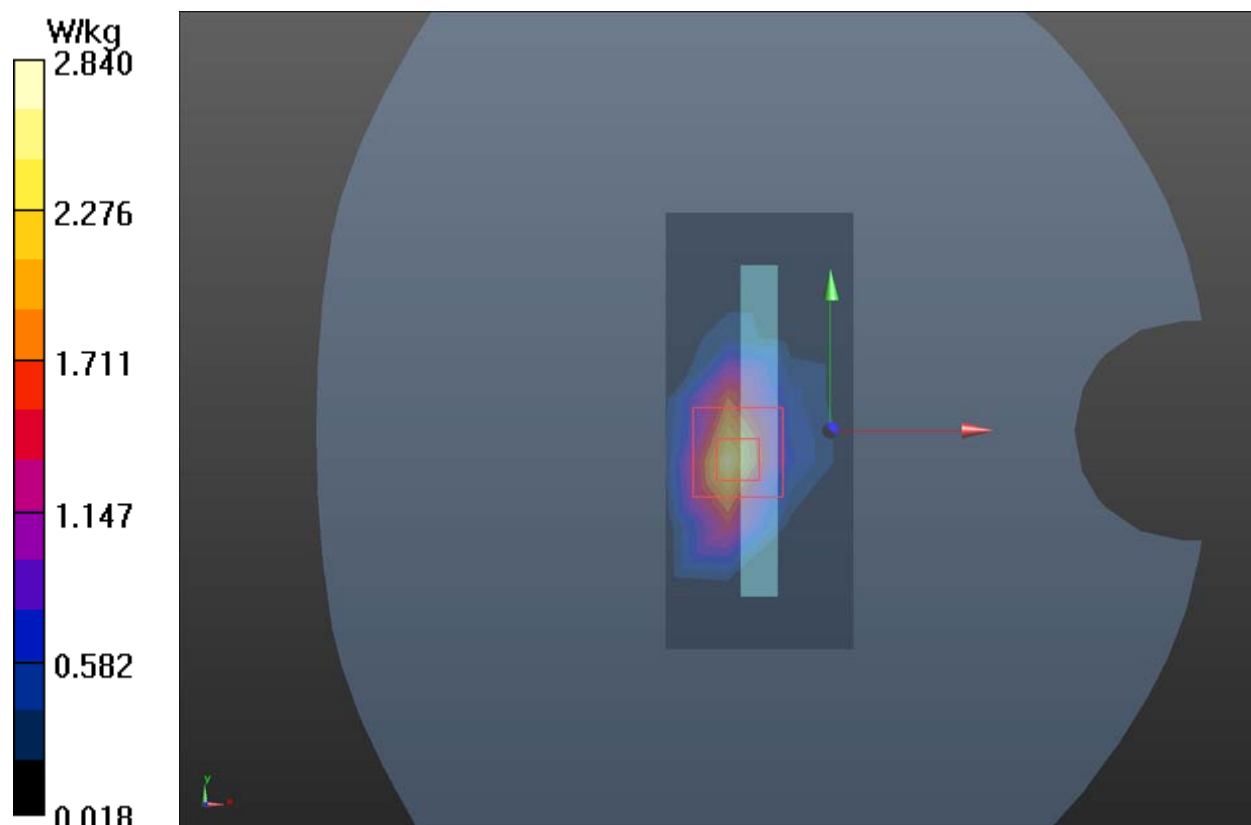
Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 38.80 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 5.29 W/kg

SAR(1 g) = 2.050 W/kg; SAR(10 g) = 0.853 W/kg

Maximum value of SAR (measured) = 2.84 W/kg



Plot 43 LTE Band 5 1RB Right Cheek Low (Main-Antenna)

Date: 1/4/2021

Communication System: UID 0, LTE (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.917 \text{ S/m}$; $\epsilon_r = 42.181$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

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 Low/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.120 W/kg

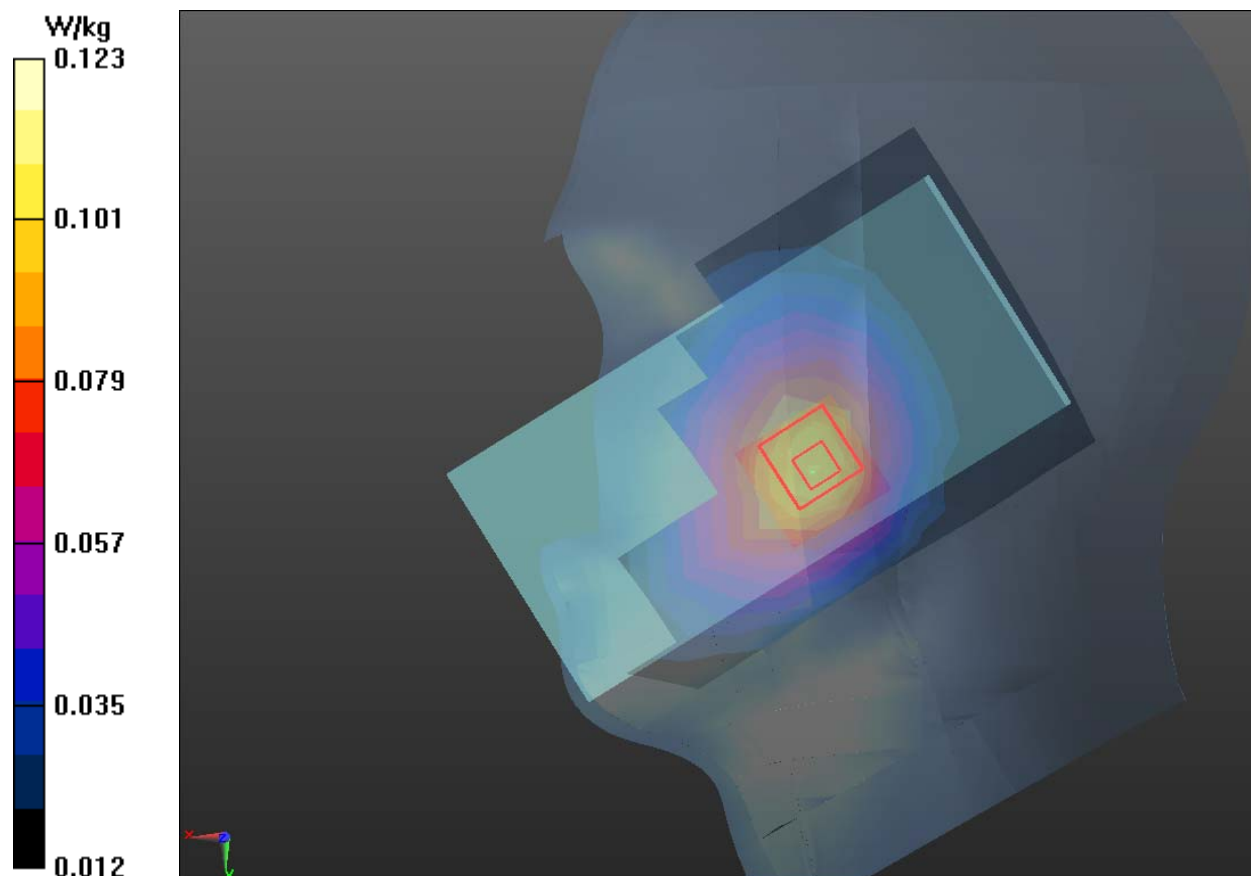
Right Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 1.638 V/m ; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.241 W/kg

SAR(1 g) = 0.114 W/kg ; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.123 W/kg



Plot 44 LTE Band 5 1RB Back Side Low (Main-Antenna, Distance 15mm)

Date: 1/4/2021

Communication System: UID 0, LTE (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.917 \text{ S/m}$; $\epsilon_r = 42.181$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

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 Low/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.151 W/kg

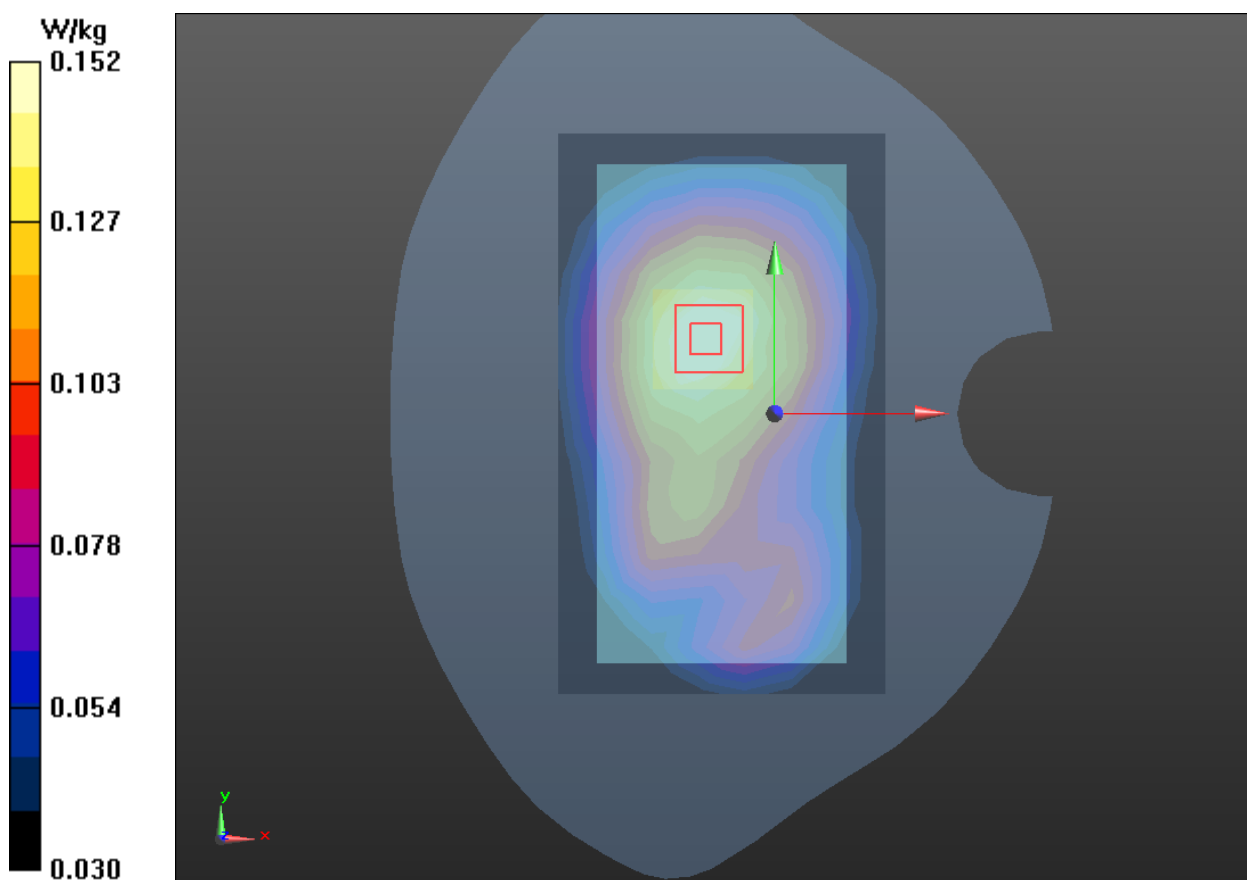
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.78 V/m ; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.278 W/kg

SAR(1 g) = 0.146 W/kg ; SAR(10 g) = 0.115 W/kg

Maximum value of SAR (measured) = 0.152 W/kg



Plot 45 LTE Band 5 1RB Back Side Low (Main-Antenna, Distance 10mm)

Date: 1/4/2021

Communication System: UID 0, LTE (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 829 \text{ MHz}$; $\sigma = 0.917 \text{ S/m}$; $\epsilon_r = 42.181$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3°C Liquid Temperature: 21.5°C

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 Low/Area Scan (8x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.235 W/kg

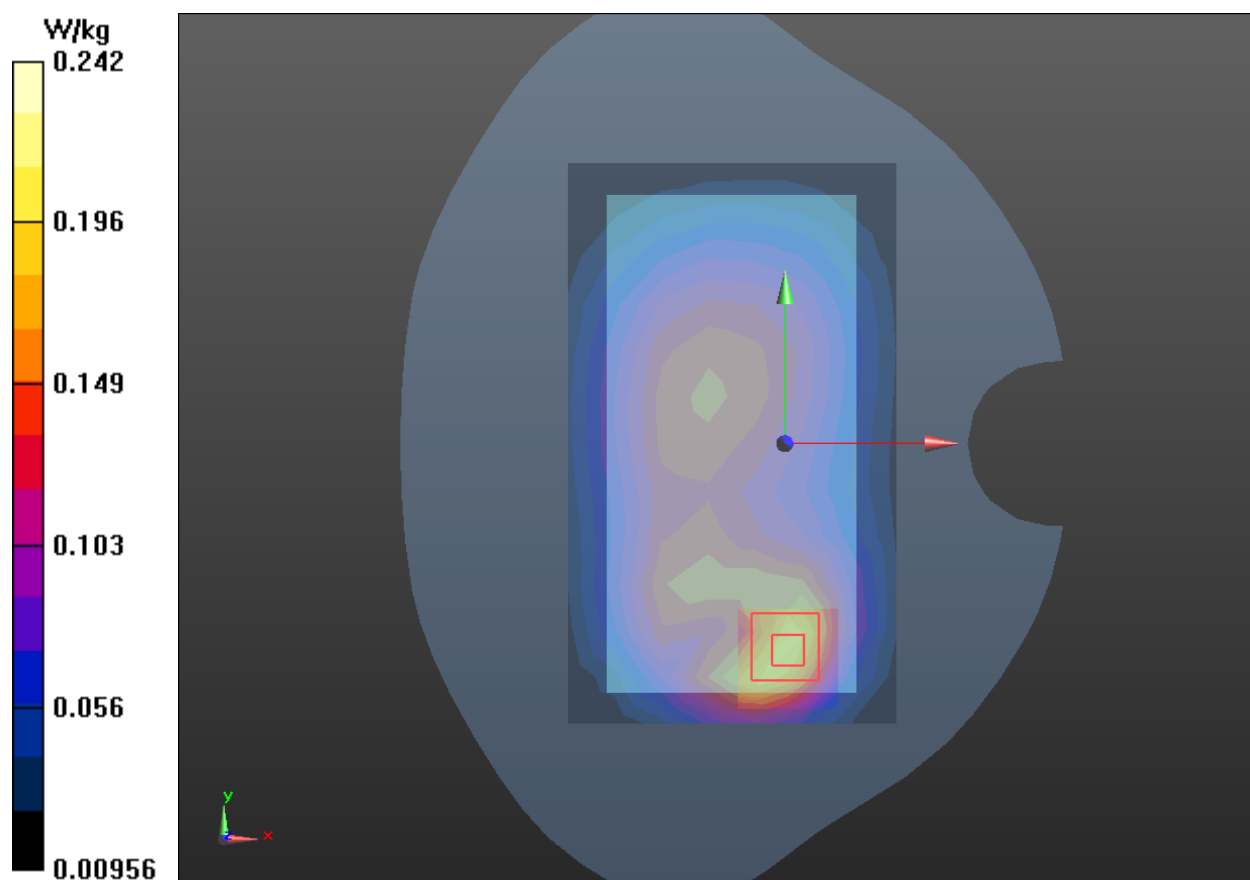
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.55 V/m ; Power Drift = -0.033 dB

Peak SAR (extrapolated) = 0.434 W/kg

SAR(1 g) = 0.228 W/kg ; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.242 W/kg



Plot 46 LTE Band 7 1RB Right Tilt High (Main-Antenna)

Date: 12/25/2020

Communication System: UID 0, LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.932$ S/m; $\epsilon_r = 38.175$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right 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)

Right Tilt High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.069 W/kg

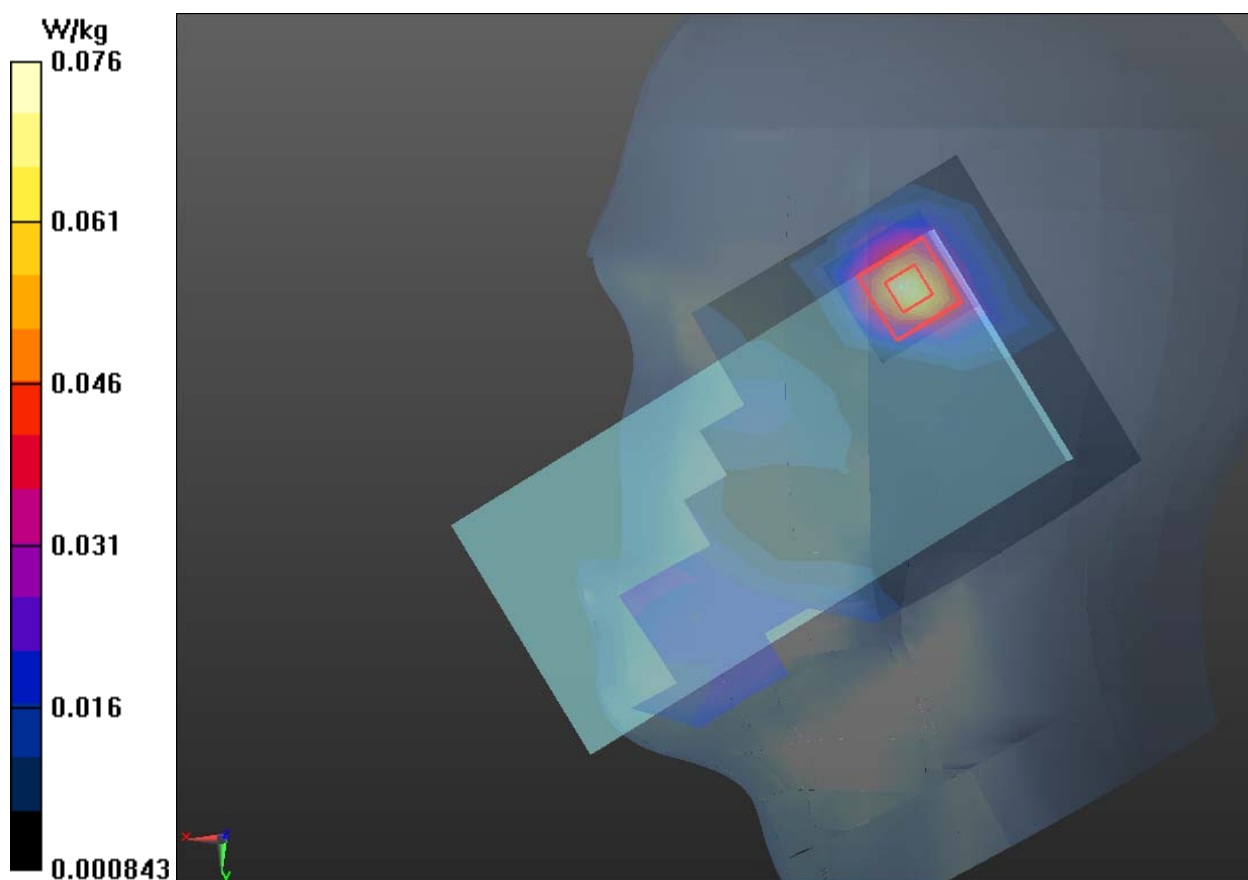
Right Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.789 V/m; Power Drift = 0.198 dB

Peak SAR (extrapolated) = 0.125 W/kg

SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.031 W/kg

Maximum value of SAR (measured) = 0.076 W/kg



Plot 47 LTE Band 7 50%RB Back Side Middle (Main-Antenna, Distance 15mm)

Date: 12/25/2020

Communication System: UID 0, LTE (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.905$ S/m; $\epsilon_r = 38.267$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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)

Back Side Middle/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.385 W/kg

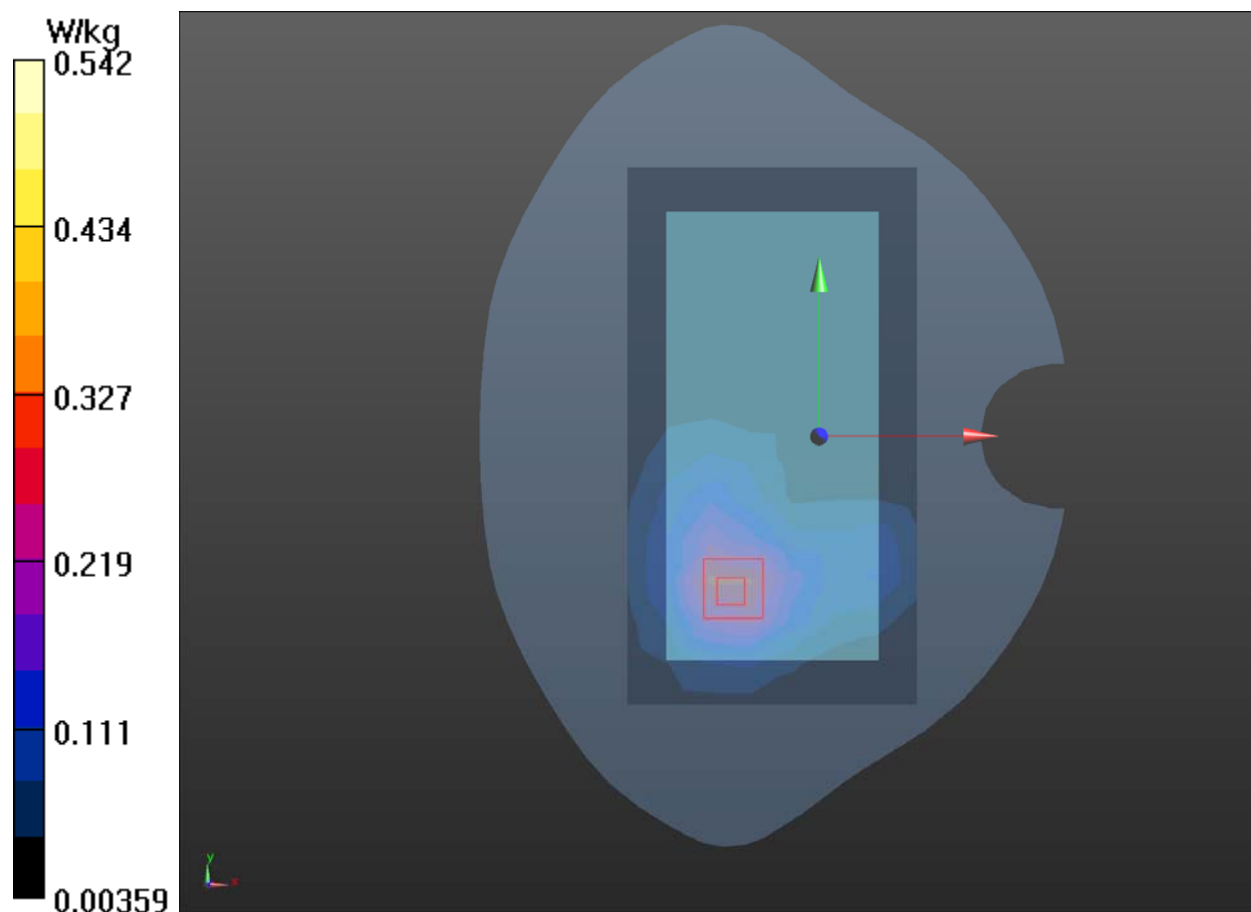
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.315 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.403 W/kg; SAR(10 g) = 0.227 W/kg

Maximum value of SAR (measured) = 0.542 W/kg



Plot 48 LTE Band 7 50%RB Bottom Edge High (Main-Antenna, Distance 10mm)

Date: 12/25/2020

Communication System: UID 0, LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.932$ S/m; $\epsilon_r = 38.175$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.671 W/kg

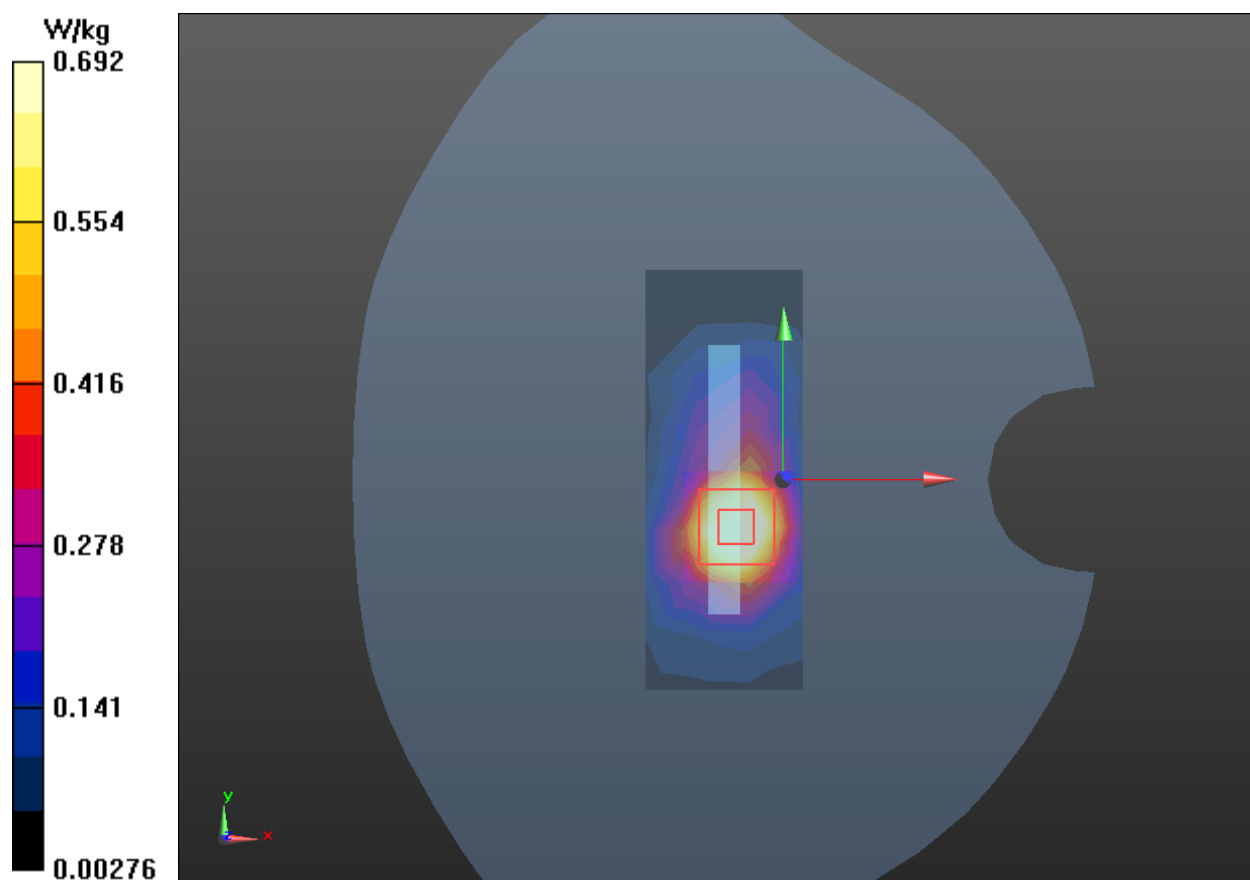
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.32 V/m; Power Drift = 0.160 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.668 W/kg; SAR(10 g) = 0.321 W/kg

Maximum value of SAR (measured) = 0.692 W/kg



Plot 49 LTE Band 7 50%RB Back Side High (Main-Antenna, Distance 0mm)

Date: 12/25/2020

Communication System: UID 0, LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.932$ S/m; $\epsilon_r = 38.175$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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)

Back Side High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 2.95 W/kg

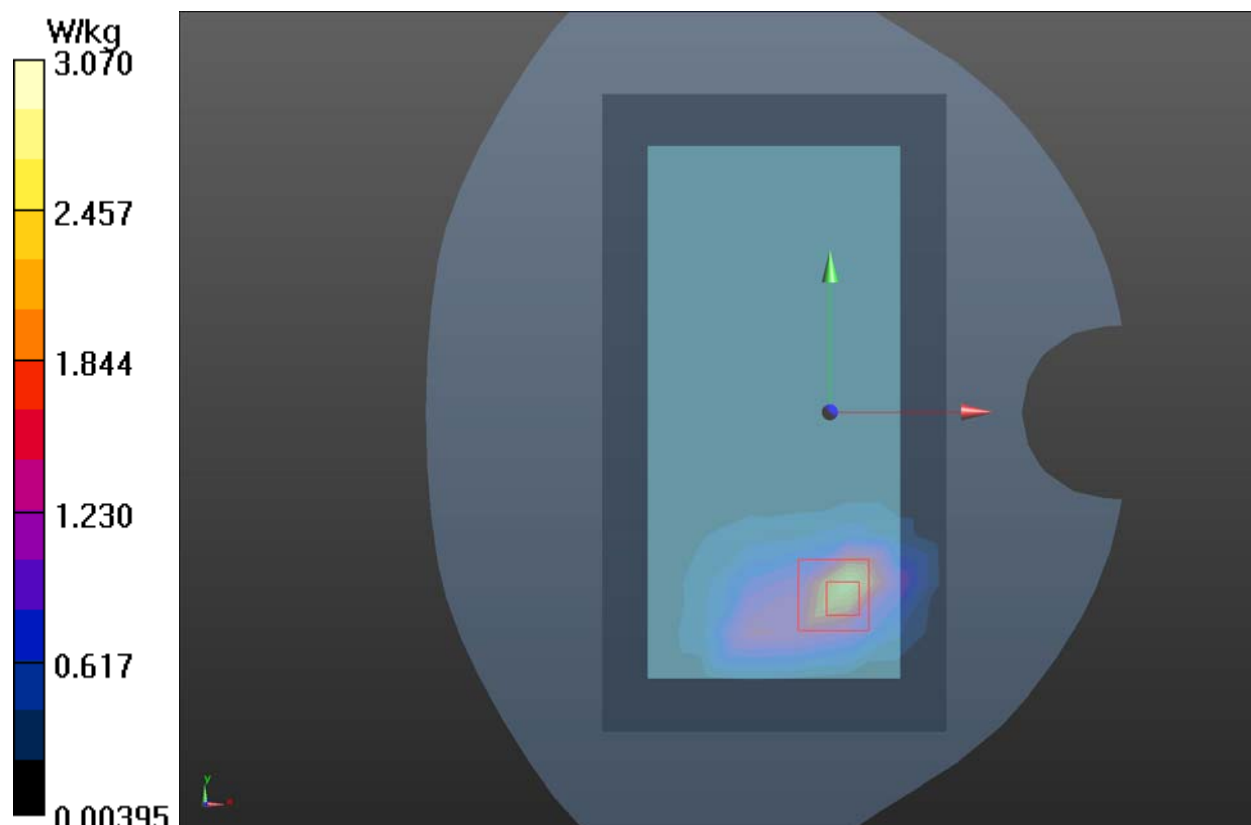
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.2510 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 6.68 W/kg

SAR(1 g) = 2.91 W/kg; SAR(10 g) = 1.09 W/kg

Maximum value of SAR (measured) = 3.07 W/kg



Plot 50 LTE Band 38 1RB Right Cheek High (Main-Antenna)

Date: 12/27/2020

Communication System: UID 0, LTE (0); Frequency: 2610 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2610$ MHz; $\sigma = 1.987$ S/m; $\epsilon_r = 37.993$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right 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)

Right Cheek High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.057 W/kg

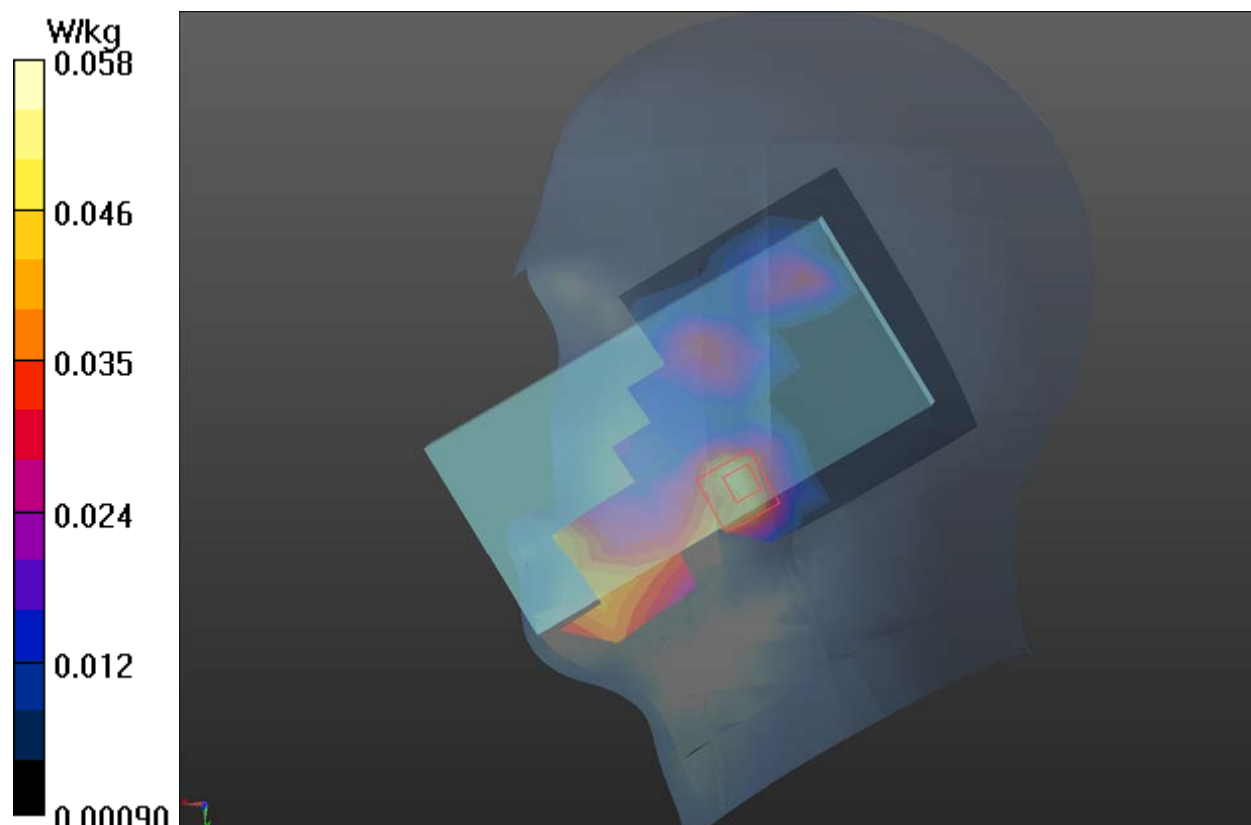
Right Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.6920 V/m; Power Drift = 0.065 dB

Peak SAR (extrapolated) = 0.119 W/kg

SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.058 W/kg



Plot 51 LTE Band 38 50%RB Back Side Middle (Main-Antenna, Distance 15mm)

Date: 12/27/2020

Communication System: UID 0, LTE (0); Frequency: 2595 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.973$ S/m; $\epsilon_r = 38.008$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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)

Back Side Middle/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.309 W/kg

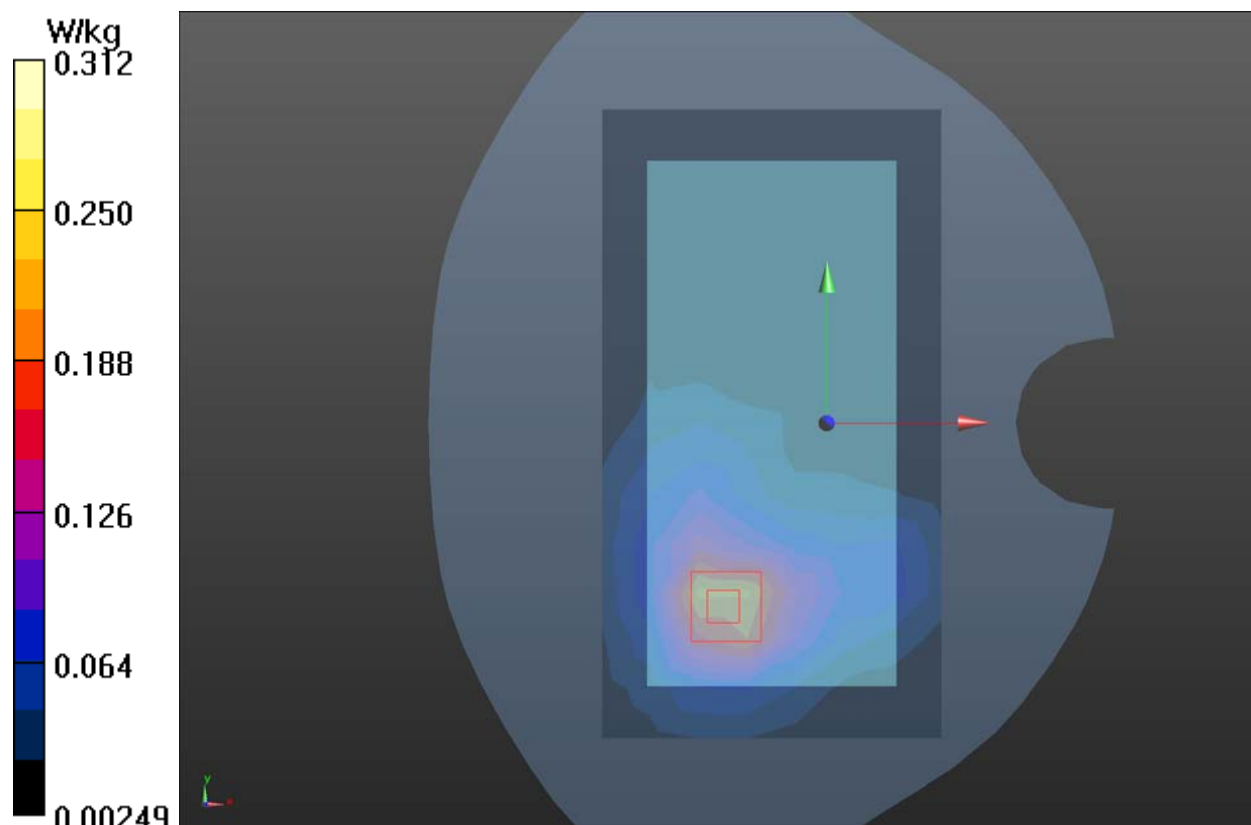
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.650 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.672 W/kg

SAR(1 g) = 0.310 W/kg; SAR(10 g) = 0.166 W/kg

Maximum value of SAR (measured) = 0.312 W/kg



Plot 52 LTE Band 38 50%RB Bottom Edge Low (Main-Antenna, Distance 10mm)

Date: 12/27/2020

Communication System: UID 0, LTE (0); Frequency: 2580 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2580$ MHz; $\sigma = 1.954$ S/m; $\epsilon_r = 38.099$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.623 W/kg

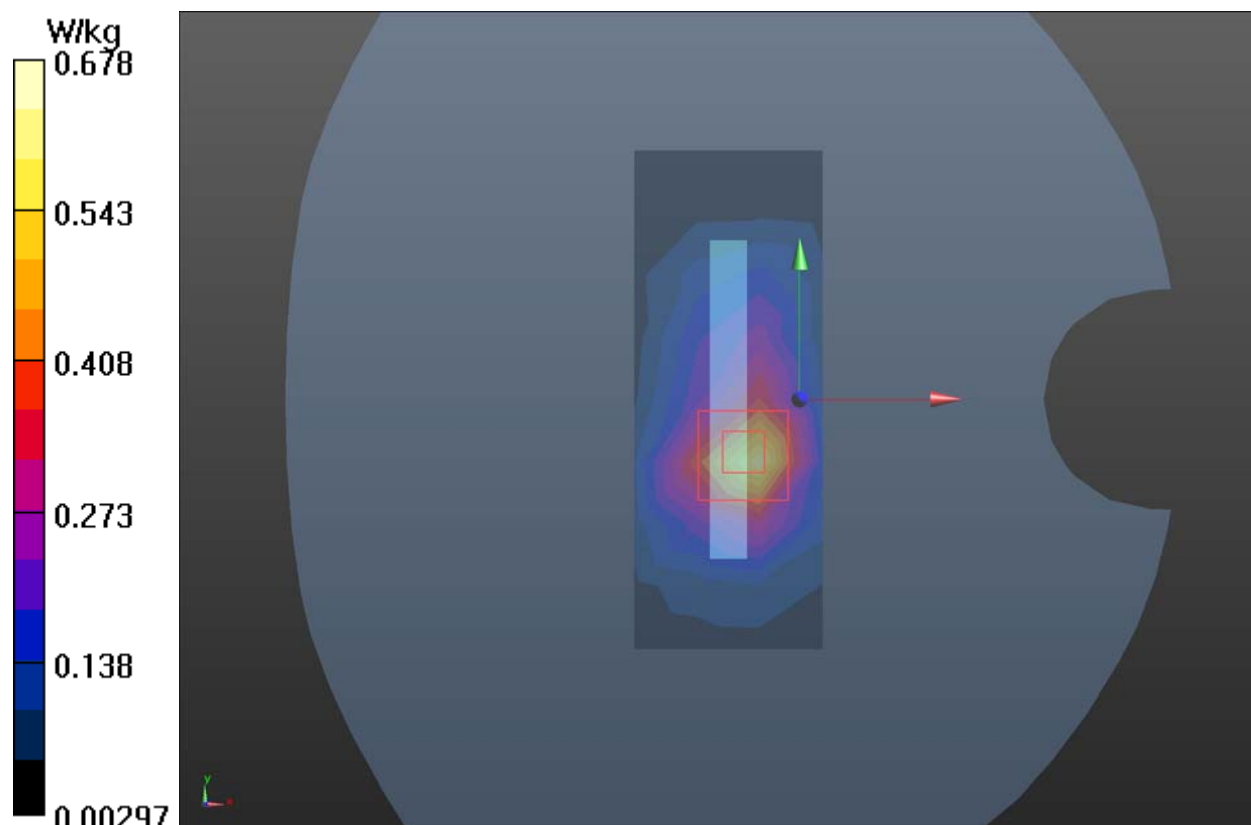
Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.02 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.608 W/kg; SAR(10 g) = 0.287 W/kg

Maximum value of SAR (measured) = 0.678 W/kg



Plot 53 LTE Band 38 50%RB Bottom Edge Low (Main-Antenna, Distance 0mm)

Date: 12/27/2020

Communication System: UID 0, LTE (0); Frequency: 2580 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2580$ MHz; $\sigma = 1.954$ S/m; $\epsilon_r = 38.099$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.71 W/kg

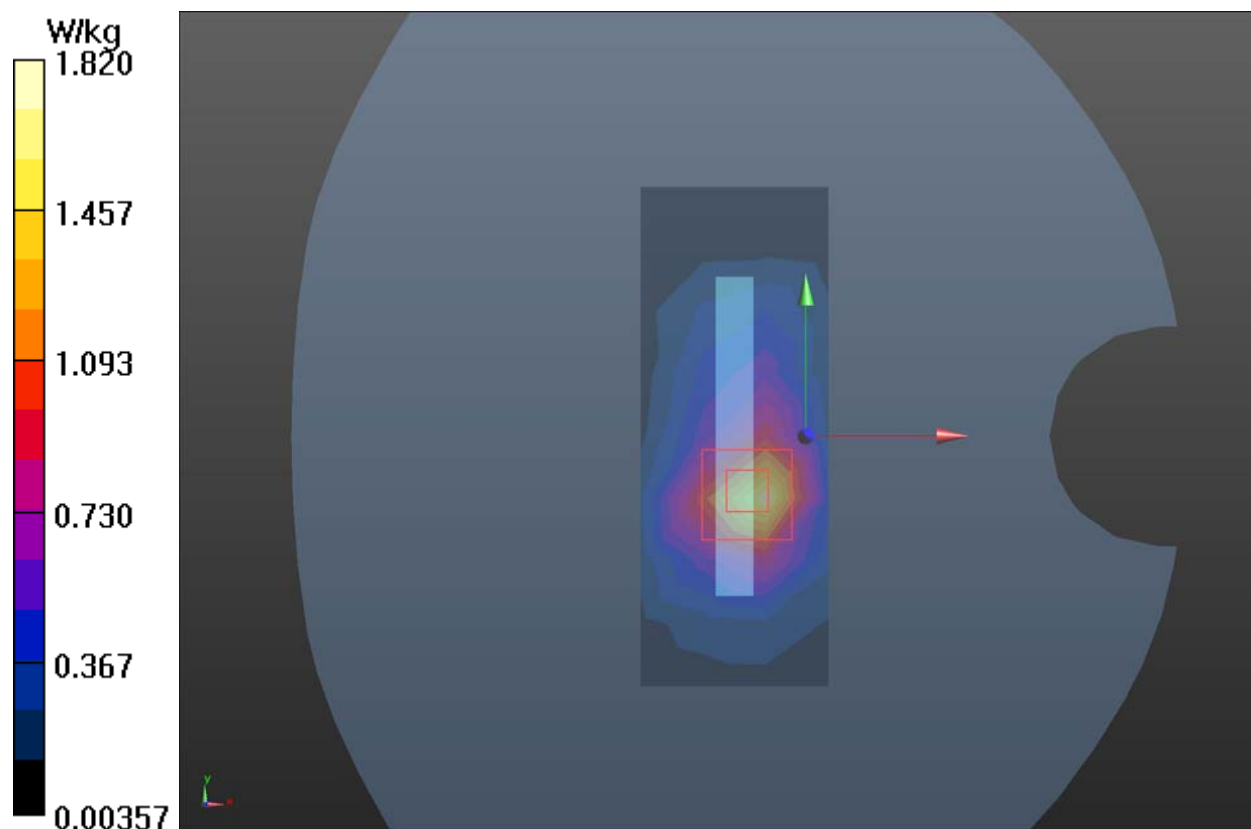
Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.51 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.81 W/kg

SAR(1 g) = 1.680 W/kg; SAR(10 g) = 0.610 W/kg

Maximum value of SAR (measured) = 1.820 W/kg



Plot 54 LTE Band 41 1RB Right Cheek Low (Main-Antenna)

Date: 12/28/2020

Communication System: UID 0, LTE (0); Frequency: 2545 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2545$ MHz; $\sigma = 1.908$ S/m; $\epsilon_r = 38.956$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right 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)

Right Cheek Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.058 W/kg

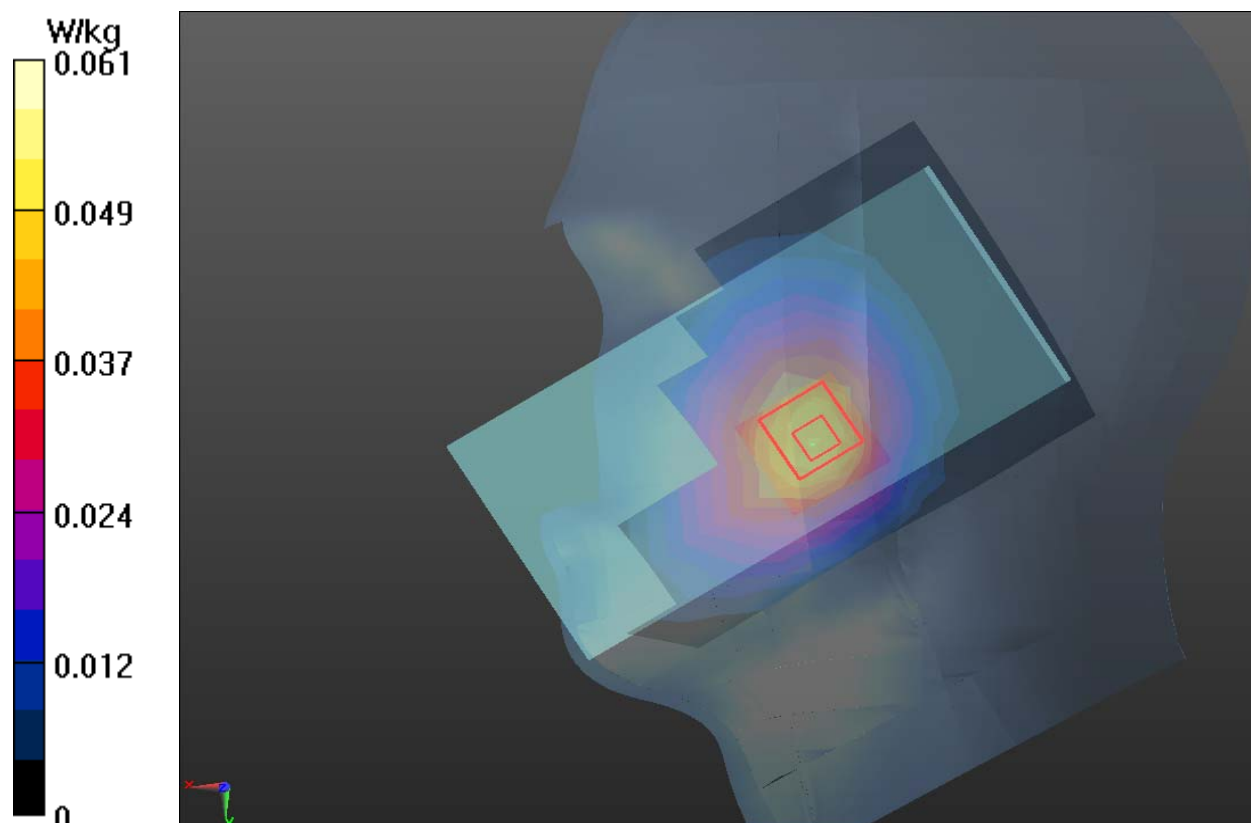
Right Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.520 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 0.125 W/kg

SAR(1 g) = 0.055 W/kg; SAR(10 g) = 0.030 W/kg

Maximum value of SAR (measured) = 0.061 W/kg



Plot 55 LTE Band 41 1RB Back Side High (Main-Antenna, Distance 15mm)

Date: 12/28/2020

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

Medium parameters used: $f = 2645$ MHz; $\sigma = 2.029$ S/m; $\epsilon_r = 38.715$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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)

Back Side High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.299 W/kg

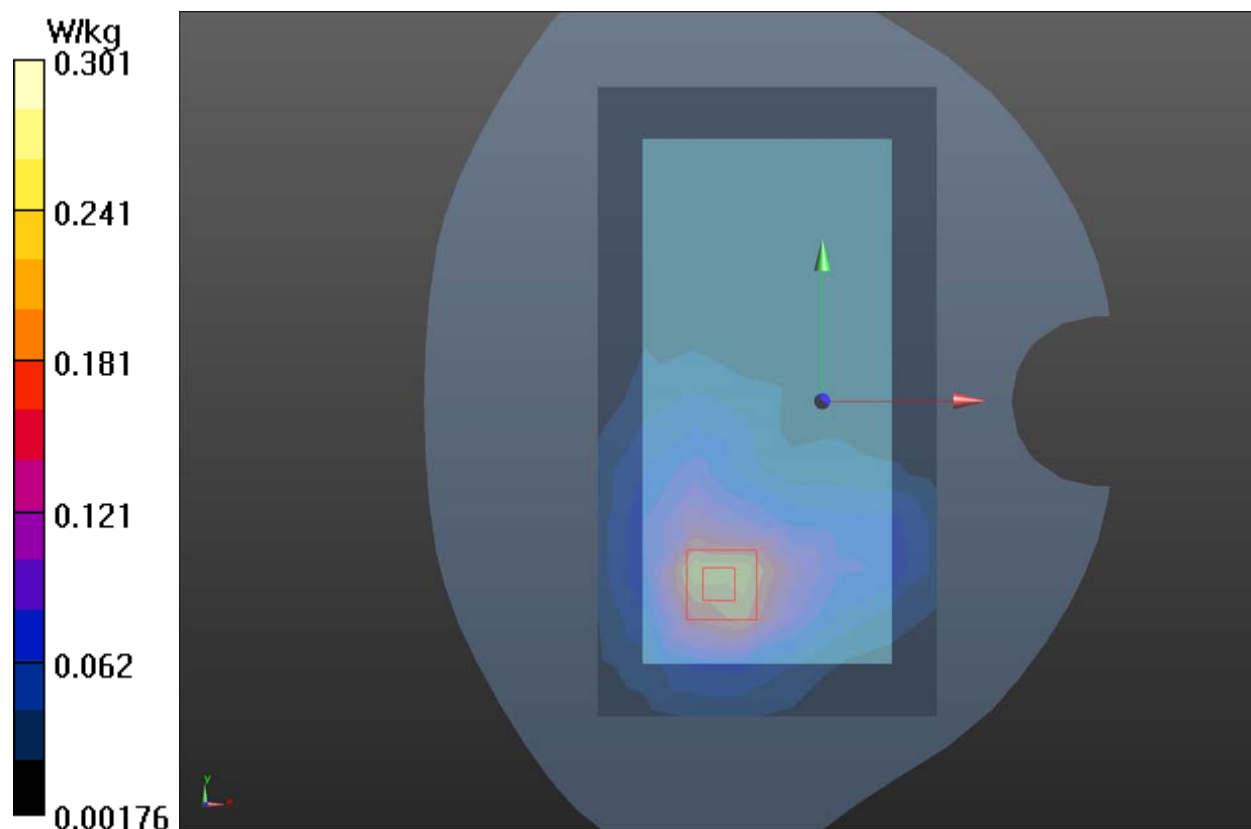
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.719 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.677 W/kg

SAR(1 g) = 0.288 W/kg; SAR(10 g) = 0.157 W/kg

Maximum value of SAR (measured) = 0.301 W/kg



Plot 56 LTE Band 41 50%RB Bottom Edge High (Main-Antenna, Distance 10mm)

Date: 12/28/2020

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

Medium parameters used: $f = 2645$ MHz; $\sigma = 2.029$ S/m; $\epsilon_r = 38.715$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.677 W/kg

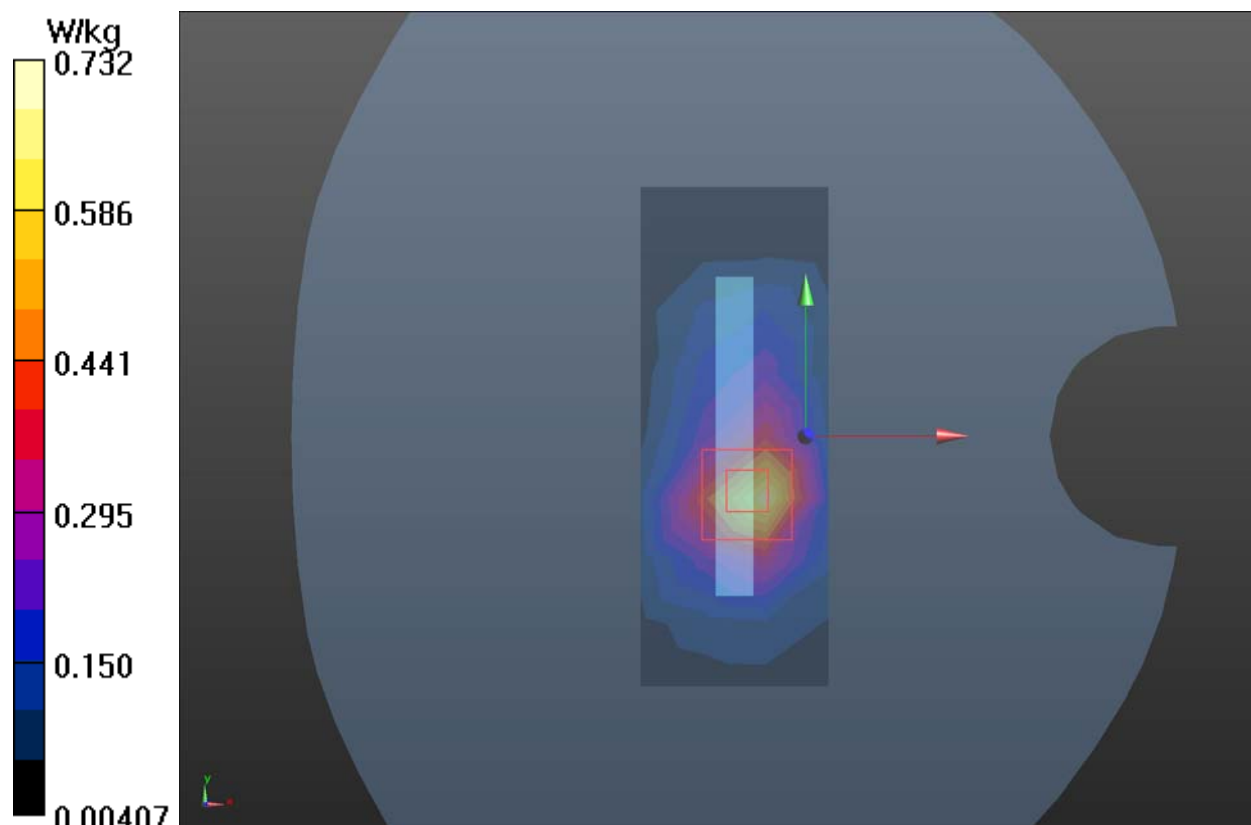
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.36 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.672 W/kg; SAR(10 g) = 0.330 W/kg

Maximum value of SAR (measured) = 0.732 W/kg



Plot 57 LTE Band 41 1RB Bottom Edge Middle (Main-Antenna, Distance 10mm)

Date: 12/28/2020

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

Medium parameters used: $f = 2645$ MHz; $\sigma = 2.028$ S/m; $\epsilon_r = 37.868$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (5x12x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.946 W/kg

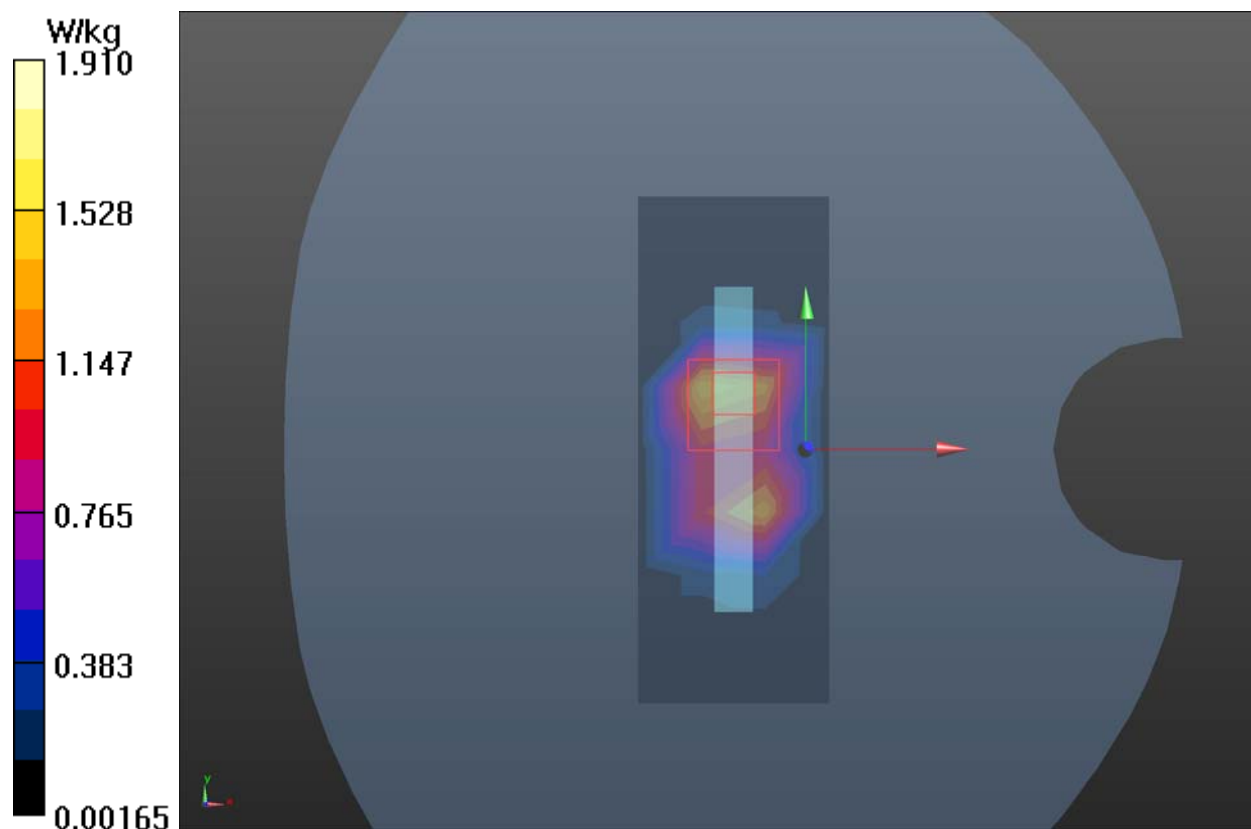
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.85 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 2.09 W/kg

SAR(1 g) = 1.67 W/kg; SAR(10 g) = 0.561 W/kg

Maximum value of SAR (measured) = 1.91 W/kg



Plot 58 GSM 850 Right Cheek Middle (Second-Antenna)

Date: 1/5/2021

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.530 W/kg

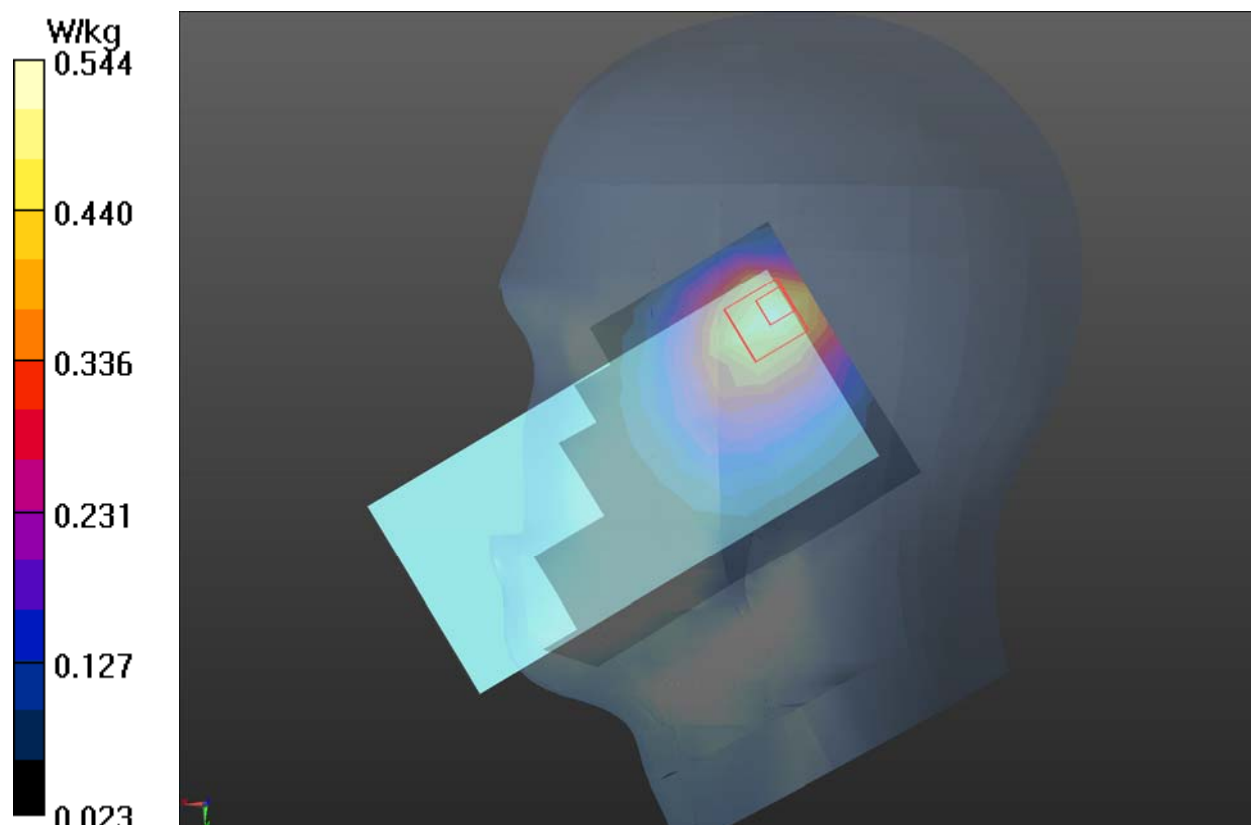
Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.56 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.932 W/kg

SAR(1 g) = 0.518 W/kg; SAR(10 g) = 0.318 W/kg

Maximum value of SAR (measured) = 0.544 W/kg



Plot 59 GSM 850 Back Side Middle (Second-Antenna, Distance 15mm)

Date: 1/5/2021

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.201$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.136 W/kg

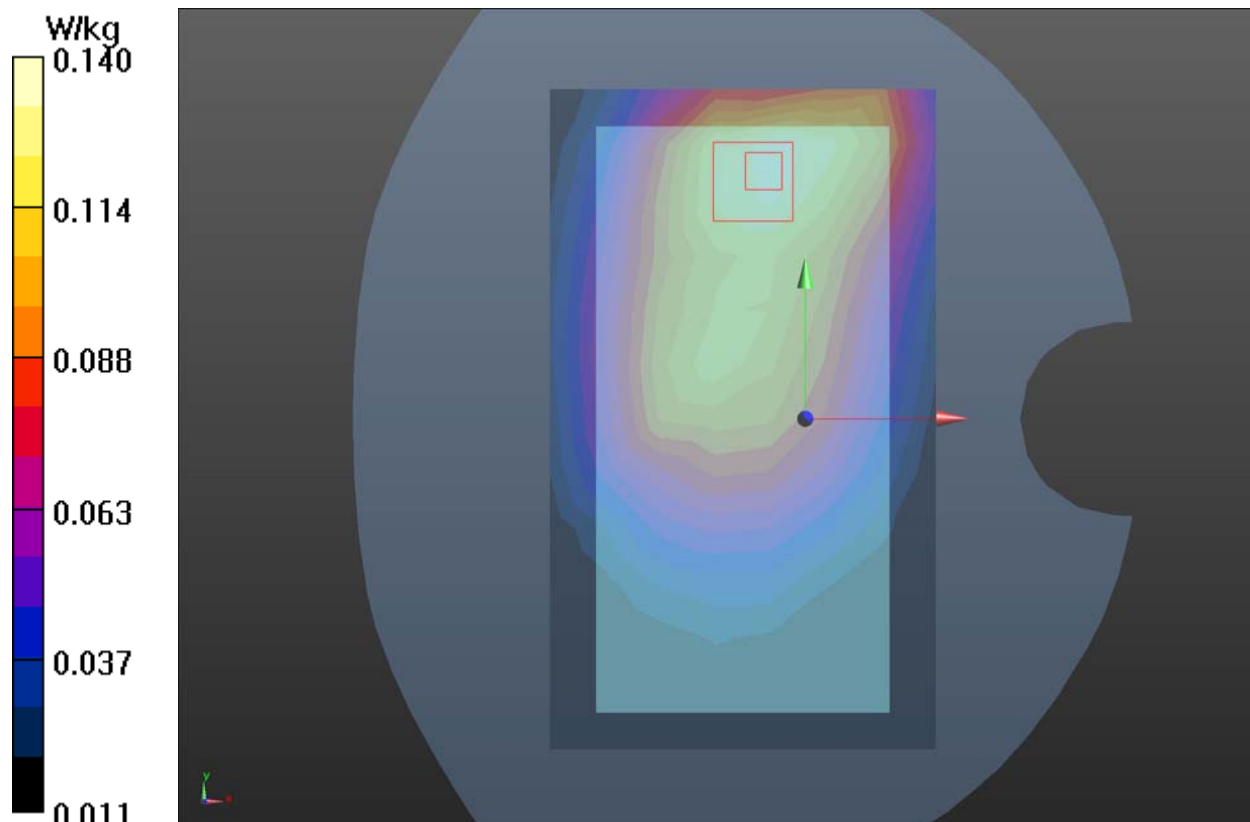
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.67 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.283 W/kg

SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.097 W/kg

Maximum value of SAR (measured) = 0.140 W/kg



Plot 60 GSM 850 GPRS (4Txslots) Back Side Middle (Second-Antenna, Distance 10mm)

Date: 1/5/2021

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

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.201$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: $22.3 \text{ }^\circ\text{C}$ Liquid Temperature: $21.5 \text{ }^\circ\text{C}$

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: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.161 W/kg

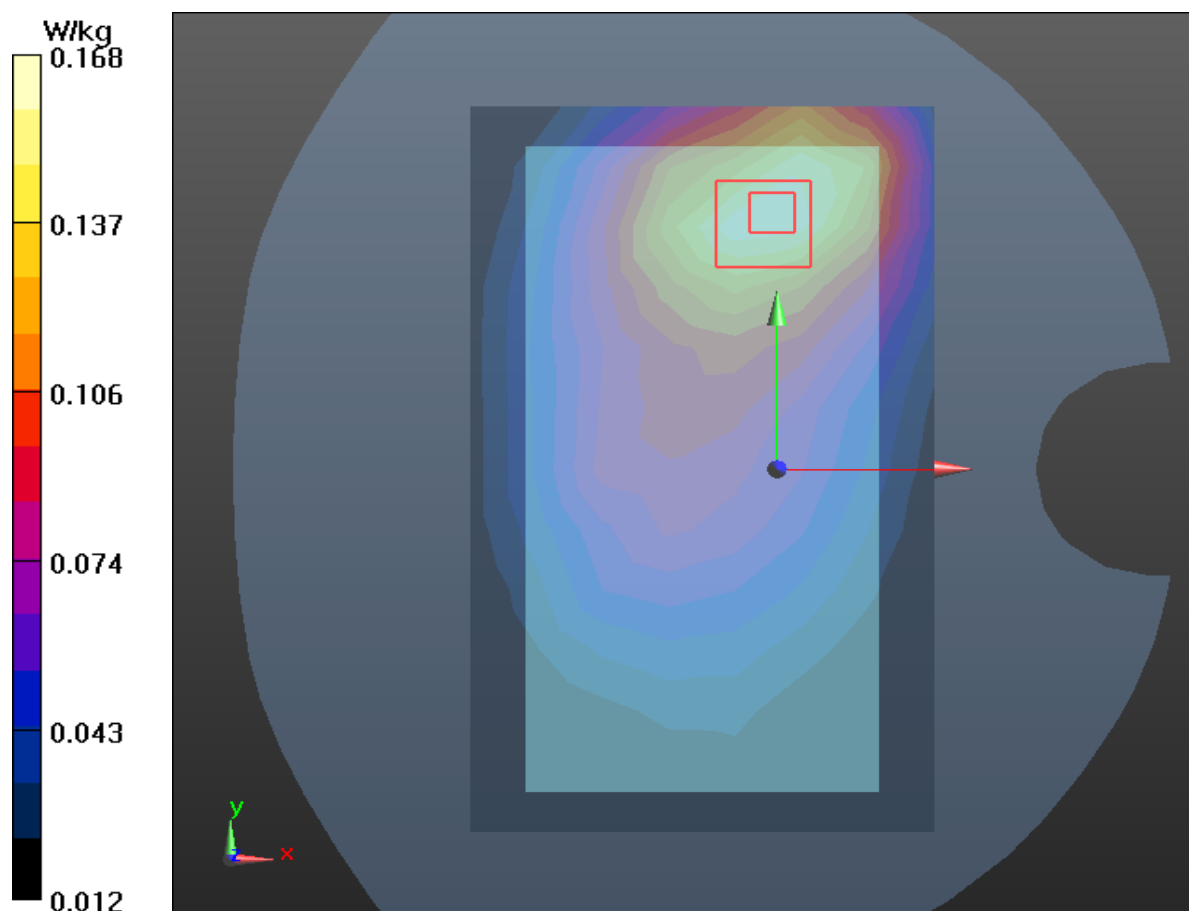
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.595 V/m ; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.239 W/kg

SAR(1 g) = 0.157 W/kg ; SAR(10 g) = 0.107 W/kg

Maximum value of SAR (measured) = 0.168 W/kg



Plot 61 GSM 1900 Right Cheek Middle (Second-Antenna)

Date: 12/22/2020

Communication System: UID 0, GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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 (8x13x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.671 W/kg

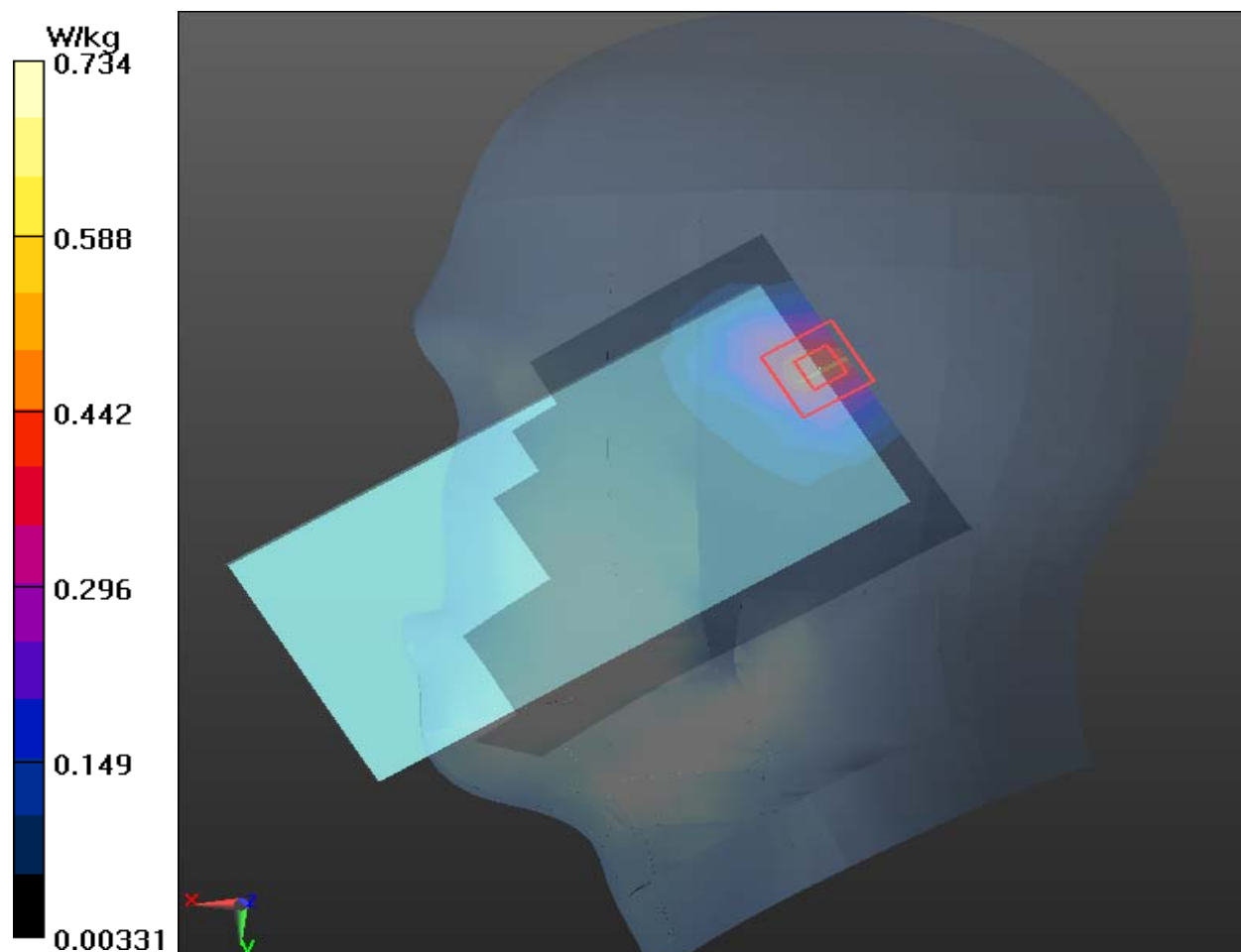
Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.70 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.622 W/kg; SAR(10 g) = 0.283 W/kg

Maximum value of SAR (measured) = 0.734 W/kg



Plot 62 GSM 1900 Back Side Middle (Second-Antenna, Distance 15mm)

Date: 12/22/2020

Communication System: UID 0, GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.352 W/kg

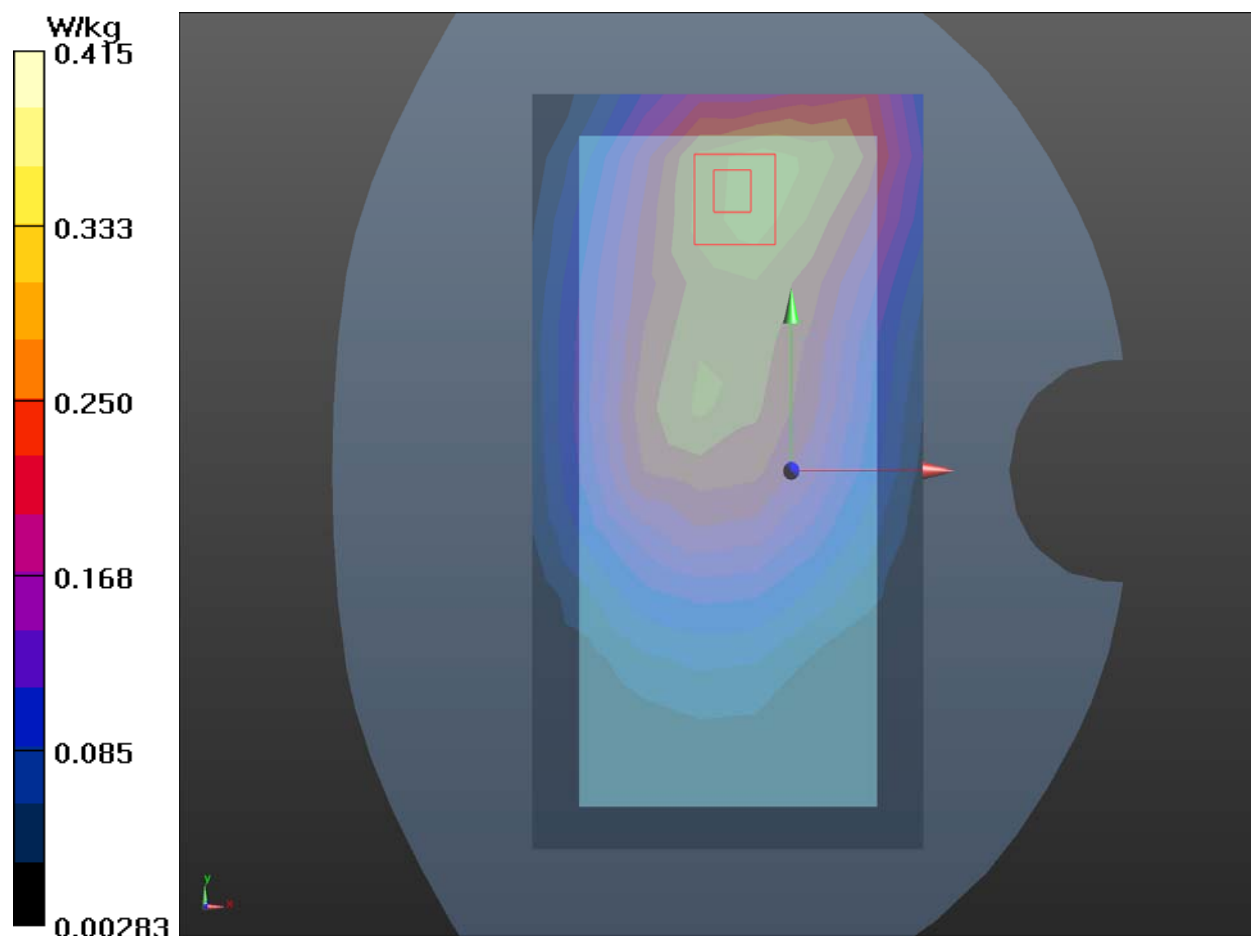
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.176 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 0.913 W/kg

SAR(1 g) = 0.303 W/kg; SAR(10 g) = 0.148 W/kg

Maximum value of SAR (measured) = 0.415 W/kg



Plot 63 GSM 1900 GPRS (4Txslots) Top Edge Middle (Second-Antenna, Distance 10mm)

Date: 12/22/2020

Communication System: UID 0, GPRS 4TX (0); Frequency: 1880 MHz; Duty Cycle: 1:2.07

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

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) = 0.382 W/kg

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

Reference Value = 9.686 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 0.695 W/kg

SAR(1 g) = 0.367 W/kg; SAR(10 g) = 0.182 W/kg

Maximum value of SAR (measured) = 0.420 W/kg

