SAR TEST REPORT

Applicant	ZTE Corporation
FCC ID	SRQ-ZTEA2022PG
Product	5G NR/LTE/WCDMA/GSM(GPRS) Multi-Mode Digital Mobile Phone
Marketing	ZTE Axon 30 Ultra 5G
Model	ZTE A2022PG
Report No.	R2103A0263-S1V2
Issue Date	May 12, 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.	April 27, 2021
Rev.1	Update data and description.	May 10, 2021
Rev.2	add RU mode data.	May 12, 2021
Note: This revised report (Report No. R2103A0263-S1V2) supersedes and replaces the previously issued report (Report No. R2103A0263-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 (Separation 15mm)	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
GSM 850	0.181	0.314	1.153	NA
GSM 1900	0.037	0.156	0.583	NA
WCDMA Band II	0.123	0.406	1.056	3.285
WCDMA Band IV	0.166	0.479	1.179	2.900
WCDMA Band V	0.235	0.276	0.676	NA
LTE FDD 2	0.113	0.376	**1.189**	NA
LTE FDD 4	0.164	0.446	1.189	**3.510**
LTE FDD 5	0.200	0.275	0.596	NA
LTE FDD 7	0.163	**0.642**	1.118	2.092
LTE FDD 12	0.097	0.230	0.374	NA
LTE FDD 17	0.087	0.258	0.423	NA
LTE FDD 26	0.216	0.316	0.655	NA
LTE TDD 38	0.090	0.355	1.127	1.712
LTE TDD 41	0.159	0.322	0.731	1.567
NR n41	**0.770**	0.220	0.784	NA
Wi-Fi (2.4G)	0.418	0.096	0.620	NA
Wi-Fi (5G)	0.359	0.241	0.432	1.755
BT	0.152	0.095	0.095	NA
Date of Testing: March 23, 2021 ~April 15, 2021 Date of Sample Received: March 18, 2021				
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 (Separation 15mm)	1g SAR Hotspot (Separation 10mm)	Product Specific 10-g SAR (Separation 0mm)
Highest Simultaneous Transmission SAR (W/kg)	1.113	0.941	1.507	3.705
Note: The detail for simultaneous transmission consideration is described in chapter 10.3.				

3 Description of Equipment under Test

Client Information

Applicant	ZTE Corporation
Applicant address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China
Manufacturer	ZTE Corporation
Manufacturer address	ZTE Plaza, Keji Road South, Hi-Tech, Industrial Park, Nanshan District, Shenzhen, Guangdong, 518057, P.R.China

General Technologies

Application Purpose	Original Grant
EUT Stage	Identical Prototype
Model	ZTE A2022PG
IMEI	IMEI 1:861959050001424 IMEI 2:861959050002224
Hardware Version	ZTE A2022PGHW1.0
Software Version 1	MyOS11.0.0_A2022PG_GLB
Software Version 2	MyOS11.0.0_A2022PG_TEL
Antenna Type	Internal Antenna
Flash	8+128G/12+256G
Device Class	B
Wi-Fi Hotspot	Wi-Fi 2.4G Wi-Fi 5G U-NII-1&U-NII-3
Power Class	GSM850/1900:3 WCDMA Band II/IV/V:3 LTE FDD Band 2/4/5/7/12/17/26:3 LTE TDD Band 38/41:3 NR n41:3
Power Level	GSM850/1900:max power WCDMA Band II/IV/V: max power LTE FDD Band 2/4/5/7/12/17/26: max power LTE TDD Band 38/41:max power NR n41: max power
EUT Accessory	
Battery	Manufacturer: Zhuhai CosMX Battery Co., Ltd. Model: Li3941T44P8h826453
Earphone	Manufacturer: Shen zhen FDC Electronic Co.,Ltd. Model: DEM-9A

Note: 1.The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.

2. There are two forms of this product: it supports dual cards in some regions or operators; while in other regions or operators supports single cards.

When supports dual cards, SIM1 and SIM2 are based on the same radio frequency module, and the working mechanism is dual-standby with single-pass, which means SIM1 and SIM2 cannot work at the same time in the communication mode;

When only supports a single card, other software and hardware are consistent with the status that supports dual cards;

This report focuses on the dual-card status, carries out SAR evaluation, and verifies the compliance of the single-card. The test data in the report is the dual-card status of SIM1 under the worst conditions.

3.The two different software versions are for different market requirement.

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)
GSM	850	Voice(GMSK) GPRS(GMSK) EGPRS(GMSK,8PSK)	☐Multi-slot Class:8-1UP ☐Multi-slot Class:10-2UP ☒Multi-slot Class:12-4UP ☐Multi-slot Class:33-4UP	824 ~ 849
	1900			1850 ~ 1910
	Does this device support DTM (Dual Transfer Mode)? ☐Yes ☒No			
UMTS	Band II	QPSK, 16QAM	HSDPA 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 /Category 13	1850 ~ 1910
	FDD 4			1710 ~ 1755
	FDD 5			824 ~ 849
	FDD 7			2500 ~ 2570
	FDD 12			699 ~ 716
	FDD 17			704 ~ 716
	FDD 26			814 ~ 849
	TDD 38			2570 ~ 2620
	TDD 41			2496 ~ 2690
	Does this device support Carrier Aggregation (CA) ☒Yes ☐No			
	Does this device support SV-LTE (1xRTT-LTE)? ☐Yes ☒No			
NR	TDD n41	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM; DFT-s OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM	/	2496 ~ 2690
BT	2.4G	Version 5.0 LE		2402 ~2480
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20 802.11ax HE20	2412 ~ 2462
		OFDM	802.11n HT40 802.11ax HE40	2422 ~ 2452
	5G	OFDM	802.11a/n HT20/ HT40/ ac VHT20/VHT40/VHT80 ax HE20/HE40/HE80	5150 ~ 5250 5250 ~ 5350 5470 ~ 5725 5725 ~ 5850
	Does this device support MIMO ☒Yes(2TX, 2RX) ☐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 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

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

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

5.1.3 Phablet SAR test considerations

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

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

b) The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for product specific 10-g SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. The 1-g SAR at 5 mm for UMPC mini-tablets is not required. When hotspot mode applies, product specific 10-g SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Product specific 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode product specific 10-g SAR.

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

5.2 Measurement Variability

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

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

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

5.3 Test Configuration

5.3.1 GSM Test Configuration

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot. The allowed power reduction in the multi-slot configuration is as following:

Output power of reductions:

Table 3: The allowed power reduction in the multi-slot configuration

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

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

5.3.2 UMTS Test Configuration

5.3.2.1 3G SAR Test Reduction Procedure

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

5.3.2.2 Head SAR

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

5.3.2.3 Body-worn accessory SAR

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

5.3.2.4 Release 5 HSDPA Test Configuration

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

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

Table 4: Subtests for UMTS Release 5 HSDPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

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

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

Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1, TF1) to β_c=11/15 and β_d=15/15.

5.3.2.5 Release 6 HSUPA Test Configuration

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

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

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

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM (2) (dB)	MPR (dB)	AG (4) Index	E-TFCI
1	11/15 (3)	15/15 (3)	64	11/15 (3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 (4)	15/15 (4)	64	15/15 (4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ_{ACK}, ΔNACK and Δ_{CQI} = 8 ⇔ $A_{hs} = \beta_{hs}/\beta_c$ = 30/15 ⇔β_{hs}= 30/15 *β_c.
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c =24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 14/15 and β_d = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Figure 5.1g.
Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Table 6: HSUPA UE category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCHTTI (ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592

4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	11484	5.76
	4	4	10		20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?
	4	4	10		20000	?
NoTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM. (TS25.306-7.3.0)						

Table 7: HS-DSCH UE category

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

5.3.3 LTE Test Configuration

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

A) Spectrum Plots for RB Configurations

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

B) MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to

3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

C) A-MPR

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

D) Largest channel bandwidth standalone SAR test requirements

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100% RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

4) Higher order modulations

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

E) Other channel bandwidth standalone SAR test requirements

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

5.3.4 Additional requirements for TDD LTE specification

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

TDD LTE Band supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table: Uplink-downlink configurations for uplink-downlink configurations and Table: Configuration of special subframe (lengths of DwPTS/GP/UpPTS) for Special subframe configurations.

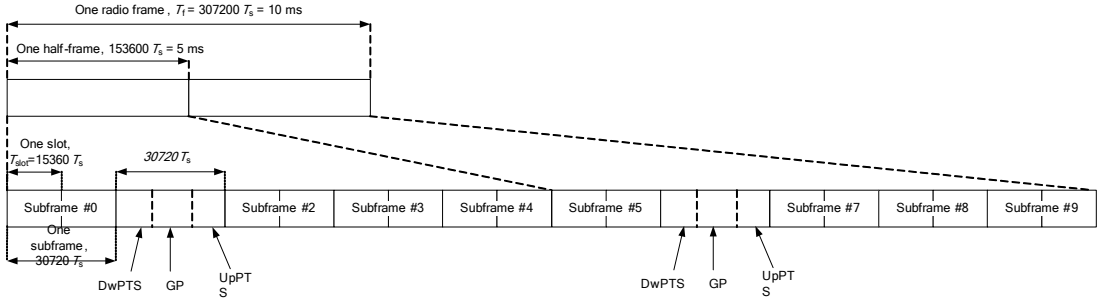


Figure 1: Frame structure type 2

Table 8: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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

Table 9: Uplink-downlink configurations

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

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

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

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

Uplink Component = UpPTS

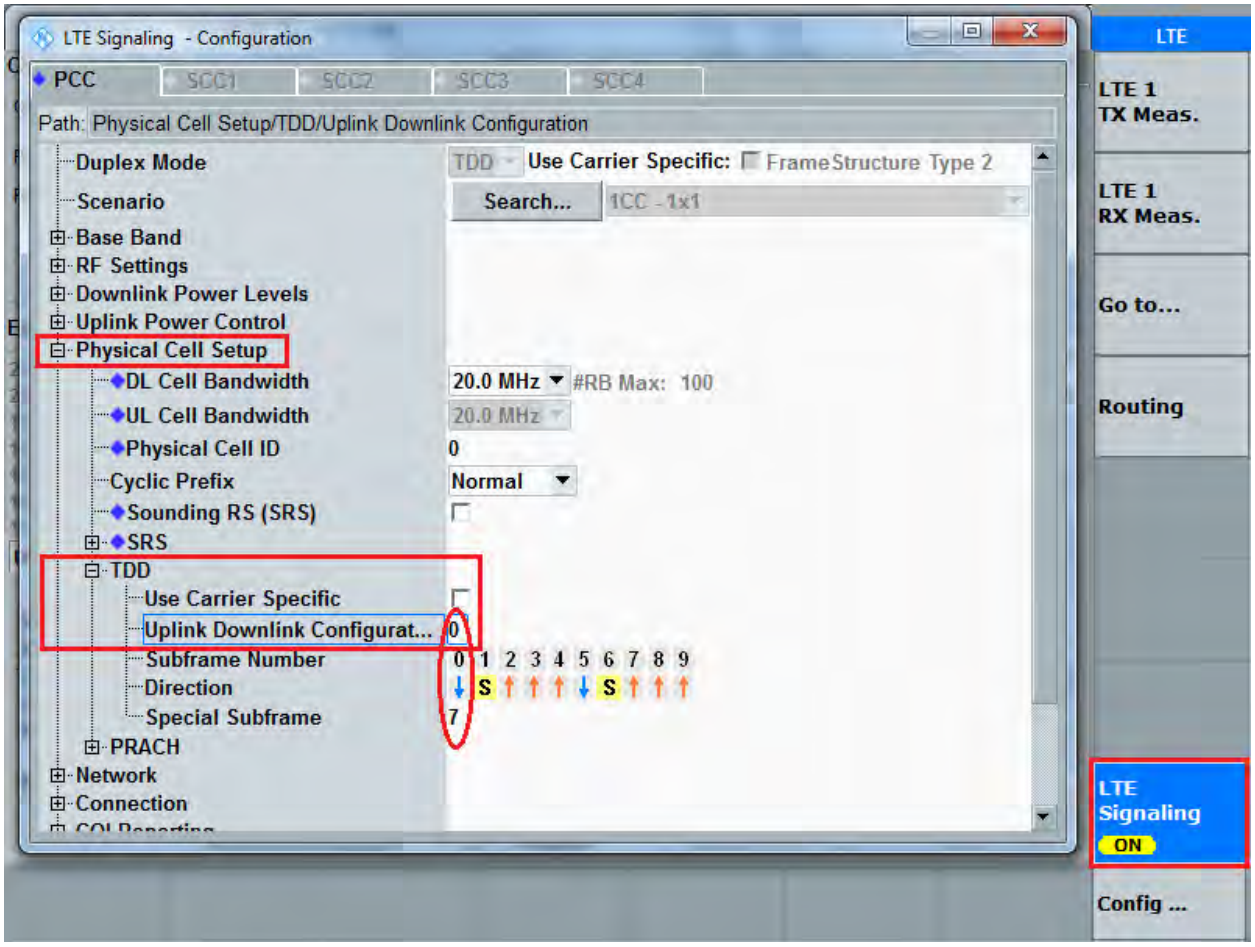
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

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

And we can get different Duty cycles under different configurations:

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

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



5.3.5 5G NR Test Configuration

For 5G NR SAR testing, due to test setup limitations, SAR testing for NR was performed using factory test mode software to establish the connection and perform SAR with 100% transmission.

The DFT-s-OFDM and CP-OFDM waveforms were investigated, and DFT-s-OFDM was found to be the worst case.
The worst-case scenario for all measurements is based on an engineering evaluation and QPSK was observed as the worst one and set for all conducted and radiated. Output power measurements were measured on QPSK, 1 6QAM, 64QAM, 256QAM, and BPSK, modulations.

For TDD NR Band operation and final implementation, TDD NR slot configuration extended cyclic prefix uplink duty cycle =25%; However, EN-DC transmission on test DUT is only possible using FTM mode with continuous transmission (duty cycle =100%). SAR testing was performed using FTM mode at maximum output power adjusted for duty cycle to mimic final 25% cycle

Band	5G NR(NSA) Antenna Power Level (dBm)	
	Tune-up	Tune-up
	(Not Adjusted for duty cycle)	(Adjusted for duty cycle)
NR n41(Ant 2)	25.00	19.00
NR n41(Ant 5)	27.00	21.00
NR n41 MIMO	24.00	18.00

For EN-DC SAR, as the existing SAR test system can not test the multiple different frequency bands simultaneous Transmission SAR at the same time , we suggest that the conservative "max tune-up + max 10dBm tune-up" multi-Tx and SAR scaling method can be used to evaluate the inter-band Upl ink EN-DC SAR from standalone SAR test results of each LTE and NR EN-DC component band and the conservative "max tune-up + max 10dBm tune-up" multi-Tx method to combine the scaled SAR value from each EN-DC component band as the inter-band Uplink EN-DC SAR. All Simultaneous Tr ansmission Scenarios will be evaluated independently in the final SAR report .

5.3.6 Wi-Fi Test Configuration

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

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

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

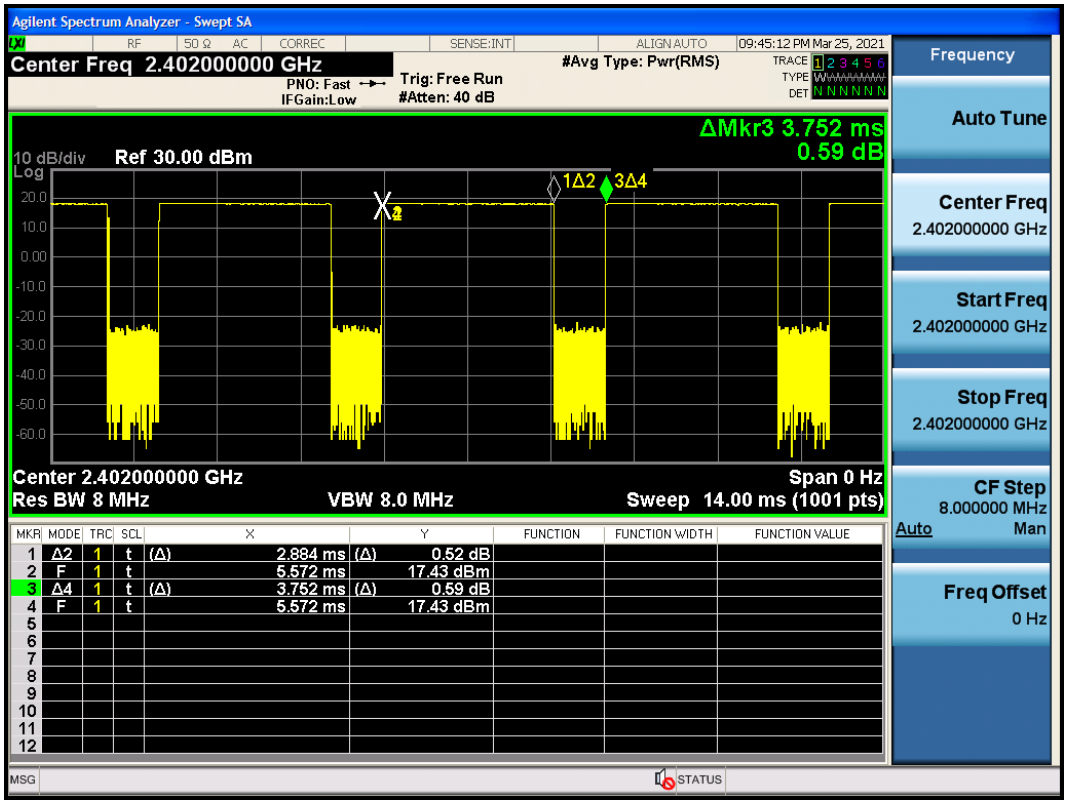
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

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

5.3.7 BT Test Configuration

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

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



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=2.884/3.752=76.9%

5.3.8 LTE CA specification

The device supports LTE advanced Rel. 15, Carrier Aggregation (CA) on downlink for Intra band and inter-band. Uplink CA is supported for Intra band only, more details information is provided in tables below:

1) 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					
		10	20				40	0
		15	15, 20					
		20	10, 15, 20					
		5, 10	20				40	1
		15	15, 20					
CA_41C	CA_41C	20	5, 10, 15, 20					
		10	15, 20				40	2
		15	10, 15, 20					
		20	10, 15, 20					
		10	20				40	3
		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.

5.3.9 Power Reduction Configuration

WWAN Reduced power level table

Antenna	Position	Reduced level	Receiver State	Hotspot State	Sensor State	Transmitting conditions
ANT1	Head	Level1	On	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
						WWAN+WLAN2.4G+WLAN5G
	Body worn/Product Specific	Level2	Off	N/A	N/A	WWAN Only
	Hotspot	Level3	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
						WWAN+WLAN2.4G+WLAN5G
ANT2	Head	Level1	On	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
						WWAN+WLAN2.4G+WLAN5G
	Body worn	Level2	Off	N/A	N/A	WWAN Only
	Hotspot	Level3	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
						WWAN+WLAN2.4G+WLAN5G

	Product Specific	Level4	Off	N/A	D1	WWAN Only and sensor off
			Off		D2	WWAN Only and sensor on
			Off		D1	WWAN+WLAN2.4G and sensor off
			Off		D2	WWAN+WLAN2.4G and sensor on
			Off		D1	WWAN+WLAN5G and sensor off
			Off		D2	WWAN+WLAN5G and sensor on
			Off		D1	WWAN+WLAN2.4G+WLAN5G and sensor off
			Off		D2	WWAN+WLAN2.4G+WLAN5G and sensor on
ANT5	Head	Level1	On	N/A	N/A	WWAN Only
						WWAN+WLAN2.4G
						WWAN+WLAN5G
						WWAN+WLAN2.4G+WLAN5G
	Body worn/Product Specific	Level2	Off	N/A	N/A	WWAN Only
	Hotspot	Level3	Off	On	N/A	WWAN+WLAN2.4G
						WWAN+WLAN5G
						WWAN+WLAN2.4G+WLAN5G

Antenna	Position	Reduced level	Receiver State	Transmitting conditions
ANT8	Head	Level1	On	WLAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
				WWAN+WLAN2.4G+WLAN5G
	Body worn/Hotspot/Product Specific	Level2	Off	WLAN Only
				WWAN+WLAN2.4G
				WWAN+WLAN5G
				WWAN+WLAN2.4G+WLAN5G
ANT9	Head	Level1	On	WLAN Only
				WWAN+WLAN2.4G
	Body worn/Hotspot/Product Specific	Level2	Off	WLAN Only
				WWAN+WLAN2.4G
ANT10	Head	Level1	On	WLAN Only
				WWAN+WLAN5G
	Body worn/Hotspot/Product Specific	Level2	Off	WLAN Only
				WWAN+WLAN5G

Mode	Band	Full power (Tune up)	Antenna	Head(Receiver on)				Body worn (Receiver off)				Hotspot(Receiver off+Hotspot on)				Product Specific(Receiver off+Sensor on)				Product Specific(Receiver off+Sensor off)			
				Standalone	Simultaneous transmission			Standalone	Simultaneous transmission			Standalone	Simultaneous transmission			Standalone	Simultaneous transmission			Standalone	Simultaneous transmission		
					WWAN+	WWAN+	WWAN+2.4G		WWAN+	WWAN+	WWAN+2.4G		WWAN+	WWAN+	WWAN+2.4G		WWAN+	WWAN+	WWAN+2.4G		WWAN+	WWAN+	WWAN+2.4G

					2.4G WLAN	5G WLAN	5G WLAN		2.4G WLAN	5G WLAN	5G WLAN		2.4G WLAN	5G WLAN	5G WLAN		2.4G WLAN	5G WLAN	5G WLAN		2.4G WLAN	5G WLAN	5G WLAN
GSM (CS)	GSM 850	33.5	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/	/	/	/	/	/
GSM (CS)	GSM 1900	31	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.2kbps RMC	WCDMA B2	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
12.2kbps RMC	WCDMA B4	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0
12.2kbps RMC	WCDMA B5	25	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/	/	/	/	/	/
LTE Bands	LTE B2	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	LTE B4	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
	LTE B5	25	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/	/	/	/	/	/
	LTE B7	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	0.0	0.0	0.0
	LTE B12	25	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/	/	/	/	/	/
	LTE B17	25	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/	/	/	/	/	/
	LTE B26	25	Ant.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	/	/	/	/	/	/	/	/
	LTE B38	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0
	LTE B41	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0
SA Bands	n 41	19	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	n 41	21	Ant.5	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	/	/	/	/	/	/	/	/
EN-DC（B2+N41）	LTE B2	25	Ant.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	n 41	21	Ant.5	3.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	/	/	/	/	/	/	/	/

Mode	Band	Full power (Tune up)	Antenna	Head(Receiver on)		Body worn/Hotspot/Product Specific(Receiver off)	
				Standalone	Simultaneous transmission	Standalone	Simultaneous transmission

					WWAN+ Wi-Fi 2.4G / Wi-Fi 5 WLAN	WWAN+ Wi-Fi 2.4G+ Wi-Fi 5 WLAN		WWAN+ Wi-Fi 2.4G / Wi-Fi 5 WLAN	WWAN+ Wi-Fi 2.4G+ Wi-Fi 5 WLAN
Wi-Fi 2.4G	802.11b CH1-11	20.0	Ant.8	6.0	6.0	6.0	0.0	0.0	0.0
	802.11g CH1-11	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11nHT20 CH1-11	18.0		4.5	4.5	4.5	0.0	0.0	0.0
	802.11nHT40 CH3-11	17.0		3.5	3.5	3.5	0.0	0.0	0.0
	802.11ax20 CH1-11	17.0		3.5	3.5	3.5	0.0	0.0	0.0
	802.11ax20 CH3-11	17.0		3.5	3.5	3.5	0.0	0.0	0.0
	802.11b CH1-11	20.0	Ant.9	6.0	6.0	6.0	0.0	0.0	0.0
	802.11g CH1-11	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11nHT20 CH1-11	18.0		4.5	4.5	4.5	0.0	0.0	0.0
	802.11nHT40 CH3-11	17.0		3.5	3.5	3.5	0.0	0.0	0.0
	802.11ax20 CH1-11	17.0		3.5	3.5	3.5	0.0	0.0	0.0
	802.11ax20 CH3-11	17.0		3.5	3.5	3.5	0.0	0.0	0.0
Wi-Fi 5 G U-NII-1	802.11a CH36-48	18.0	Ant.8	6.0	6.0	6.0	0.0	0.0	0.0
	802.11nHT20 CH36-48	19.5		7.0	7.0	7.0	0.0	0.0	0.0
	802.11nHT40 CH38-46	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT20 CH36-48	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT40 CH38-46	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11acVHT80 CH42	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE20 CH36-48	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE40 CH38-46	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11ax HE80 CH42	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11a CH36-48	19.0	Ant.10	5.5	5.5	5.5	0.0	0.0	0.0
	802.11nHT20 CH36-48	20.5		6.5	6.5	6.5	0.0	0.0	0.0
	802.11nHT40 CH38-46	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11acVHT20 CH36-48	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11acVHT40 CH38-46	20.0		6.5	6.5	6.5	0.0	0.0	0.0
	802.11acVHT80 CH42	20.0		6.5	6.5	6.5	0.0	0.0	0.0
	802.11ax HE20 CH36-48	20.0		6.5	6.5	6.5	0.0	0.0	0.0
	802.11ax HE40 CH38-46	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11ax HE80 CH42	19.0		5.5	5.5	5.5	0.0	0.0	0.0
Wi-Fi 5 U-NII-2A	802.11a CH52-64	18.0	Ant.8	6.0	6.0	6.0	0.0	0.0	0.0
	802.11nHT20 CH52-64	19.5		7.0	7.0	7.0	0.0	0.0	0.0
	802.11nHT40 CH54-62	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT20 CH52-64	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT40 CH54-62	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11acVHT80 CH58	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE20 CH52-64	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE40 CH54-62	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11ax HE80 CH58	18.0		6.0	6.0	6.0	0.0	0.0	0.0

	802.11a CH52-64	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11nHT20 CH52-64	21.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11nHT40 CH54-62	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11acVHT20 CH52-64	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11acVHT40 CH54-62	20.0	Ant.10	6.5	6.5	6.5	0.0	0.0	0.0
	802.11acVHT80 CH58	20.0		6.5	6.5	6.5	0.0	0.0	0.0
	802.11ax HE20 CH52-64	20.5		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE40 CH54-62	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11ax HE80 CH58	19.0		5.5	5.5	5.5	0.0	0.0	0.0
	802.11a CH100-140	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11nHT20 CH100-140	19.5		7.0	7.0	7.0	0.0	0.0	0.0
	802.11nHT40 CH102-134	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT20 CH100-140	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT40 CH102-134	19.0	Ant.8	7.0	7.0	7.0	0.0	0.0	0.0
	802.11acVHT80 CH106-122	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE20 CH100-140	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE40 CH102-134	18.0		6.0	6.0	6.0	0.0	0.0	0.0
Wi-Fi 5	802.11ax HE80 CH106-122	18.0		6.0	6.0	6.0	0.0	0.0	0.0
U-NII-2C	802.11a CH100-140	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11nHT20 CH100-140	20.5		7.0	7.0	7.0	0.0	0.0	0.0
	802.11nHT40 CH102-134	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT20 CH100-140	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT40 CH102-134	19.5	Ant.10	6.5	6.5	6.5	0.0	0.0	0.0
	802.11acVHT80 CH106-122	19.5		6.5	6.5	6.5	0.0	0.0	0.0
	802.11ax HE20 CH100-140	20.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE40 CH102-134	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11ax HE80 CH106-122	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11a CH149-165	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11nHT20 CH149-165	19.5		7.0	7.0	7.0	0.0	0.0	0.0
	802.11nHT40 CH151-159	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT20 CH149-165	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT40 CH151-159	19.0	Ant.8	7.0	7.0	7.0	0.0	0.0	0.0
	802.11acVHT80 CH155	19.0		7.0	7.0	7.0	0.0	0.0	0.0
	802.11ax HE20 CH149-165	19.0		7.0	7.0	7.0	0.0	0.0	0.0
Wi-Fi 5	802.11ax HE40 CH151-159	18.0		6.0	6.0	6.0	0.0	0.0	0.0
U-NII-3	802.11ax HE80 CH155	18.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11a CH149-165	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11nHT20 CH149-165	20.5		7.0	7.0	7.0	0.0	0.0	0.0
	802.11nHT40 CH151-159	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT20 CH149-165	19.0	Ant.10	6.0	6.0	6.0	0.0	0.0	0.0
	802.11acVHT40 CH151-159	19.5		6.5	6.5	6.5	0.0	0.0	0.0
	802.11acVHT80 CH155	19.5		6.5	6.5	6.5	0.0	0.0	0.0
	802.11ax HE20 CH149-165	20.0		7.0	7.0	7.0	0.0	0.0	0.0

	802.11ax HE40 CH151-159	19.0		6.0	6.0	6.0	0.0	0.0	0.0
	802.11ax HE80 CH155	19.0		6.0	6.0	6.0	0.0	0.0	0.0

5.3.10 Proximity sensor Configuration

Due to the operating configurations and exposure conditions required by the device, the proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of Antenna 2 to ensure SAR compliance. It is also set an output power Leveled to the lowest one to make sure that in any case of SAR sensor hardware failure, the SAR requirements can still be satisfied.

The following tables summarize the key power reduction information for proximity sensor. The test procedures be applied to determine proximity sensor triggering distances, and sensor coverage for normal and tilt positions. To ensure all production units are compliant, it is generally necessary to reduce the triggering distance determined from the triggering tests by 1 mm, or more if it is necessary, and use the smallest distance for movements to and from the phantom, minus 1 mm, as the sensor triggering distance for determining the SAR measurement distance.

Antenna 2				
Band	Test position	Sensor Trigger Distance range (DUT to Phantom)	Power reduction amount(dB)	Power Level
WCDMA B2	Back side	0mm≤distance≤7mm	2.0	Level4-D2
		7mm<distance	0.0	Level 4-D1
	Front side	0mm≤distance≤7mm	2.0	Level 4-D2
		7mm<distance	0.0	Level 4-D1
	Left edge	ALL	0.0	Level 4-D1
	Right edge	ALL	0.0	Level 4-D1
	Top edge	ALL	0.0	Level 4-D1
	Bottom Edge	0mm≤distance≤15mm	2.0	Level 4-D2
		15mm<distance	0.0	Level 4-D1
WCDMA B4	Back side	0mm≤distance≤7mm	3.0	Level 4-D2
		7mm<distance	0.0	Level4-D1
	Front side	0mm≤distance≤7mm	3.0	Level 4-D2
		7mm<distance	0.0	Level4-D1
	Left edge	ALL	0.0	Level4-D1
	Right edge	ALL	0.0	Level4-D1
	Top edge	ALL	0.0	Level4-D1
	Bottom Edge	0mm≤distance≤15mm	3.0	Level 4-D2
		15mm<distance	0.0	Level4-D1
LTE B4	Back side	0mm≤distance≤7mm	2.0	Level 4-D2
		7mm<distance	0.0	Level4-D1
	Front side	0mm≤distance≤7mm	2.0	Level 4-D2
		7mm<distance	0.0	Level4-D1

	Left edge	ALL	0.0	Level4-D1
	Right edge	ALL	0.0	Level4-D1
	Top edge	ALL	0.0	Level4-D1
	Bottom Edge	0mm≤distance≤15mm	2.0	Level 4-D2
		15mm<distance	0.0	Level4-D1
LTE B7	Back side	0mm≤distance≤7mm	4.0	Level 4-D2
		7mm<distance	0.0	Level4-D1
	Front side	0mm≤distance≤7mm	4.0	Level 4-D2
		7mm<distance	0.0	Level4-D1
	Left edge	ALL	0.0	Level4-D1
	Right edge	ALL	0.0	Level4-D1
	Top edge	ALL	0.0	Level4-D1
	Bottom Edge	0mm≤distance≤15mm	4.0	Level4-D2
		15mm<distance	0.0	Level4-D1
LTE B38	Back side	0mm≤distance≤7mm	3.0	Level4-D2
		7mm<distance	0.0	Level4-D1
	Front side	0mm≤distance≤7mm	3.0	Level4-D2
		7mm<distance	0.0	Level4-D1
	Left edge	ALL	0.0	Level4-D1
	Right edge	ALL	0.0	Level4-D1
	Top edge	ALL	0.0	Level4-D1
	Bottom Edge	0mm≤distance≤15mm	3.0	Level4-D2
		15mm<distance	0.0	Level4-D1
LTE B41	Back side	0mm≤distance≤7mm	3.0	Level4-D2
		7mm<distance	0.0	Level4-D1
	Front side	0mm≤distance≤7mm	3.0	Level4-D2
		7mm<distance	0.0	Level4-D1
	Left edge	ALL	0.0	Level4-D1
	Right edge	ALL	0.0	Level4-D1
	Top edge	ALL	0.0	Level4-D1
	Bottom Edge	0mm≤distance≤15mm	3.0	Level4-D2
		15mm<distance	0.0	Level4-D1

Note:

To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering and sensor coverage for normal and tit positions for all usage conditions and applicable sides, minus 1 mm, must be used as the test separation distance for additional SAR testing of each higher power stage.

For the other sides or other frequency bands of the device, SAR is still tested at the maximum full power Level with sensor off.

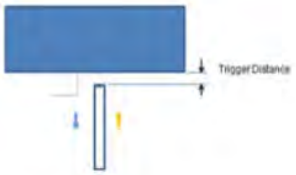
D1= Sensor off, D2= Sensor on

2.Procedures for determining proximity sensor triggering distances

The device was tested by the test lab to determine the proximity sensor triggering distances for the front side, back side and bottom side of the device. To ensure all production units are compliant, the smallest separation distance determined by the sensor triggering minus 1 mm, must be used as the test separation distance for SAR testing.

TheProximity sensor triggering distance measurement method are as below:

Picture: Proximity sensor triggering distances assessment (Front/Back side)



Picture: Proximity sensor triggering distances assessmect(Bottom edge)

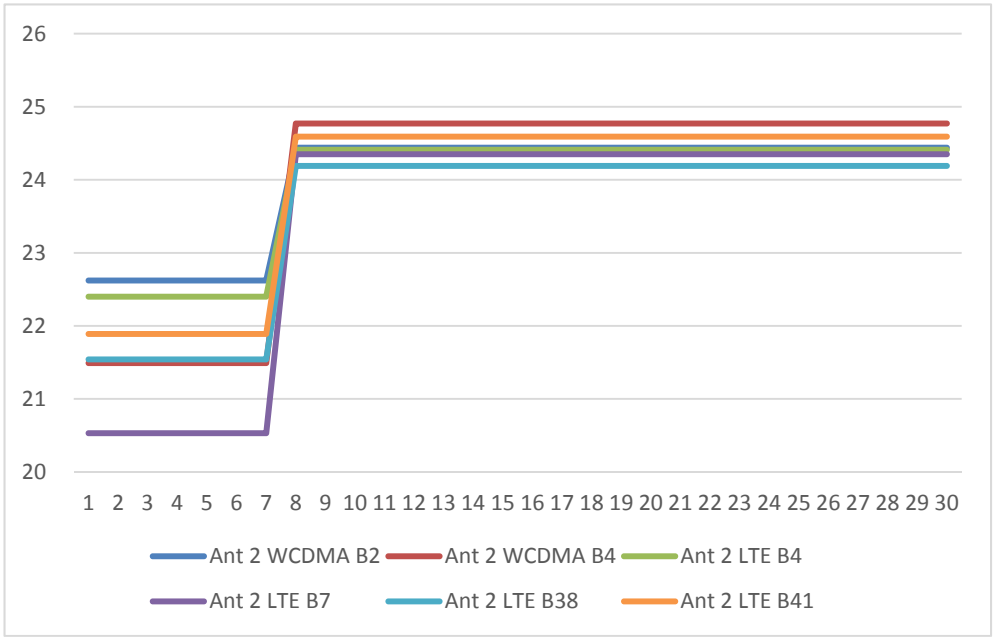
Table: Summary of Trigger Distances

Band	Trigger distance-Back Side		Trigger distance-Front Side		Trigger distance-Bottom Edge	
	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom	Moving toward Phantom	Moving away from Phantom
WCDMA B2	7mm	7mm	7mm	7mm	15mm	15mm
WCDMA B4	7mm	7mm	7mm	7mm	15mm	15mm
LTE B4	7mm	7mm	7mm	7mm	15mm	15mm
LTE B7	7mm	7mm	7mm	7mm	15mm	15mm
LTE B38	7mm	7mm	7mm	7mm	15mm	15mm
LTE B41	7mm	7mm	7mm	7mm	15mm	15mm

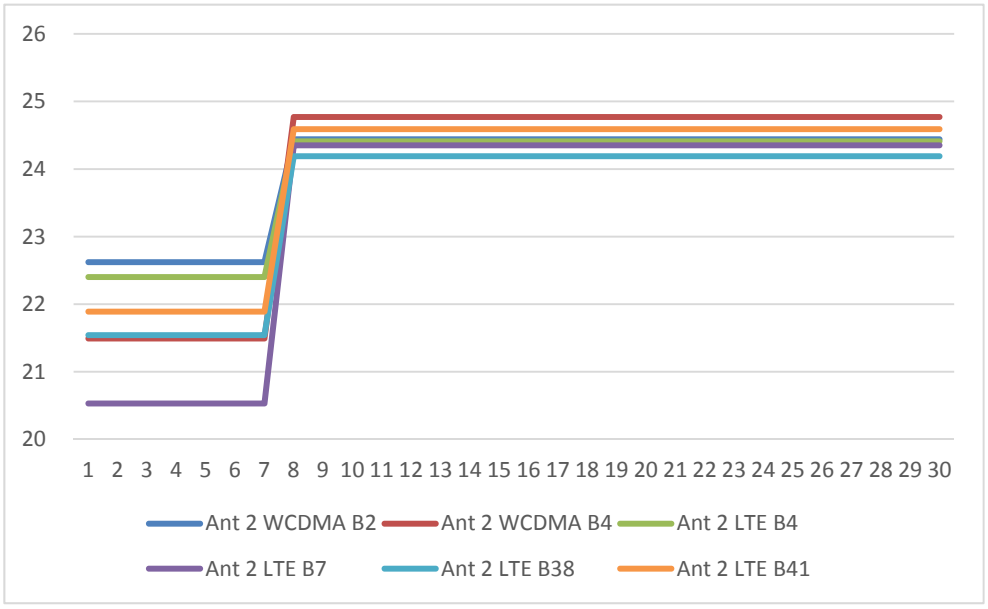
Conclusion: It can be ensured that the proximity sensor can be valid triggered for the body exposure condition(UMTSBand2/4,LTEBand 4/7/38/41 with Antenna 2).

The detailed conducted power measurement data to determine the triggering distances is as below:

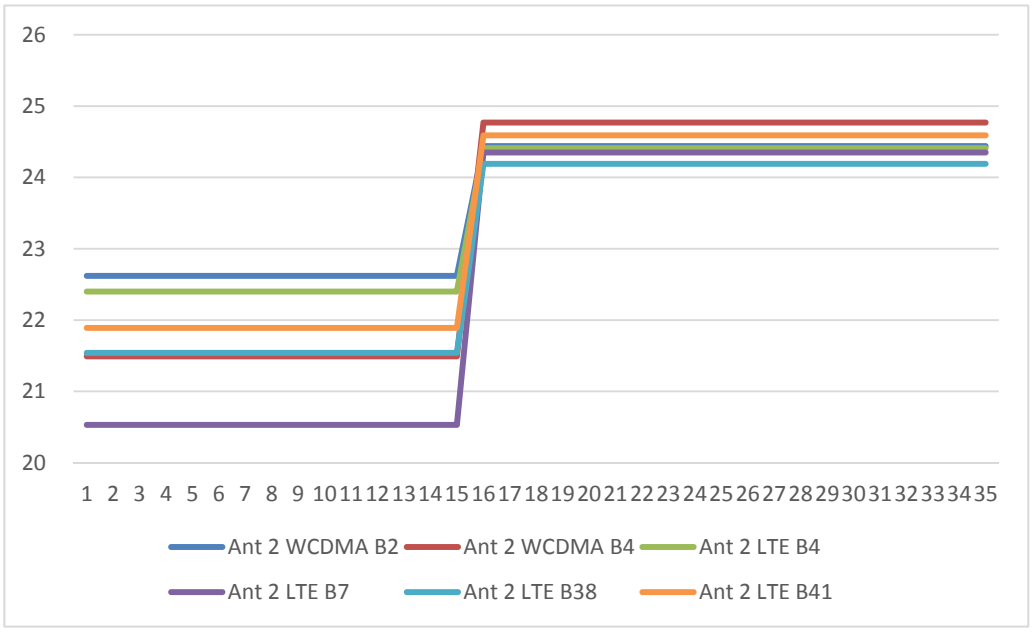
The DUT (Back side) is moved away from the flat phantom:



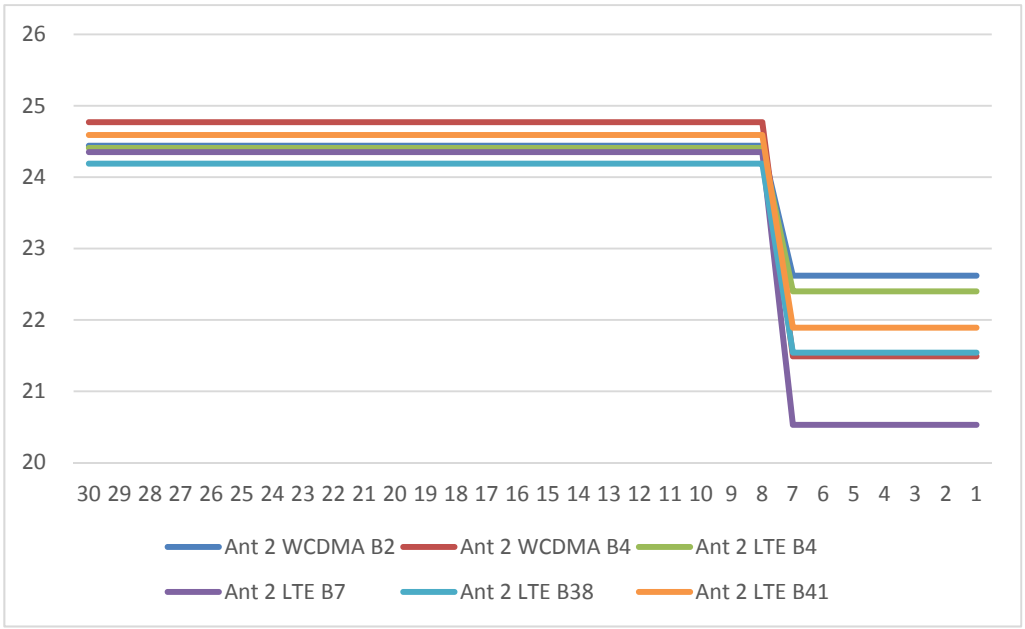
The DUT (Front side) is moved away from the flat phantom:



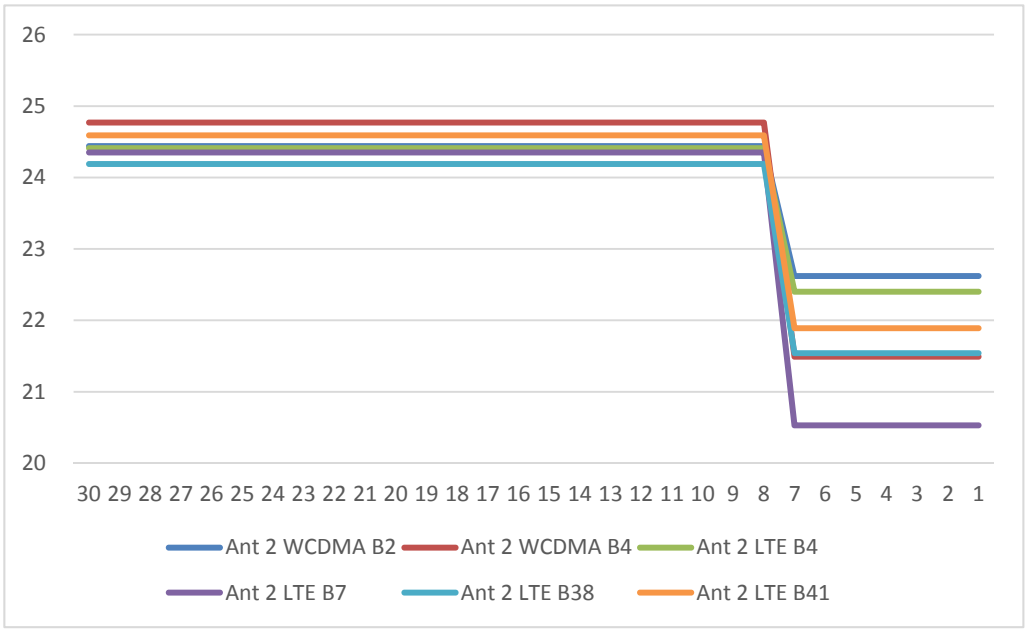
The DUT (Bottom edge) is moved away from the flat phantom:



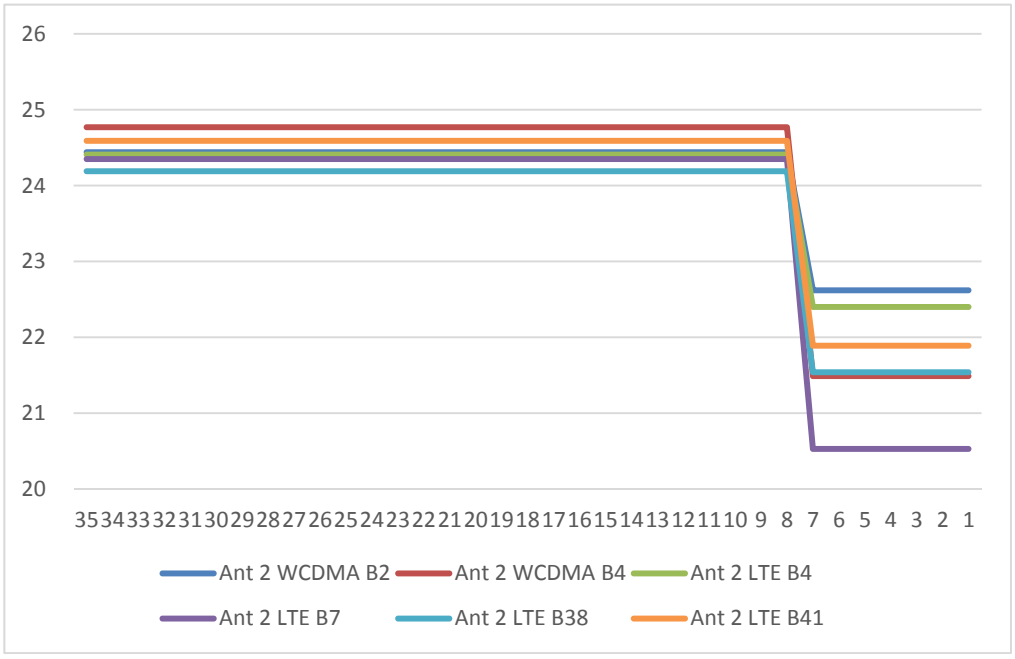
The DUT (Back side) is moved towards the flat phantom:



The DUT (Front side) is moved towards the flat phantom:



The DUT (Bottom edge) is moved towards the flat phantom:



The detailed conducted power measurement data to determine the triggering distances is as below:

Table: Full Power and Reduced power (Moving toward phantom)

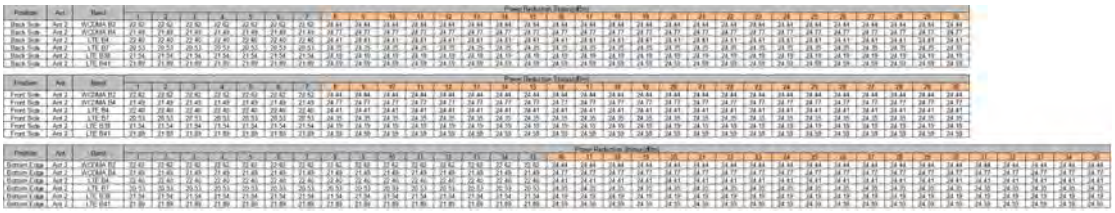
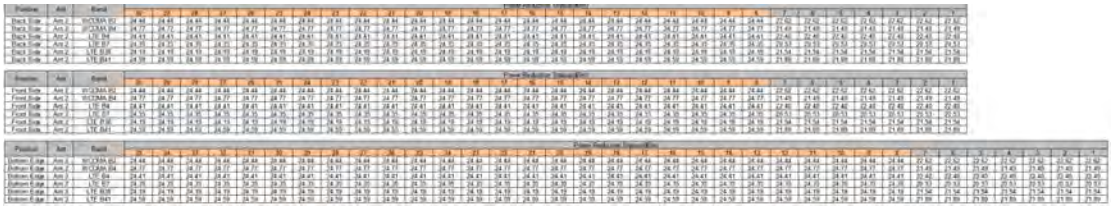


Table: Full Power and Reduced power (Moving away from phantom)



3. Procedures for determining device tilt angle influences to proximity sensor triggering

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom side parallel to the base of the flat phantom for each band.

The EUT was rotated about Bottom side for angles up to +/- 45°. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to +/- 45°.

The proximity sensor triggering tilt angle measurement method are as below:

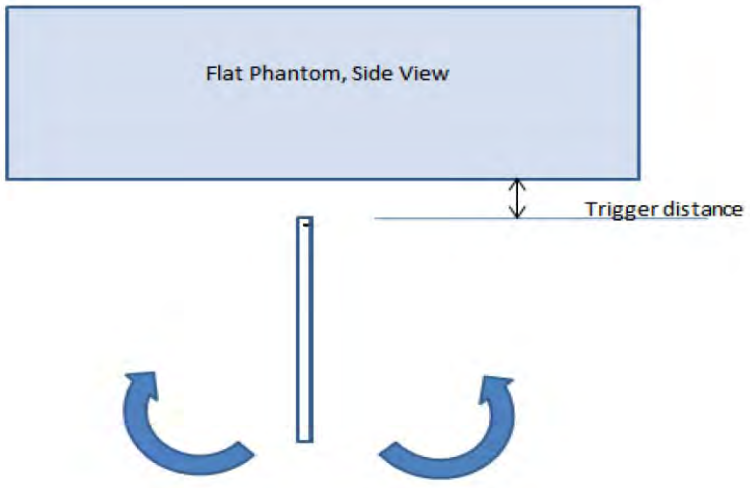


Table: Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering(Bottom edge)

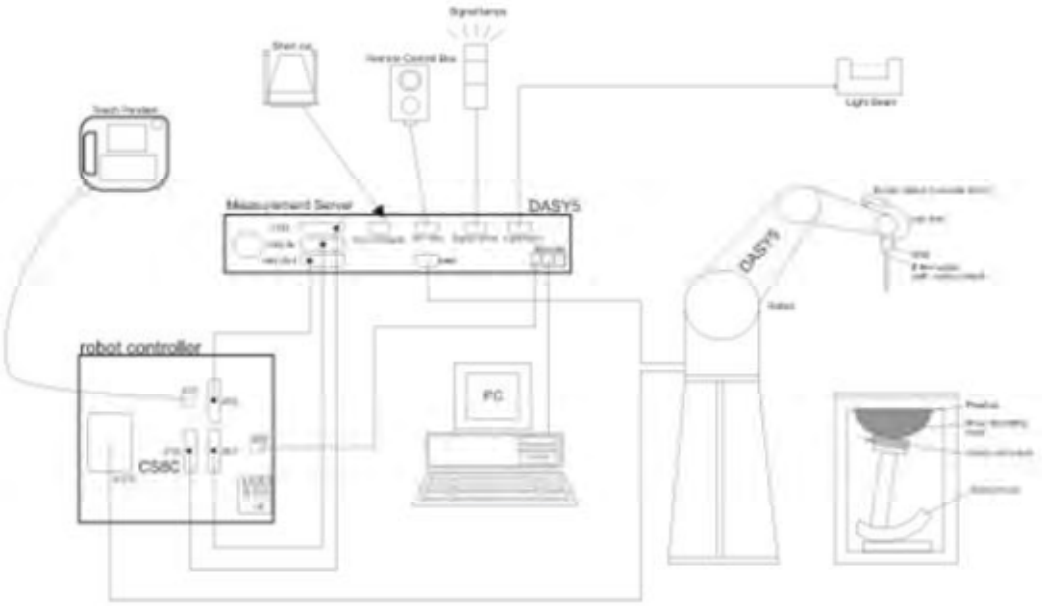
Band(MHz)	Posltion	Minimum trigger distance at which power reduction was maintained over ±45°	Power Reduction Status										
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
WCDMA B2	Bottom edge	15mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B4	Bottom edge	15mm	on	on	on	on	on	on	on	on	on	on	on
LTE B4	Bottom edge	15mm	on	on	on	on	on	on	on	on	on	on	on
LTE B7	Bottom edge	15mm	on	on	on	on	on	on	on	on	on	on	on
LTE B38	Bottom edge	15mm	on	on	on	on	on	on	on	on	on	on	on
LTE B41	Bottom edge	15mm	on	on	on	on	on	on	on	on	on	on	on

Conclusion: It can be ensured that the proximity sensor can be valid triggered for the DUT tilt coverage exposure condition.

6 SAR Measurements System Configuration

6.1 SAR Measurement Set-up

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



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

6.2 DASY5 E-field Probe System

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

EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure Scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

E-field Probe Calibration

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

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

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

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

Where: Δt = Exposure time (30 seconds),

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

ΔT = Temperature increase due to RF exposure.

Or

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

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

6.3 SAR Measurement Procedure

Power Reference Measurement

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

Area Scan

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

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

Zoom Scan

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

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

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

Volume Scan Procedures

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

Power Drift Monitoring

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

7 Main Test Equipment

Name of Equipment	Manufacturer	Type/Model	Serial Number	Last Cal.	Cal. Due Date
Network analyzer	Agilent	E5071B	MY42404014	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-DDC056G-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	1317	2021-02-23	2022-02-22
Validation Kit 750MHz	SPEAG	D750V3	1045	2020-08-28	2023-08-27
Validation Kit 835MHz	SPEAG	D835V2	4d020	2020-08-28	2023-08-27
Validation Kit 1750MHz	SPEAG	D1750V2	1033	2020-02-25	2023-02-24
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	2020-08-27	2023-08-26
Validation Kit 2450MHz	SPEAG	D2450V2	786	2020-08-27	2023-08-26
Validation Kit 2600MHz	SPEAG	D2600V2	1025	2018-05-02	2021-05-01
Validation Kit 5GHz	SPEAG	D5GHzV2	1151	2020-02-27	2023-02-26
Temperature Probe	Tianjin jinming	JM222	381	2020-05-25	2021-05-24
Hygrothermograph	Anymetr	HTC-1	TY2020A043	2020-05-19	2021-05-18
Twin SAM Phantom	Speag	SAM1	1534	/	/

Software for Test	Speag	DASY52	/	/	/
Softwarefor Tissue	Agilent	85070	/	/	/

8 Tissue Dielectric Parameter Measurements & System Verification

8.1 Tissue Verification

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 24 hours of use; or earlier if the dielectric parameters can become out of tolerance.

Target values

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	Glycol (%)	Preventol (%)	Cellulose (%)	ε_r	σ(s/m)
750	41.448	1.452	56	0	0.1	1.0	41.9	0.89
835	41.45	1.45	56	0	0.1	1.0	41.5	0.90
1750	55.24	0.31	0	44.45	0	0	40.1	1.37
1900	55.242	0.306	0	44.452	0	0	40.0	1.40
2450	62.7	0.5	0	36.8	0	0	39.2	1.80
2600	55.242	0.306	0	44.452	0	0	39.0	1.96
Frequency (MHz)	**Water (%)**	**Diethylenglycol monohexylether**			**Triton X-100**		**ε_r**	**σ(s/m)**
5250	65.53	17.24			17.23		35.9	4.71
5600	65.53	17.24			17.23		35.5	5.07
5750	65.53	17.24			17.23		35.4	5.22

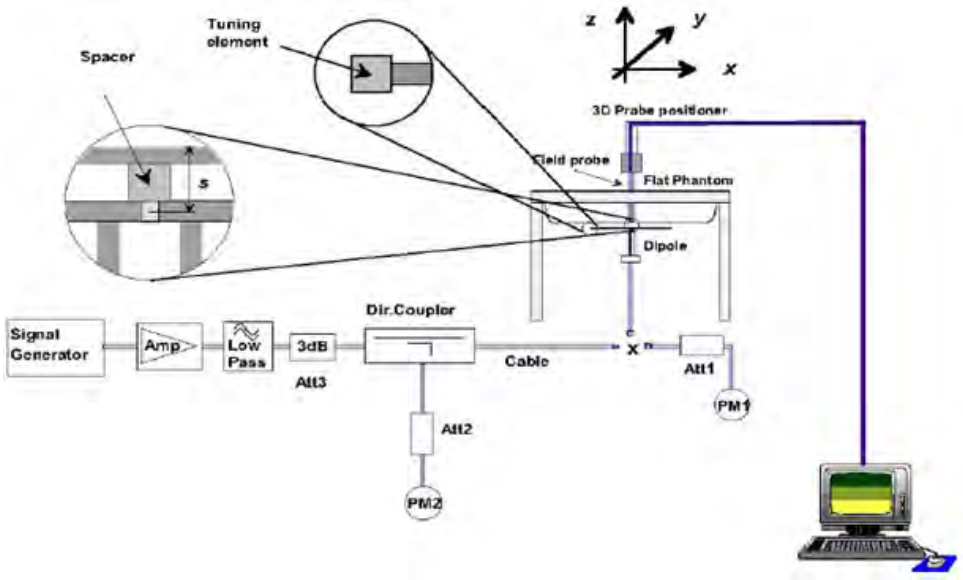
Measurements results

Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
750	3/28/2021	21.5	42.3	0.88	41.9	0.89	0.95	-1.12
	3/29/2021	21.5	42.0	0.87	41.9	0.89	0.24	-2.25
835	3/23/2021	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	3/24/2021	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
1750	3/26/2021	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	3/27/2021	21.5	40.1	1.36	40.1	1.37	0.00	-0.73
1900	4/9/2021	21.5	40.3	1.41	40.0	1.40	0.75	0.71
	4/15/2021	21.5	40.2	1.43	40.0	1.40	0.50	2.14
2450	3/25/2021	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	4/8/2021	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	4/10/2021	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02
	4/11/2021	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
	4/12/2021	21.5	38.5	1.95	39.0	1.96	-1.28	-0.51
	4/13/2021	21.5	38.2	1.96	39.0	1.96	-2.05	0.00
5250	4/3/2021	21.5	35.5	4.80	35.9	4.71	-1.11	1.91
5600	4/4/2021	21.5	35.2	5.21	35.5	5.07	-0.85	2.76
5750	4/6/2021	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 1System Performance Check setup

Picture 2 Setup Photo

Justification for Extended SAR Dipole Calibrations

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

Dipole		Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ
Dipole D2600V2 SN: 1025	Head Liquid	5/2/2018	-22.0	/	48.1	/
		5/1/2019	-22.5	-2.2	48.7	-0.6

System Check results

Frequency (MHz)	Test Date	Temp ℃	250mW /100mW Measured SAR_{1g} (W/kg)	1W Normalized SAR_{1g} (W/kg)	1W Target SAR_{1g} (W/kg)	Δ % (Limit ±10%)	Plot No.
750	3/28/2021	21.5	2.13	8.52	8.37	1.79	1
	3/29/2021	21.5	2.10	8.40	8.37	0.36	2
835	3/23/2021	21.5	2.44	9.76	9.65	1.14	3
	3/24/2021	21.5	2.46	9.84	9.65	1.97	4
1750	3/26/2021	21.5	8.95	35.80	35.90	-0.28	5
	3/27/2021	21.5	9.11	36.44	35.90	1.50	6
1900	4/9/2021	21.5	9.88	39.52	39.50	0.05	7
	4/15/2021	21.5	9.85	39.40	39.50	-0.25	8
2450	3/25/2021	21.5	13.7	54.80	52.30	4.78	9
2600	4/8/2021	21.5	13.91	55.64	54.10	2.85	10
	4/10/2021	21.5	13.88	55.52	54.10	2.62	11
	4/11/2021	21.5	13.94	55.76	54.10	3.07	12
	4/12/2021	21.5	13.92	55.68	54.10	2.92	13
	4/13/2021	21.5	13.90	55.60	54.10	2.77	14
5250	4/3/2021	21.5	7.87	78.70	78.00	0.90	15
5600	4/4/2021	21.5	7.67	76.70	80.50	-4.72	16
5750	4/6/2021	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

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

GSM 850 Full power&Level1&Level2&Level3		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	128 /824.2	190 /836.6	251 /848.8		MAX	128 /824.2	190 /836.6	251 /848.8
GSM	CS	33.50	32.98	32.89	33.06	9.03	24.47	23.95	23.86	24.03
GPRS/ EGPRS (GMSK)	1 Tx Slot	33.50	33.06	33.18	33.17	9.03	24.47	24.03	24.15	24.14
	2 Tx Slots	31.50	30.85	31.08	31.01	6.02	**25.48**	**24.83**	**25.06**	**24.99**
	3 Tx Slots	29.50	28.77	29.04	28.87	4.26	25.24	24.51	24.78	24.61
	4 Tx Slots	27.50	26.80	26.56	26.73	3.01	24.49	23.79	23.55	23.72
EGPRS (8PSK)	1 Tx Slot	33.50	33.11	33.24	33.06	9.03	24.47	24.08	24.21	24.03
	2 Tx Slots	31.50	31.00	31.05	30.93	6.02	**25.48**	**24.98**	**25.03**	**24.91**
	3 Tx Slots	29.50	28.78	28.87	28.90	4.26	25.24	24.52	24.61	24.64
	4 Tx Slots	27.50	26.83	26.76	26.77	3.01	24.49	23.82	23.75	23.76
GSM 1900 Full power&Level1&Level2&Level3&Level4-D1&Level4-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	29.93	29.87	29.74	9.03	21.97	20.90	20.84	20.71
GPRS/ EGPRS (GMSK)	1 Tx Slot	31.00	29.81	29.52	29.68	9.03	21.97	20.78	20.49	20.65
	2 Tx Slots	29.00	27.77	27.67	27.52	6.02	**22.98**	**21.75**	**21.65**	**21.50**
	3 Tx Slots	27.00	25.73	25.65	25.59	4.26	22.74	21.47	21.39	21.33
	4 Tx Slots	25.00	23.79	23.32	23.46	3.01	21.99	20.78	20.31	20.45
EGPRS (8PSK)	1 Tx Slot	31.00	29.82	29.62	29.74	9.03	21.97	20.79	20.59	20.71
	2 Tx Slots	29.00	27.78	27.67	27.49	6.02	**22.98**	**21.76**	**21.65**	**21.47**
	3 Tx Slots	27.00	25.71	25.65	25.58	4.26	22.74	21.45	21.39	21.32
	4 Tx Slots	25.00	23.43	23.30	23.37	3.01	21.99	20.42	20.29	20.36
Notes: 1.The worst-case configuration and mode for SAR testing is determined to be as follows: 2. Standalone: GSM 850 GMSK (GPRS) mode with 2 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 2 time slots for Max power, based on the output power measurements above.										

9.2 WCDMA Mode

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

WCDMA		Band II(dBm) Full power&Level1&Level2&Level4-D1				Band II(dBm) Level3&Level4-D2			
Tx Channel		9262	9400	9538	Tune-up Limit	9262	9400	9538	Tune-up Limit
Frequency(MHz)		1852.4	1880	1907.6		1852.4	1880	1907.6	
RMC	12.2kbps	24.43	24.44	24.35	25.00	22.61	22.62	22.53	23.00
AMR	12.2kbps	24.27	24.27	24.20	25.00	22.44	22.44	22.38	23.00
HSDPA	Sub 1	23.85	23.86	23.77	24.50	22.02	22.03	21.95	22.50
	Sub 2	23.84	23.85	23.76	24.50	22.01	22.02	21.94	22.50
	Sub 3	23.33	23.34	23.25	24.00	21.50	21.50	21.42	22.00
	Sub 4	23.32	23.33	23.24	24.00	21.49	21.49	21.41	22.00
HSUPA	Sub 1	23.81	23.82	23.73	24.50	21.98	21.98	21.90	22.50
	Sub 2	22.80	22.81	22.72	23.50	20.97	20.97	20.89	21.50
	Sub 3	23.28	23.30	23.21	24.00	21.45	21.47	21.39	22.00
	Sub 4	22.77	22.79	22.70	23.50	20.95	20.97	20.88	21.50
	Sub 5	23.76	23.78	23.69	24.50	21.95	21.97	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 IV(dBm) Full power&Level1&Level2&Level4-D1				Band IV(dBm) Level3&Level4-D2			
Tx Channel		1312	1413	1513	Tune-up Limit	1312	1413	1513	Tune-up Limit
Frequency(MHz)		1712.4	1732.6	1752.6		1712.4	1732.6	1752.6	
RMC	12.2kbps	24.49	**24.77**	24.67	25.00	21.25	**21.49**	21.43	22.00
AMR	12.2kbps	24.43	24.93	24.77	25.00	21.19	21.65	21.53	22.00
HSDPA	Sub 1	24.05	24.29	24.21	24.50	20.81	20.99	20.95	21.50
	Sub 2	23.97	24.37	24.11	24.50	20.73	21.07	20.85	21.50
	Sub 3	23.49	23.83	23.65	24.00	20.25	20.53	20.39	21.00
	Sub 4	23.41	23.65	23.69	24.00	20.17	20.35	20.43	21.00
HSUPA	Sub 1	23.83	24.21	24.19	24.50	20.59	20.93	20.95	21.50
	Sub 2	22.91	23.19	23.01	23.50	19.69	19.93	19.77	20.50
	Sub 3	23.57	23.87	23.51	24.00	20.35	20.61	20.27	21.00
	Sub 4	23.15	23.21	23.23	23.50	19.93	19.97	20.01	20.50
	Sub 5	23.91	24.39	24.27	24.50	20.69	21.15	21.05	21.50
Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all “1’s”.									

WCDMA		Band V(dBm) Full power&Level1&Level2&Level3			
Tx Channel		4132	4183	4233	Tune-up Limit
Frequency(MHz)		826.4	836.6	846.6	
RMC	12.2kbps	24.28	24.32	**24.34**	25.00
AMR	12.2kbps	24.12	24.15	24.19	25.00
HSDPA	Sub 1	23.70	23.74	23.76	24.50
	Sub 2	23.69	23.73	23.75	24.50
	Sub 3	23.18	23.22	23.24	24.00
	Sub 4	23.17	23.21	23.23	24.00
HSUPA	Sub 1	23.66	23.70	23.72	24.50
	Sub 2	22.65	22.69	22.71	23.50
	Sub 3	23.13	23.18	23.20	24.00
	Sub 4	22.62	22.67	22.69	23.50
	Sub 5	23.61	23.66	23.68	24.50
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

LTE FDD Band 2 Full power&Level1&Level2& Level3&Level4-D1&Level4-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	24.13	24.20	24.16	25.00
		1	2	24.06	24.03	24.04	25.00
		1	5	23.94	23.91	23.96	25.00
		3	0	24.03	24.10	24.10	25.00
		3	2	24.07	24.13	24.11	25.00
		3	3	24.15	24.05	24.10	25.00
		6	0	23.15	23.06	23.14	24.00
	16QAM	1	0	23.48	23.57	23.56	24.50
		1	2	23.46	23.49	23.50	24.50
		1	5	23.41	23.43	23.36	24.50
		3	0	23.15	23.15	23.21	24.50
		3	2	23.03	23.06	23.11	24.50
		3	3	23.07	23.15	23.01	24.50
		6	0	22.15	22.23	22.10	23.50
	64QAM	1	0	23.61	23.53	23.63	24.00
		1	2	23.48	23.44	23.52	24.00
		1	5	23.48	23.41	23.49	24.00
		3	0	23.19	23.01	23.16	24.00
		3	2	23.20	23.11	23.23	24.00
		3	3	23.19	23.11	23.22	24.00
		6	0	22.19	22.14	22.28	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	

	QPSK	1	0	24.15	24.24	24.19	25.00
		1	7	24.04	24.06	24.08	25.00
		1	14	23.97	23.96	24.00	25.00
		8	0	23.13	23.22	23.23	24.00
		8	4	23.19	23.23	23.23	24.00
		8	7	23.25	23.16	23.20	24.00
		15	0	23.15	23.10	23.17	24.00
	16QAM	1	0	23.51	23.59	23.59	24.50
		1	7	23.49	23.49	23.54	24.50
		1	14	23.43	23.47	23.39	24.50
3MHz		8	0	22.26	22.28	22.33	23.50
		8	4	22.14	22.19	22.23	23.50
		8	7	22.17	22.27	22.14	23.50
		15	0	22.18	22.27	22.13	23.50
	64QAM	1	0	23.64	23.55	23.66	24.00
		1	7	23.51	23.44	23.54	24.00
		1	14	23.50	23.40	23.52	24.00
		8	0	22.30	22.14	22.28	23.00
		8	4	22.31	22.24	22.35	23.00
		8	7	22.29	22.23	22.35	23.00
		15	0	22.22	22.18	22.31	23.00

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
	QPSK	1	0	24.12	24.22	24.15	25.00
		1	13	24.02	24.02	24.05	25.00
		1	24	23.94	23.91	23.96	25.00
		12	0	23.10	23.17	23.19	24.00
		12	6	23.17	23.19	23.18	24.00
		12	13	23.23	23.14	23.16	24.00
		25	0	23.15	23.09	23.15	24.00
	16QAM	1	0	23.48	23.55	23.56	24.50
		1	13	23.46	23.47	23.51	24.50
		1	24	23.40	23.45	23.35	24.50
5MHz		12	0	22.24	22.24	22.30	23.50
		12	6	22.11	22.14	22.19	23.50
		12	13	22.14	22.22	22.10	23.50
		25	0	22.16	22.23	22.08	23.50
	64QAM	1	0	23.61	23.55	23.63	24.00
		1	13	23.48	23.46	23.51	24.00
		1	24	23.51	23.38	23.48	24.00
		12	0	22.28	22.10	22.29	23.00
		12	6	22.28	22.19	22.31	23.00
		12	13	22.26	22.18	22.31	23.00

		25	0	22.20	22.14	22.26	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	24.14	24.23	24.18	25.00
		1	25	24.05	24.07	24.09	25.00
		1	49	23.96	23.95	23.99	25.00
		25	0	23.13	23.22	23.23	24.00
		25	13	23.20	23.24	23.22	24.00
		25	25	23.25	23.18	23.21	24.00
		50	0	23.19	23.11	23.19	24.00
	16QAM	1	0	23.50	23.58	23.58	24.50
		1	25	23.49	23.51	23.54	24.50
		1	49	23.43	23.47	23.38	24.50
		25	0	22.27	22.29	22.34	23.50
		25	13	22.13	22.18	22.22	23.50
		25	25	22.17	22.27	22.14	23.50
		50	0	22.19	22.28	22.12	23.50
	64QAM	1	0	23.63	23.54	23.65	24.00
		1	25	23.51	23.46	23.54	24.00
		1	49	23.50	23.40	23.51	24.00
		25	0	22.31	22.15	22.29	23.00
		25	13	22.30	22.23	22.34	23.00
		25	25	22.29	22.23	22.35	23.00
		50	0	22.23	22.19	22.30	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	24.13	24.19	24.16	25.00
		1	38	24.03	24.06	24.06	25.00
		1	74	23.93	23.90	23.95	25.00
		36	0	23.11	23.18	23.20	24.00
		36	18	23.17	23.19	23.18	24.00
		36	39	23.22	23.15	23.17	24.00
		75	0	23.17	23.07	23.14	24.00
	16QAM	1	0	23.45	23.56	23.56	24.50
		1	38	23.47	23.48	23.52	24.50
		1	74	23.40	23.43	23.35	24.50
		36	0	22.24	22.27	22.31	23.50
		36	18	22.10	22.13	22.18	23.50
		36	39	22.15	22.23	22.11	23.50
		75	0	22.16	22.23	22.08	23.50
	64QAM	1	0	23.58	23.52	23.63	24.00
		1	38	23.49	23.43	23.52	24.00
		1	74	23.51	23.39	23.52	24.00

		36	0	22.30	22.17	22.30	23.00
		36	18	22.28	22.20	22.33	23.00
		36	39	22.27	22.19	22.32	23.00
		75	0	22.20	22.14	22.26	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	**24.10**	**24.25**	**24.13**	25.00
		1	50	24.02	24.02	24.04	25.00
		1	99	23.91	23.89	23.92	25.00
		50	0	23.08	23.13	**23.16**	24.00
		50	25	23.15	**23.15**	23.15	24.00
		50	50	**23.19**	23.10	23.13	24.00
		100	0	**23.14**	23.02	23.10	24.00
	16QAM	1	0	23.49	23.52	23.51	24.50
		1	50	23.43	23.46	23.48	24.50
		1	99	23.38	23.40	23.33	24.50
		50	0	22.21	22.23	22.28	23.50
		50	25	22.07	22.11	22.15	23.50
		50	50	22.12	22.18	22.07	23.50
		100	0	22.14	22.19	22.05	23.50
	64QAM	1	0	23.56	23.48	23.58	24.00
		1	50	23.45	23.41	23.48	24.00
		1	99	23.45	23.33	23.46	24.00
		50	0	22.25	22.09	22.23	23.00
		50	25	22.24	22.16	22.27	23.00
		50	50	22.24	22.14	22.28	23.00
		100	0	22.18	22.10	22.23	23.00

LTE FDD Band 4 Full power&Level1&Level2&Level4-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	24.16	24.46	24.33	25.00
		1	2	24.04	24.29	24.12	25.00
		1	5	24.08	24.19	24.11	25.00
		3	0	24.19	24.33	24.39	25.00
		3	2	24.15	24.30	24.39	25.00
		3	3	24.22	24.22	24.25	25.00
		6	0	23.32	23.38	23.39	24.00
	16QAM	1	0	23.89	23.71	23.73	24.50
		1	2	23.87	23.89	23.80	24.50
		1	5	23.44	23.47	23.52	24.50
		3	0	23.31	23.33	23.36	24.50

		3	2	23.34	23.34	23.36	24.50
		3	3	23.18	23.23	23.27	24.50
		6	0	22.30	22.36	22.46	23.50
	64QAM	1	0	23.55	23.48	23.55	24.00
		1	2	23.59	23.54	23.58	24.00
		1	5	23.50	23.50	23.52	24.00
		3	0	23.37	23.34	23.40	24.00
		3	2	23.43	23.39	23.48	24.00
		3	3	23.29	23.27	23.33	24.00
		6	0	22.25	22.24	22.33	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	24.18	24.50	24.36	25.00
		1	7	24.02	24.32	24.16	25.00
		1	14	24.11	24.24	24.15	25.00
		8	0	23.29	23.45	23.52	24.00
		8	4	23.27	23.40	23.51	24.00
		8	7	23.32	23.33	23.35	24.00
		15	0	23.32	23.42	23.42	24.00
	16QAM	1	0	23.92	23.73	23.76	24.50
		1	7	23.90	23.89	23.84	24.50
		1	14	23.46	23.51	23.55	24.50
		8	0	22.42	22.46	22.48	23.50
		8	4	22.45	22.47	22.48	23.50
		8	7	22.28	22.35	22.40	23.50
		15	0	22.33	22.40	22.49	23.50
	64QAM	1	0	23.58	23.50	23.58	24.00
		1	7	23.62	23.54	23.60	24.00
		1	14	23.52	23.49	23.55	24.00
		8	0	22.48	22.47	22.52	23.00
		8	4	22.54	22.52	22.60	23.00
		8	7	22.39	22.39	22.46	23.00
		15	0	22.28	22.28	22.36	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	24.15	24.48	24.32	25.00
		1	13	24.00	24.28	24.13	25.00
		1	24	24.08	24.19	24.11	25.00
		12	0	23.26	23.40	23.48	24.00
		12	6	23.25	23.36	23.46	24.00
		12	13	23.30	23.31	23.31	24.00
		25	0	23.32	23.41	23.40	24.00
	16QAM	1	0	23.89	23.69	23.73	24.50

		1	13	23.87	23.87	23.81	24.50
		1	24	23.43	23.49	23.51	24.50
		12	0	22.40	22.42	22.45	23.50
		12	6	22.42	22.42	22.44	23.50
		12	13	22.25	22.30	22.36	23.50
		25	0	22.31	22.36	22.44	23.50
	64QAM	1	0	23.55	23.50	23.55	24.00
		1	13	23.59	23.56	23.57	24.00
		1	24	23.53	23.47	23.51	24.00
		12	0	22.46	22.43	22.53	23.00
		12	6	22.51	22.47	22.56	23.00
		12	13	22.36	22.34	22.42	23.00
		25	0	22.26	22.24	22.31	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	24.17	24.49	24.35	25.00
		1	25	24.03	24.33	24.17	25.00
		1	49	24.10	24.23	24.14	25.00
		25	0	23.29	23.45	23.52	24.00
		25	13	23.28	23.41	23.50	24.00
		25	25	23.32	23.35	23.36	24.00
		50	0	23.36	23.43	23.44	24.00
	16QAM	1	0	23.91	23.72	23.75	24.50
		1	25	23.90	23.91	23.84	24.50
		1	49	23.46	23.51	23.54	24.50
		25	0	22.43	22.47	22.49	23.50
		25	13	22.44	22.46	22.47	23.50
		25	25	22.28	22.35	22.40	23.50
		50	0	22.34	22.41	22.48	23.50
	64QAM	1	0	23.57	23.49	23.57	24.00
		1	25	23.62	23.56	23.60	24.00
		1	49	23.52	23.49	23.54	24.00
		25	0	22.49	22.48	22.53	23.00
		25	13	22.53	22.51	22.59	23.00
		25	25	22.39	22.39	22.46	23.00
		50	0	22.29	22.29	22.35	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	24.16	24.45	24.33	25.00
		1	38	24.01	24.32	24.14	25.00
		1	74	24.07	24.18	24.10	25.00
		36	0	23.27	23.41	23.49	24.00
		36	18	23.25	23.36	23.46	24.00

		36	39	23.29	23.32	23.32	24.00
		75	0	23.34	23.39	23.39	24.00
	16QAM	1	0	23.86	23.70	23.73	24.50
		1	38	23.88	23.88	23.82	24.50
		1	74	23.43	23.47	23.51	24.50
		36	0	22.40	22.45	22.46	23.50
		36	18	22.41	22.41	22.43	23.50
		36	39	22.26	22.31	22.37	23.50
		75	0	22.31	22.36	22.44	23.50
	64QAM	1	0	23.52	23.47	23.55	24.00
		1	38	23.60	23.53	23.58	24.00
		1	74	23.53	23.48	23.55	24.00
		36	0	22.48	22.50	22.54	23.00
		36	18	22.51	22.48	22.58	23.00
		36	39	22.37	22.35	22.43	23.00
		75	0	22.26	22.24	22.31	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	**24.13**	**24.41**	**24.30**	25.00
		1	50	24.00	24.28	24.12	25.00
		1	99	24.05	24.17	24.07	25.00
		50	0	23.24	**23.36**	**23.45**	24.00
		50	25	23.23	23.32	23.43	24.00
		50	50	**23.26**	23.27	23.28	24.00
		100	0	23.31	23.34	**23.35**	24.00
	16QAM	1	0	23.57	23.66	23.68	24.50
		1	50	23.84	23.86	23.78	24.50
		1	99	23.41	23.44	23.49	24.50
		50	0	22.37	22.41	22.43	23.50
		50	25	22.38	22.39	22.40	23.50
		50	50	22.23	22.26	22.33	23.50
		100	0	22.29	22.32	22.41	23.50
	64QAM	1	0	23.50	23.43	23.50	24.00
		1	50	23.56	23.51	23.54	24.00
		1	99	23.47	23.42	23.49	24.00
		50	0	22.43	22.42	22.47	23.00
		50	25	22.47	22.44	22.52	23.00
		50	50	22.34	22.30	22.39	23.00
		100	0	22.24	22.20	22.28	23.00

LTE FDD Band 4 Level3&Level4-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	22.11	22.45	22.49	23.00
		1	2	21.96	22.23	22.06	23.00
		1	5	22.04	22.16	22.09	23.00
		3	0	22.18	22.32	22.36	23.00
		3	2	22.09	22.28	22.37	23.00
		3	3	22.18	22.18	22.22	23.00
		6	0	21.23	21.36	21.35	22.00
	16QAM	1	0	21.85	21.68	21.71	22.50
		1	2	21.83	21.82	21.76	22.50
		1	5	21.59	21.64	21.68	22.50
		3	0	21.46	21.48	21.51	22.50
		3	2	21.51	21.52	21.54	22.50
		3	3	21.33	21.42	21.44	22.50
		6	0	20.44	20.54	20.64	21.50
	64QAM	1	0	21.33	21.25	21.33	22.00
		1	2	21.35	21.27	21.34	22.00
		1	5	21.45	21.47	21.48	22.00
		3	0	21.32	21.29	21.35	22.00
		3	2	21.40	21.37	21.46	22.00
		3	3	21.24	21.26	21.30	22.00
		6	0	20.19	20.22	20.31	21.00
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	22.13	22.49	22.52	23.00
		1	7	21.94	22.26	22.10	23.00
		1	14	22.07	22.21	22.13	23.00
		8	0	21.28	21.44	21.49	22.00
		8	4	21.21	21.38	21.49	22.00
		8	7	21.28	21.29	21.32	22.00
		15	0	21.23	21.40	21.38	22.00
	16QAM	1	0	21.88	21.70	21.74	22.50
		1	7	21.86	21.82	21.80	22.50
		1	14	21.61	21.68	21.71	22.50
		8	0	20.57	20.61	20.63	21.50
		8	4	20.62	20.65	20.66	21.50
		8	7	20.43	20.54	20.57	21.50
		15	0	20.47	20.58	20.67	21.50
	64QAM	1	0	21.36	21.27	21.36	22.00
		1	7	21.38	21.27	21.36	22.00
		1	14	21.47	21.46	21.51	22.00
		8	0	20.43	20.42	20.47	21.00
		8	4	20.51	20.50	20.58	21.00

		8	7	20.34	20.38	20.43	21.00
		15	0	20.22	20.26	20.34	21.00
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	22.10	22.47	22.48	23.00
		1	13	21.92	22.22	22.07	23.00
		1	24	22.04	22.16	22.09	23.00
		12	0	21.25	21.39	21.45	22.00
		12	6	21.19	21.34	21.44	22.00
		12	13	21.26	21.27	21.28	22.00
		25	0	21.23	21.39	21.36	22.00
	16QAM	1	0	21.85	21.66	21.71	22.50
		1	13	21.83	21.80	21.77	22.50
		1	24	21.58	21.66	21.67	22.50
		12	0	20.55	20.57	20.60	21.50
		12	6	20.59	20.60	20.62	21.50
		12	13	20.40	20.49	20.53	21.50
		25	0	20.45	20.54	20.62	21.50
	64QAM	1	0	21.33	21.27	21.33	22.00
		1	13	21.35	21.29	21.33	22.00
		1	24	21.48	21.44	21.47	22.00
		12	0	20.41	20.38	20.48	21.00
		12	6	20.48	20.45	20.54	21.00
		12	13	20.31	20.33	20.39	21.00
		25	0	20.20	20.22	20.29	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	22.12	22.48	22.51	23.00
		1	25	21.95	22.27	22.11	23.00
		1	49	22.06	22.20	22.12	23.00
		25	0	21.28	21.44	21.49	22.00
		25	13	21.22	21.39	21.48	22.00
		25	25	21.28	21.31	21.33	22.00
		50	0	21.27	21.41	21.40	22.00
	16QAM	1	0	21.87	21.69	21.73	22.50
		1	25	21.86	21.84	21.80	22.50
		1	49	21.61	21.68	21.70	22.50
		25	0	20.58	20.62	20.64	21.50
		25	13	20.61	20.64	20.65	21.50
		25	25	20.43	20.54	20.57	21.50
		50	0	20.48	20.59	20.66	21.50
	64QAM	1	0	21.35	21.26	21.35	22.00
		1	25	21.38	21.29	21.36	22.00

		1	49	21.47	21.46	21.50	22.00
		25	0	20.44	20.43	20.48	21.00
		25	13	20.50	20.49	20.57	21.00
		25	25	20.34	20.38	20.43	21.00
		50	0	20.23	20.27	20.33	21.00
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	22.11	22.44	22.49	23.00
		1	38	21.93	22.26	22.08	23.00
		1	74	22.03	22.15	22.08	23.00
		36	0	21.26	21.40	21.46	22.00
		36	18	21.19	21.34	21.44	22.00
		36	39	21.25	21.28	21.29	22.00
		75	0	21.25	21.37	21.35	22.00
	16QAM	1	0	21.82	21.67	21.71	22.50
		1	38	21.84	21.81	21.78	22.50
		1	74	21.58	21.64	21.67	22.50
		36	0	20.55	20.60	20.61	21.50
		36	18	20.58	20.59	20.61	21.50
		36	39	20.41	20.50	20.54	21.50
		75	0	20.45	20.54	20.62	21.50
	64QAM	1	0	21.30	21.24	21.33	22.00
		1	38	21.36	21.26	21.34	22.00
		1	74	21.48	21.45	21.51	22.00
		36	0	20.43	20.45	20.49	21.00
		36	18	20.48	20.46	20.56	21.00
		36	39	20.32	20.34	20.40	21.00
		75	0	20.20	20.22	20.29	21.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	**22.08**	**22.40**	**22.46**	23.00
		1	50	21.92	22.22	22.06	23.00
		1	99	22.01	22.14	22.05	23.00
		50	0	**21.23**	**21.35**	**21.42**	22.00
		50	25	21.17	21.30	21.41	22.00
		50	50	21.22	21.23	21.25	22.00
		100	0	21.22	**21.32**	21.31	22.00
	16QAM	1	0	21.82	21.63	21.66	22.50
		1	50	21.80	21.79	21.74	22.50
		1	99	21.56	21.61	21.65	22.50
		50	0	20.52	20.56	20.58	21.50
		50	25	20.55	20.57	20.58	21.50
		50	50	20.38	20.45	20.50	21.50

		100	0	20.43	20.50	20.59	21.50
	64QAM	1	0	21.28	21.20	21.28	22.00
		1	50	21.32	21.24	21.30	22.00
		1	99	21.42	21.39	21.45	22.00
		50	0	20.38	20.37	20.42	21.00
		50	25	20.44	20.42	20.50	21.00
		50	50	20.29	20.29	20.36	21.00
		100	0	20.18	20.18	20.26	21.00

LTE FDD Band 5 Full power&Level1&Level2&Level3				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	24.59	24.70	24.61	25.00
		1	2	24.52	24.77	24.49	25.00
		1	5	24.65	24.74	23.96	25.00
		3	0	24.58	24.74	24.68	25.00
		3	2	24.61	24.82	24.72	25.00
		3	3	24.53	24.82	24.58	25.00
		6	0	23.65	23.89	23.59	24.00
	16QAM	1	0	23.62	23.58	23.56	24.50
		1	2	23.60	23.58	23.62	24.50
		1	5	23.40	23.34	23.41	24.50
		3	0	23.66	23.56	23.63	24.50
		3	2	23.58	23.53	23.61	24.50
		3	3	23.67	23.64	23.70	24.50
		6	0	22.65	22.64	22.74	23.50
	64QAM	1	0	23.90	23.88	23.85	24.50
		1	2	23.82	23.78	23.80	24.50
		1	5	23.90	23.94	23.89	24.50
		3	0	23.70	23.64	23.67	24.50
		3	2	23.81	23.77	23.78	24.50
		3	3	23.65	23.62	23.60	24.50
		6	0	22.75	22.73	22.74	24.00
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	24.60	24.73	24.63	25.00
		1	7	24.51	24.81	24.54	25.00
		1	14	24.67	24.78	23.99	25.00
		8	0	23.68	23.86	23.81	24.00
		8	4	23.74	23.93	23.83	24.00

		8	7	23.63	23.95	23.69	24.00
		15	0	23.69	23.94	23.64	24.00
	16QAM	1	0	24.44	24.39	24.38	24.50
		1	7	24.43	24.40	24.46	24.50
		1	14	24.22	24.18	24.23	24.50
		8	0	23.08	23.00	23.06	23.50
		8	4	22.98	22.95	23.02	23.50
		8	7	23.07	23.06	23.13	23.50
		15	0	22.99	22.99	23.06	23.50
	64QAM	1	0	23.92	23.89	23.87	24.50
		1	7	23.85	23.80	23.82	24.50
		1	14	23.92	23.93	23.91	24.50
		8	0	22.82	22.78	22.80	24.00
		8	4	22.91	22.89	22.89	24.00
		8	7	22.75	22.74	22.73	24.00
		15	0	22.79	22.78	22.76	24.00
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	24.59	24.69	24.61	25.00
		1	13	24.49	24.80	24.51	25.00
		1	24	24.64	24.73	23.95	25.00
		12	0	23.66	23.82	23.78	24.00
		12	6	23.71	23.88	23.79	24.00
		12	13	23.60	23.92	23.65	24.00
		25	0	23.67	23.90	23.59	24.00
	16QAM	1	0	24.39	24.37	24.36	24.50
		1	13	24.41	24.37	24.44	24.50
		1	24	24.19	24.14	24.20	24.50
		12	0	23.05	22.98	23.03	23.50
		12	6	22.95	22.90	22.98	23.50
		12	13	23.05	23.02	23.10	23.50
		25	0	22.96	22.94	23.02	23.50
	64QAM	1	0	23.87	23.87	23.85	24.50
		1	13	23.83	23.77	23.80	24.50
		1	24	23.93	23.92	23.92	24.50
		12	0	22.81	22.80	22.81	24.00
		12	6	22.89	22.86	22.88	24.00
		12	13	22.73	22.70	22.70	24.00
		25	0	22.76	22.73	22.72	24.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	24.56	24.65	**24.58**	25.00
		1	25	24.48	**24.76**	24.49	25.00

		1	49	**24.62**	24.72	23.92	25.00
		25	0	23.63	23.77	23.74	24.00
		25	13	**23.69**	23.84	**23.76**	24.00
		25	25	23.57	**23.87**	23.61	24.00
		50	0	23.64	**23.85**	23.55	24.00
	16QAM	1	0	24.29	24.33	24.31	24.50
		1	25	24.37	24.35	24.40	24.50
		1	49	24.17	24.11	24.18	24.50
		25	0	23.02	22.94	23.00	23.50
		25	13	22.92	22.88	22.95	23.50
		25	25	23.02	22.97	23.06	23.50
		50	0	22.94	22.90	22.99	23.50
	64QAM	1	0	23.85	23.83	23.80	24.50
		1	25	23.79	23.75	23.76	24.50
		1	49	23.87	23.86	23.86	24.50
		25	0	22.76	22.72	22.74	24.00
		25	13	22.85	22.82	22.82	24.00
		25	25	22.70	22.65	22.66	24.00
		50	0	22.74	22.69	22.69	24.00

LTE FDD Band 7 Full power&Level1&Level2&Level4-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	24.37	24.27	24.15	25.00
		1	13	24.21	24.10	24.03	25.00
		1	24	24.20	24.20	24.25	25.00
		12	0	23.36	23.12	23.18	24.00
		12	6	23.33	23.30	23.29	24.00
		12	13	23.39	23.36	23.25	24.00
		25	0	23.31	23.31	23.32	24.00
	16QAM	1	0	23.53	23.73	23.65	24.50
		1	13	23.51	23.42	23.39	24.50
		1	24	23.43	23.40	23.40	24.50
		12	0	22.35	22.25	22.33	23.50
		12	6	22.40	22.29	22.37	23.50
		12	13	22.31	22.34	22.34	23.50
		25	0	22.26	22.32	22.25	23.50
	64QAM	1	0	23.17	23.17	23.22	24.00
		1	13	23.08	23.06	23.10	24.00
		1	24	23.23	23.16	23.18	24.00
		12	0	22.06	21.99	22.10	23.00
		12	6	22.16	22.11	22.18	23.00

		12	13	21.95	21.94	21.98	23.00
		25	0	21.98	21.98	22.02	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	24.39	24.28	24.18	25.00
		1	25	24.24	24.15	24.07	25.00
		1	49	24.22	24.24	24.28	25.00
		25	0	23.39	23.17	23.22	24.00
		25	13	23.36	23.35	23.33	24.00
		25	25	23.41	23.40	23.30	24.00
		50	0	23.35	23.33	23.36	24.00
	16QAM	1	0	23.55	23.76	23.67	24.50
		1	25	23.54	23.46	23.42	24.50
		1	49	23.46	23.42	23.43	24.50
		25	0	22.38	22.30	22.37	23.50
		25	13	22.42	22.33	22.40	23.50
		25	25	22.34	22.39	22.38	23.50
		50	0	22.29	22.37	22.29	23.50
	64QAM	1	0	23.19	23.16	23.24	24.00
		1	25	23.11	23.06	23.13	24.00
		1	49	23.22	23.18	23.21	24.00
		25	0	22.09	22.04	22.10	23.00
		25	13	22.18	22.15	22.21	23.00
		25	25	21.98	21.99	22.02	23.00
		50	0	22.01	22.03	22.06	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	24.38	24.24	24.16	25.00
		1	38	24.22	24.14	24.04	25.00
		1	74	24.19	24.19	24.24	25.00
		36	0	23.37	23.13	23.19	24.00
		36	18	23.33	23.30	23.29	24.00
		36	39	23.38	23.37	23.26	24.00
		75	0	23.33	23.29	23.31	24.00
	16QAM	1	0	23.50	23.74	23.65	24.50
		1	38	23.52	23.43	23.40	24.50
		1	74	23.43	23.38	23.40	24.50
		36	0	22.35	22.28	22.34	23.50
		36	18	22.39	22.28	22.36	23.50
		36	39	22.32	22.35	22.35	23.50
		75	0	22.26	22.32	22.25	23.50
	64QAM	1	0	23.14	23.14	23.22	24.00
		1	38	23.09	23.03	23.11	24.00

		1	74	23.23	23.17	23.22	24.00
		36	0	22.08	22.06	22.11	23.00
		36	18	22.16	22.12	22.20	23.00
		36	39	21.96	21.95	21.99	23.00
		75	0	21.98	21.98	22.02	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	**24.35**	**24.20**	24.13	25.00
		1	50	24.21	24.10	24.02	25.00
		1	99	24.17	24.18	**24.21**	25.00
		50	0	23.34	23.08	23.15	24.00
		50	25	23.31	23.26	**23.26**	24.00
		50	50	**23.35**	**23.32**	23.22	24.00
		100	0	**23.30**	23.24	23.27	24.00
	16QAM	1	0	23.67	23.70	23.60	24.50
		1	50	23.48	23.41	23.36	24.50
		1	99	23.41	23.35	23.38	24.50
		50	0	22.32	22.24	22.31	23.50
		50	25	22.36	22.26	22.33	23.50
		50	50	22.29	22.30	22.31	23.50
		100	0	22.24	22.28	22.22	23.50
	64QAM	1	0	23.12	23.10	23.17	24.00
		1	50	23.05	23.01	23.07	24.00
		1	99	23.17	23.11	23.16	24.00
		50	0	22.03	21.98	22.04	23.00
		50	25	22.12	22.08	22.14	23.00
		50	50	21.93	21.90	21.95	23.00
		100	0	21.96	21.94	21.99	23.00

LTE FDD Band 7 Level2-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	20.55	20.41	20.58	21.00
		1	13	20.41	20.44	20.44	21.00
		1	24	20.51	20.49	20.53	21.00
		12	0	19.61	19.59	19.48	20.00
		12	6	19.63	19.64	19.62	20.00
		12	13	19.69	19.73	19.51	20.00
		25	0	19.73	19.67	19.68	20.00
	16QAM	1	0	19.76	19.57	19.67	20.50
		1	13	19.74	19.76	19.84	20.50
		1	24	19.67	19.73	19.75	20.50

		12	0	18.50	18.53	18.57	19.50
		12	6	18.62	18.66	18.72	19.50
		12	13	18.51	18.57	18.62	19.50
		25	0	18.54	18.68	18.64	19.50
		1	0	19.56	19.61	19.57	20.50
		1	13	19.55	19.61	19.65	20.50
		1	24	19.45	19.52	19.36	20.50
	64QAM	12	0	18.34	18.49	18.40	19.50
		12	6	18.66	18.74	18.70	19.50
		12	13	18.53	18.66	18.61	19.50
		25	0	18.46	18.60	18.50	19.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	20.57	20.42	20.61	21.00
		1	25	20.44	20.49	20.48	21.00
		1	49	20.53	20.53	20.56	21.00
		25	0	19.64	19.64	19.52	20.00
		25	13	19.66	19.69	19.66	20.00
		25	25	19.71	19.77	19.56	20.00
		50	0	19.77	19.69	19.72	20.00
	16QAM	1	0	19.78	19.60	19.69	20.50
		1	25	19.77	19.80	19.87	20.50
		1	49	19.70	19.75	19.78	20.50
		25	0	18.53	18.58	18.61	19.50
		25	13	18.64	18.70	18.75	19.50
		25	25	18.54	18.62	18.66	19.50
		50	0	18.57	18.73	18.68	19.50
	64QAM	1	0	19.58	19.60	19.59	20.50
		1	25	19.58	19.61	19.68	20.50
		1	49	19.44	19.54	19.39	20.50
		25	0	18.37	18.54	18.40	19.50
		25	13	18.68	18.78	18.73	19.50
		25	25	18.56	18.71	18.65	19.50
		50	0	18.49	18.65	18.54	19.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	20.56	20.38	20.59	21.00
		1	38	20.42	20.48	20.45	21.00
		1	74	20.50	20.48	20.52	21.00
		36	0	19.62	19.60	19.49	20.00
		36	18	19.63	19.64	19.62	20.00
		36	39	19.68	19.74	19.52	20.00
		75	0	19.75	19.65	19.67	20.00

	16QAM	1	0	19.73	19.58	19.67	20.50
		1	38	19.75	19.77	19.85	20.50
		1	74	19.67	19.71	19.75	20.50
		36	0	18.50	18.56	18.58	19.50
		36	18	18.61	18.65	18.71	19.50
		36	39	18.52	18.58	18.63	19.50
		75	0	18.54	18.68	18.64	19.50
	64QAM	1	0	19.53	19.58	19.57	20.50
		1	38	19.56	19.58	19.66	20.50
		1	74	19.45	19.53	19.40	20.50
		36	0	18.36	18.56	18.41	19.50
		36	18	18.66	18.75	18.72	19.50
		36	39	18.54	18.67	18.62	19.50
		75	0	18.46	18.60	18.50	19.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	**20.53**	20.34	**20.56**	21.00
		1	50	20.41	20.44	20.43	21.00
		1	99	20.48	**20.47**	20.49	21.00
		50	0	19.59	19.55	19.45	20.00
		50	25	19.61	19.60	**19.59**	20.00
		50	50	**19.65**	**19.69**	19.48	20.00
		100	0	**19.72**	19.60	19.63	20.00
	16QAM	1	0	19.59	19.54	19.62	20.50
		1	50	19.71	19.75	19.81	20.50
		1	99	19.65	19.68	19.73	20.50
		50	0	18.47	18.52	18.55	19.50
		50	25	18.58	18.63	18.68	19.50
		50	50	18.49	18.53	18.59	19.50
		100	0	18.52	18.64	18.61	19.50
	64QAM	1	0	19.51	19.54	19.52	20.50
		1	50	19.52	19.56	19.62	20.50
		1	99	19.39	19.47	19.34	20.50
		50	0	18.31	18.48	18.34	19.50
		50	25	18.62	18.71	18.66	19.50
		50	50	18.51	18.62	18.58	19.50
		100	0	18.44	18.56	18.47	19.50

LTE FDD Band 12 Full power&Level1&Level2&Level3				**Conducted Power(dBm)**	Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)	

				23017/699.7	23095/707.5	23173/715.3	
1.4MHz	QPSK	1	0	24.59	24.51	24.54	25.00
		1	2	24.51	24.38	24.47	25.00
		1	5	24.47	24.57	24.29	25.00
		3	0	24.47	24.36	24.44	25.00
		3	2	24.39	24.43	24.40	25.00
		3	3	24.39	24.45	24.36	25.00
		6	0	23.58	23.45	23.46	24.00
	16QAM	1	0	23.69	23.80	23.76	24.50
		1	2	23.67	23.64	23.61	24.50
		1	5	23.70	23.69	23.63	24.50
		3	0	23.47	23.47	23.40	24.50
		3	2	23.43	23.39	23.36	24.50
		3	3	23.34	23.32	23.24	24.50
		6	0	22.45	22.43	22.40	23.50
	64QAM	1	0	23.76	23.79	23.81	24.50
		1	2	23.64	23.65	23.69	24.50
		1	5	23.79	23.88	23.82	24.50
		3	0	23.58	23.57	23.61	24.50
		3	2	23.54	23.55	23.58	24.50
		3	3	23.60	23.62	23.62	24.50
		6	0	22.57	22.60	22.64	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				23025/700.5	23095/707.5	23165/714.5	
3MHz	QPSK	1	0	24.60	24.54	24.56	25.00
		1	7	24.50	24.42	24.52	25.00
		1	14	24.49	24.61	24.32	25.00
		8	0	23.57	23.48	23.57	24.00
		8	4	23.52	23.54	23.51	24.00
		8	7	23.49	23.58	23.47	24.00
		15	0	23.62	23.50	23.51	24.00
	16QAM	1	0	23.71	23.81	23.78	24.50
		1	7	23.70	23.66	23.65	24.50
		1	14	23.72	23.73	23.65	24.50
		8	0	22.59	22.61	22.53	23.50
		8	4	22.53	22.51	22.47	23.50
		8	7	22.44	22.44	22.37	23.50
		15	0	22.49	22.48	22.42	23.50
	64QAM	1	0	23.78	23.80	23.83	24.50
		1	7	23.67	23.67	23.71	24.50
		1	14	23.81	23.87	23.84	24.50
		8	0	22.70	22.71	22.74	24.00
		8	4	22.64	22.67	22.69	24.00

		8	7	22.70	22.74	22.75	24.00
		15	0	22.61	22.65	22.66	24.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				23035/701.5	23095/707.5	23155/713.5	
5MHz	QPSK	1	0	24.59	24.50	24.54	25.00
		1	13	24.48	24.41	24.49	25.00
		1	24	24.46	24.56	24.28	25.00
		12	0	23.55	23.44	23.54	24.00
		12	6	23.49	23.49	23.47	24.00
		12	13	23.46	23.55	23.43	24.00
		25	0	23.60	23.46	23.46	24.00
	16QAM	1	0	23.66	23.79	23.76	24.50
		1	13	23.68	23.63	23.63	24.50
		1	24	23.69	23.69	23.62	24.50
		12	0	22.56	22.59	22.50	23.50
		12	6	22.50	22.46	22.43	23.50
		12	13	22.42	22.40	22.34	23.50
		25	0	22.46	22.43	22.38	23.50
	64QAM	1	0	23.73	23.78	23.81	24.50
		1	13	23.65	23.64	23.69	24.50
		1	24	23.82	23.86	23.85	24.50
		12	0	22.69	22.73	22.75	24.00
		12	6	22.62	22.64	22.68	24.00
		12	13	22.68	22.70	22.72	24.00
		25	0	22.58	22.60	22.62	24.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				23060/704	23095/707.5	23130/711	
10MHz	QPSK	1	0	**24.56**	24.46	**24.51**	25.00
		1	25	24.47	24.37	24.47	25.00
		1	49	24.44	**24.55**	24.25	25.00
		25	0	**23.52**	23.39	**23.50**	24.00
		25	13	23.47	23.45	23.44	24.00
		25	25	23.43	**23.50**	23.39	24.00
		50	0	**23.57**	23.41	23.42	24.00
	16QAM	1	0	23.77	23.75	23.71	24.50
		1	25	23.64	23.61	23.59	24.50
		1	49	23.67	23.66	23.60	24.50
		25	0	22.53	22.55	22.47	23.50
		25	13	22.47	22.44	22.40	23.50
		25	25	22.39	22.35	22.30	23.50
		50	0	22.44	22.39	22.35	23.50
	64QAM	1	0	23.71	23.74	23.76	24.50
		1	25	23.61	23.62	23.65	24.50

		1	49	23.76	23.80	23.79	24.50
		25	0	22.64	22.65	22.68	24.00
		25	13	22.58	22.60	22.62	24.00
		25	25	22.65	22.65	22.68	24.00
		50	0	22.56	22.56	22.59	24.00

LTE FDD Band 17 Full power&Level1&Level2&Level3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				23755/706.5	23790/710	23825/713.5	
5MHz	QPSK	1	0	24.58	24.53	24.47	25.00
		1	13	24.39	24.61	24.38	25.00
		1	24	24.43	24.38	24.26	25.00
		12	0	23.37	23.44	23.42	24.00
		12	6	23.44	23.48	23.53	24.00
		12	13	23.54	23.57	23.49	24.00
		25	0	23.40	23.36	23.35	24.00
	16QAM	1	0	23.80	23.52	23.50	24.50
		1	13	23.82	23.83	23.84	24.50
		1	24	23.63	23.71	23.69	24.50
		12	0	22.39	22.45	22.47	23.50
		12	6	22.56	22.63	22.60	23.50
		12	13	22.52	22.63	22.58	23.50
		25	0	22.40	22.50	22.45	23.50
	64QAM	1	0	23.58	23.58	23.66	24.50
		1	13	23.73	23.67	23.75	24.50
		1	24	23.85	23.79	23.84	24.50
		12	0	22.74	22.72	22.77	23.50
		12	6	22.66	22.62	22.70	23.50
		12	13	22.53	22.52	22.56	23.50
		25	0	22.57	22.57	22.61	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				23780/709	23790/710	23800/711	
10MHz	QPSK	1	0	**24.55**	24.49	**24.44**	25.00
		1	25	24.38	**24.57**	24.36	25.00
		1	49	24.41	24.37	24.23	25.00
		25	0	23.34	23.39	23.38	24.00
		25	13	23.42	23.44	**23.50**	24.00
		25	25	**23.51**	**23.52**	23.45	24.00
		50	0	**23.37**	23.31	23.31	24.00
	16QAM	1	0	23.41	23.48	23.45	24.50
		1	25	23.78	23.81	23.80	24.50
		1	49	23.61	23.68	23.67	24.50

		25	0	22.36	22.41	22.44	23.50
		25	13	22.53	22.61	22.57	23.50
		25	25	22.49	22.58	22.54	23.50
		50	0	22.38	22.46	22.42	23.50
	64QAM	1	0	23.56	23.54	23.61	24.50
		1	25	23.69	23.65	23.71	24.50
		1	49	23.79	23.73	23.78	24.50
		25	0	22.69	22.64	22.70	23.50
		25	13	22.62	22.58	22.64	23.50
		25	25	22.50	22.47	22.52	23.50
		50	0	22.55	22.53	22.58	23.50

LTE FDD Band 26 Full power&Level1&Level2&Level3				Conducted Power(dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				26697/814.7	26865/831.5	27033/848.3	
1.4MHz	QPSK	1	0	24.45	24.33	24.35	25.00
		1	2	24.25	23.82	24.43	25.00
		1	5	24.19	23.87	23.86	25.00
		3	0	24.37	24.49	24.55	25.00
		3	2	24.49	24.51	24.52	25.00
		3	3	24.35	24.41	24.31	25.00
		6	0	23.52	23.47	23.69	24.00
	16QAM	1	0	23.52	23.72	23.79	24.00
		1	2	23.50	23.48	23.52	24.00
		1	5	23.74	23.68	23.73	24.00
		3	0	23.49	23.39	23.41	24.00
		3	2	23.57	23.52	23.56	24.00
		3	3	23.52	23.49	23.50	24.00
		6	0	22.52	22.51	22.56	23.00
	64QAM	1	0	23.47	23.43	23.49	24.50
		1	2	23.62	23.60	23.66	24.50
		1	5	23.44	23.43	23.45	24.50
		3	0	23.65	23.55	23.62	24.50
		3	2	23.56	23.51	23.59	24.50
		3	3	23.61	23.58	23.64	24.50
		6	0	22.71	22.70	22.80	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				26705/815.5	26865/831.5	27025/847.5	
3MHz	QPSK	1	0	24.44	24.35	24.34	25.00
		1	7	24.21	23.81	24.44	25.00
		1	14	24.19	23.87	23.86	25.00
		8	0	23.44	23.56	23.64	24.00

		8	4	23.59	23.57	23.59	24.00
		8	7	23.43	23.50	23.37	24.00
		15	0	23.52	23.50	23.70	24.00
	16QAM	1	0	23.52	23.70	23.79	24.50
		1	7	23.50	23.46	23.53	24.50
		1	14	23.73	23.70	23.72	24.50
		8	0	22.58	22.48	22.50	23.50
		8	4	22.65	22.60	22.64	23.50
		8	7	22.59	22.56	22.59	23.50
		15	0	22.53	22.51	22.54	23.50
	64QAM	1	0	23.47	23.45	23.49	24.50
		1	7	23.62	23.62	23.65	24.50
		1	14	23.47	23.40	23.44	24.50
		8	0	22.74	22.64	22.75	23.50
		8	4	22.64	22.59	22.67	23.50
		8	7	22.68	22.65	22.73	23.50
		15	0	22.72	22.70	22.78	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				26715/816.5	26865/831.5	27015/846.5	
5MHz	QPSK	1	0	24.46	24.36	24.37	25.00
		1	13	24.24	23.86	24.48	25.00
		1	24	24.21	23.91	23.89	25.00
		12	0	23.47	23.61	23.68	24.00
		12	6	23.62	23.62	23.63	24.00
		12	13	23.45	23.54	23.42	24.00
		25	0	23.56	23.52	23.74	24.00
	16QAM	1	0	23.54	23.73	23.81	24.50
		1	13	23.53	23.50	23.56	24.50
		1	24	23.76	23.72	23.75	24.50
		12	0	22.61	22.53	22.54	23.50
		12	6	22.67	22.64	22.67	23.50
		12	13	22.62	22.61	22.63	23.50
		25	0	22.56	22.56	22.58	23.50
	64QAM	1	0	23.49	23.44	23.51	24.50
		1	13	23.65	23.62	23.68	24.50
		1	24	23.46	23.42	23.47	24.50
		12	0	22.77	22.69	22.75	23.50
		12	6	22.66	22.63	22.70	23.50
		12	13	22.71	22.70	22.77	23.50
		25	0	22.75	22.75	22.82	23.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				26750/820	26865/831.5	26990/844	
10MHz	QPSK	1	0	24.45	24.32	24.35	25.00

		1	25	24.22	23.85	24.45	25.00
		1	49	24.18	23.86	23.85	25.00
		25	0	23.45	23.57	23.65	24.00
		25	13	23.59	23.57	23.59	24.00
		25	25	23.42	23.51	23.38	24.00
		50	0	23.54	23.48	23.69	24.00
	16QAM	1	0	23.49	23.71	23.79	24.50
		1	25	23.51	23.47	23.54	24.50
		1	49	23.73	23.68	23.72	24.50
		25	0	22.58	22.51	22.51	23.50
		25	13	22.64	22.59	22.63	23.50
		25	25	22.60	22.57	22.60	23.50
		50	0	22.53	22.51	22.54	23.50
	64QAM	1	0	23.44	23.42	23.49	24.50
		1	25	23.63	23.59	23.66	24.50
		1	49	23.47	23.41	23.48	24.50
		25	0	22.76	22.71	22.76	23.50
		25	13	22.64	22.60	22.69	23.50
		25	25	22.69	22.66	22.74	23.50
		50	0	22.72	22.70	22.78	23.50

Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				26775/822.5	26865/831.5	26965/841.5	
15MHz	QPSK	1	0	**24.42**	**24.28**	24.32	25.00
		1	38	24.21	23.81	**24.43**	25.00
		1	74	24.16	23.85	23.82	25.00
		36	0	23.42	23.52	**23.61**	24.00
		36	18	**23.57**	**23.53**	23.56	24.00
		36	39	23.39	23.46	23.34	24.00
		75	0	23.51	23.43	**23.65**	24.00
	16QAM	1	0	23.71	23.67	23.74	24.50
		1	38	23.47	23.45	23.50	24.50
		1	74	23.71	23.65	23.70	24.50
		36	0	22.55	22.47	22.48	23.50
		36	18	22.61	22.57	22.60	23.50
		36	39	22.57	22.52	22.56	23.50
		75	0	22.51	22.47	22.51	23.50
	64QAM	1	0	23.42	23.38	23.44	24.50
		1	38	23.59	23.57	23.62	24.50
		1	74	23.41	23.35	23.42	24.50
		36	0	22.71	22.63	22.69	23.50
		36	18	22.60	22.56	22.63	23.50
		36	39	22.66	22.61	22.70	23.50
		75	0	22.70	22.66	22.75	23.50

LTE TDD Band 38 Full power&Level1&Level2&Level4-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	24.12	24.08	24.17	25.00
		1	13	24.08	24.13	24.11	25.00
		1	24	24.22	23.99	24.11	25.00
		12	0	23.17	23.31	23.17	24.00
		12	6	23.36	23.19	23.20	24.00
		12	13	23.34	23.36	23.23	24.00
		25	0	23.25	23.27	23.23	24.00
	16QAM	1	0	23.23	23.21	23.17	24.50
		1	13	23.21	23.13	23.20	24.50
		1	24	23.31	23.40	23.35	24.50
		12	0	22.27	22.28	22.33	23.50
		12	6	22.33	22.35	22.28	23.50
		12	13	22.26	22.43	22.30	23.50
		25	0	22.23	22.24	22.29	23.50
	64QAM	1	0	22.97	22.97	23.02	24.00
		1	13	22.99	22.97	23.01	24.00
		1	24	23.15	23.08	23.10	24.00
		12	0	21.94	21.87	21.98	23.00
		12	6	22.02	21.97	22.04	23.00
		12	13	22.01	22.00	22.04	23.00
		25	0	22.03	22.03	22.07	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	24.14	24.09	24.20	25.00
		1	25	24.11	24.18	24.15	25.00
		1	49	24.24	24.03	24.14	25.00
		25	0	23.20	23.36	23.21	24.00
		25	13	23.39	23.24	23.24	24.00
		25	25	23.36	23.40	23.28	24.00
		50	0	23.29	23.29	23.27	24.00
	16QAM	1	0	23.25	23.24	23.19	24.50
		1	25	23.24	23.17	23.23	24.50
		1	49	23.34	23.42	23.38	24.50
		25	0	22.30	22.33	22.37	23.50
		25	13	22.35	22.39	22.31	23.50
		25	25	22.29	22.48	22.34	23.50
		50	0	22.26	22.29	22.33	23.50
	64QAM	1	0	22.99	22.96	23.04	24.00

		1	25	23.02	22.97	23.04	24.00
		1	49	23.14	23.10	23.13	24.00
		25	0	21.97	21.92	21.98	23.00
		25	13	22.04	22.01	22.07	23.00
		25	25	22.04	22.05	22.08	23.00
		50	0	22.06	22.08	22.11	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up
				37825/2577.5	38000/2595	38175/2612.5	Limit
15MHz	QPSK	1	0	24.13	24.05	24.18	25.00
		1	38	24.09	24.17	24.12	25.00
		1	74	24.21	23.98	24.10	25.00
		36	0	23.18	23.32	23.18	24.00
		36	18	23.36	23.19	23.20	24.00
		36	39	23.33	23.37	23.24	24.00
		75	0	23.27	23.25	23.22	24.00
	16QAM	1	0	23.20	23.22	23.17	24.50
		1	38	23.22	23.14	23.21	24.50
		1	74	23.31	23.38	23.35	24.50
		36	0	22.27	22.31	22.34	23.50
		36	18	22.32	22.34	22.27	23.50
		36	39	22.27	22.44	22.31	23.50
		75	0	22.23	22.24	22.29	23.50
	64QAM	1	0	22.94	22.94	23.02	24.00
		1	38	23.00	22.94	23.02	24.00
		1	74	23.15	23.09	23.14	24.00
		36	0	21.96	21.94	21.99	23.00
		36	18	22.02	21.98	22.06	23.00
		36	39	22.02	22.01	22.05	23.00
		75	0	22.03	22.03	22.07	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up
				37850/2580	38000/2595	38150/2610	Limit
20MHz	QPSK	1	0	24.10	24.01	**24.15**	25.00
		1	50	24.08	**24.13**	24.10	25.00
		1	99	**24.19**	23.97	24.07	25.00
		50	0	23.15	23.27	23.14	24.00
		50	25	**23.34**	23.15	23.17	24.00
		50	50	23.30	**23.32**	**23.20**	24.00
		100	0	**23.24**	23.20	23.18	24.00
	16QAM	1	0	23.22	23.18	23.12	24.50
		1	50	23.18	23.12	23.17	24.50
		1	99	23.29	23.35	23.33	24.50
		50	0	22.24	22.27	22.31	23.50
		50	25	22.29	22.32	22.24	23.50

		50	50	22.24	22.39	22.27	23.50
		100	0	22.21	22.20	22.26	23.50
	64QAM	1	0	22.92	22.90	22.97	24.00
		1	50	22.96	22.92	22.98	24.00
		1	99	23.09	23.03	23.08	24.00
		50	0	21.91	21.86	21.92	23.00
		50	25	21.98	21.94	22.00	23.00
		50	50	21.99	21.96	22.01	23.00
		100	0	22.01	21.99	22.04	23.00

LTE TDD Band 38 Level3&Level4-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	21.44	21.42	21.44	22.00
		1	13	21.49	21.36	21.52	22.00
		1	24	21.57	21.45	21.38	22.00
		12	0	20.49	20.50	20.50	21.00
		12	6	20.62	20.55	20.52	21.00
		12	13	20.63	20.66	20.57	21.00
		25	0	20.61	20.68	20.54	21.00
	16QAM	1	0	20.57	20.56	20.63	21.50
		1	13	20.55	20.43	20.48	21.50
		1	24	20.60	20.52	20.53	21.50
		12	0	19.55	19.50	19.54	20.50
		12	6	19.53	19.54	19.61	20.50
		12	13	19.68	19.66	19.75	20.50
		25	0	19.55	19.45	19.64	20.50
	64QAM	1	0	20.51	20.52	20.63	21.00
		1	13	20.34	20.42	20.37	21.00
		1	24	20.39	20.50	20.44	21.00
		12	0	19.52	19.43	19.62	20.00
		12	6	19.37	19.52	19.56	20.00
		12	13	19.41	19.62	19.70	20.00
		25	0	19.63	19.56	19.74	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	21.46	21.43	21.47	22.00
		1	25	21.52	21.41	21.56	22.00
		1	49	21.59	21.49	21.41	22.00
		25	0	20.52	20.55	20.54	21.00
		25	13	20.65	20.60	20.56	21.00
		25	25	20.65	20.70	20.62	21.00

		50	0	20.65	20.70	20.58	21.00
	16QAM	1	0	20.59	20.59	20.65	21.50
		1	25	20.58	20.47	20.51	21.50
		1	49	20.63	20.54	20.56	21.50
		25	0	19.58	19.55	19.58	20.50
		25	13	19.55	19.58	19.64	20.50
		25	25	19.71	19.71	19.79	20.50
		50	0	19.58	19.50	19.68	20.50
	64QAM	1	0	20.53	20.51	20.65	21.00
		1	25	20.37	20.42	20.40	21.00
		1	49	20.38	20.52	20.47	21.00
		25	0	19.55	19.48	19.62	20.00
		25	13	19.39	19.56	19.59	20.00
		25	25	19.44	19.67	19.74	20.00
		50	0	19.66	19.61	19.78	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	21.45	21.39	21.45	22.00
		1	38	21.50	21.40	21.53	22.00
		1	74	21.56	21.44	21.37	22.00
		36	0	20.50	20.51	20.51	21.00
		36	18	20.62	20.55	20.52	21.00
		36	39	20.62	20.67	20.58	21.00
		75	0	20.63	20.66	20.53	21.00
	16QAM	1	0	20.54	20.57	20.63	21.50
		1	38	20.56	20.44	20.49	21.50
		1	74	20.60	20.50	20.53	21.50
		36	0	19.55	19.53	19.55	20.50
		36	18	19.52	19.53	19.60	20.50
		36	39	19.69	19.67	19.76	20.50
		75	0	19.55	19.45	19.64	20.50
	64QAM	1	0	20.48	20.49	20.63	21.00
		1	38	20.35	20.39	20.38	21.00
		1	74	20.39	20.51	20.48	21.00
		36	0	19.54	19.50	19.63	20.00
		36	18	19.37	19.53	19.58	20.00
		36	39	19.42	19.63	19.71	20.00
		75	0	19.63	19.56	19.74	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	21.42	21.35	21.42	22.00
		1	50	21.49	21.36	**21.51**	22.00
		1	99	**21.54**	**21.43**	21.34	22.00

		50	0	20.47	20.46	20.47	21.00
		50	25	**20.60**	20.51	20.49	21.00
		50	50	20.59	**20.62**	**20.54**	21.00
		100	0	20.60	**20.61**	20.49	21.00
	16QAM	1	0	20.47	20.53	20.58	21.50
		1	50	20.52	20.42	20.45	21.50
		1	99	20.58	20.47	20.51	21.50
		50	0	19.52	19.49	19.52	20.50
		50	25	19.49	19.51	19.57	20.50
		50	50	19.66	19.62	19.72	20.50
		100	0	19.53	19.41	19.61	20.50
	64QAM	1	0	20.46	20.45	20.58	21.00
		1	50	20.31	20.37	20.34	21.00
		1	99	20.33	20.45	20.42	21.00
		50	0	19.49	19.42	19.56	20.00
		50	25	19.33	19.49	19.52	20.00
		50	50	19.39	19.58	19.67	20.00
		100	0	19.61	19.52	19.71	20.00

LTE TDD Band 41 Full power&Level1&Level2&Level4-D1				Conducted Power(dBm)					Tune-up Limit
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5	
5MHz	QPSK	1	0	24.35	24.49	24.39	24.48	24.66	25.00
		1	13	24.35	24.46	24.47	24.44	24.49	25.00
		1	24	24.50	24.55	24.52	24.36	24.54	25.00
		12	0	23.50	23.51	23.49	23.50	23.53	24.00
		12	6	23.58	23.68	23.54	23.44	23.58	24.00
		12	13	23.61	23.72	23.62	23.59	23.56	24.00
		25	0	23.56	23.68	23.58	23.51	23.64	24.00
	16QAM	1	0	23.56	23.39	23.48	23.49	23.52	24.50
		1	13	23.54	23.50	23.49	23.47	23.52	24.50
		1	24	23.62	23.63	23.57	23.53	23.67	24.50
		12	0	22.55	22.51	22.53	22.58	22.58	23.50
		12	6	22.63	22.62	22.66	22.55	22.72	23.50
		12	13	22.65	22.72	22.62	22.65	22.72	23.50
		25	0	22.63	22.67	22.60	22.61	22.70	23.50
	64QAM	1	0	23.12	23.11	23.15	23.15	23.16	24.00
		1	13	23.12	23.11	23.14	23.13	23.14	24.00
		1	24	23.29	23.22	23.27	23.27	23.23	24.00
		12	0	22.09	22.04	22.08	22.03	22.10	23.00
		12	6	22.19	22.15	22.17	22.14	22.18	23.00
		12	13	22.21	22.16	22.16	22.15	22.17	23.00
		25	0	22.22	22.20	22.19	22.18	22.19	23.00
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					Tune-up Limit
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	24.37	24.50	24.42	24.50	24.67	25.00
		1	25	24.38	24.51	24.51	24.47	24.54	25.00
		1	49	24.52	24.59	24.55	24.38	24.58	25.00
		25	0	23.53	23.56	23.53	23.53	23.58	24.00
		25	13	23.61	23.73	23.58	23.47	23.63	24.00
		25	25	23.63	23.76	23.67	23.61	23.60	24.00
		50	0	23.60	23.70	23.62	23.55	23.66	24.00
	16QAM	1	0	23.58	23.42	23.50	23.51	23.55	24.50
		1	25	23.57	23.54	23.52	23.50	23.56	24.50
		1	49	23.65	23.65	23.60	23.56	23.69	24.50
		25	0	22.58	22.56	22.57	22.61	22.63	23.50
		25	13	22.65	22.66	22.69	22.57	22.76	23.50
		25	25	22.68	22.77	22.66	22.68	22.77	23.50
		50	0	22.66	22.72	22.64	22.64	22.75	23.50

	64QAM	1	0	23.12	23.08	23.17	23.14	23.18	24.00
		1	25	23.14	23.08	23.17	23.13	23.17	24.00
		1	49	23.27	23.18	23.26	23.29	23.26	24.00
		25	0	22.05	22.05	22.11	22.08	22.10	23.00
		25	13	22.14	22.11	22.19	22.18	22.21	23.00
		25	25	22.16	22.12	22.19	22.20	22.21	23.00
		50	0	22.18	22.15	22.22	22.23	22.23	23.00
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					Tune-up Limit
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5	
15MHz	QPSK	1	0	24.36	24.46	24.40	24.50	24.62	25.00
		1	38	24.36	24.50	24.47	24.48	24.51	25.00
		1	74	24.49	24.54	24.50	24.34	24.55	25.00
		36	0	23.51	23.52	23.49	23.53	23.53	24.00
		36	18	23.58	23.68	23.53	23.46	23.57	24.00
		36	39	23.60	23.73	23.62	23.60	23.56	24.00
		75	0	23.58	23.66	23.56	23.55	23.61	24.00
	16QAM	1	0	23.53	23.40	23.48	23.46	23.54	24.50
		1	38	23.55	23.51	23.50	23.46	23.55	24.50
		1	74	23.62	23.61	23.57	23.54	23.64	24.50
		36	0	22.55	22.54	22.54	22.59	22.60	23.50
		36	18	22.62	22.61	22.65	22.53	22.72	23.50
		36	39	22.66	22.73	22.62	22.68	22.72	23.50
		75	0	22.63	22.67	22.59	22.63	22.69	23.50
	64QAM	1	0	23.09	23.08	23.12	23.12	23.16	24.00
		1	38	23.11	23.09	23.15	23.10	23.15	24.00
		1	74	23.28	23.22	23.27	23.28	23.27	24.00
		36	0	22.12	22.06	22.10	22.10	22.11	23.00
		36	18	22.15	22.13	22.17	22.15	22.20	23.00
		36	39	22.17	22.13	22.17	22.16	22.18	23.00
		75	0	22.18	22.15	22.19	22.18	22.19	23.00
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					Tune-up Limit
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680	
20MHz	QPSK	1	0	24.33	24.42	24.37	**24.46**	**24.59**	25.00
		1	50	24.35	24.46	24.46	24.44	24.49	25.00
		1	99	**24.47**	**24.53**	**24.48**	24.33	24.52	25.00
		50	0	23.48	23.47	23.46	23.48	23.49	24.00
		50	25	23.56	23.64	23.51	23.42	**23.54**	24.00
		50	50	**23.57**	**23.68**	**23.59**	**23.55**	23.52	24.00
		100	0	23.55	**23.61**	23.53	23.50	**23.57**	24.00
	16QAM	1	0	23.39	23.36	23.43	23.42	23.49	24.50
		1	50	23.51	23.49	23.46	23.44	23.51	24.50
		1	99	23.60	23.58	23.55	23.51	23.62	24.50
		50	0	22.52	22.50	22.51	22.55	22.57	23.50

		50	25	22.59	22.59	22.62	22.51	22.69	23.50
		50	50	22.63	22.68	22.59	22.63	22.68	23.50
		100	0	22.61	22.63	22.57	22.59	22.66	23.50
	64QAM	1	0	23.05	23.03	23.10	23.08	23.11	24.00
		1	50	23.09	23.05	23.11	23.08	23.11	24.00
		1	99	23.22	23.16	23.21	23.22	23.21	24.00
		50	0	22.04	21.99	22.05	22.02	22.04	23.00
		50	25	22.11	22.07	22.13	22.11	22.14	23.00
		50	50	22.12	22.09	22.14	22.11	22.14	23.00
		100	0	22.14	22.12	22.17	22.14	22.16	23.00

LTE TDD Band 41 Level3&Level4-D2				Conducted Power(dBm)					Tune-up Limit
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					
				39675/2498.5	40148/2545.8	40620/2593	41093/2640.3	41565/2687.5	
5MHz	QPSK	1	0	21.53	21.78	21.71	21.85	21.81	22.00
		1	13	21.80	21.73	21.54	21.64	21.83	22.00
		1	24	21.69	21.79	21.77	21.76	21.75	22.00
		12	0	20.80	20.81	20.79	20.79	20.79	21.00
		12	6	20.88	20.91	20.89	20.84	20.81	21.00
		12	13	20.92	20.89	20.90	20.90	20.86	21.00
		25	0	20.85	20.86	20.82	20.86	20.86	21.00
	16QAM	1	0	21.18	21.28	21.16	21.08	21.38	21.50
		1	13	21.16	21.28	21.14	21.04	21.21	21.50
		1	24	21.32	21.32	21.28	21.24	21.34	21.50
		12	0	20.19	20.21	20.13	20.15	20.28	20.50
		12	6	20.20	20.25	20.16	20.02	20.29	20.50
		12	13	20.24	20.30	20.18	20.14	20.37	20.50
		25	0	20.09	20.13	20.03	19.91	20.16	20.50
	64QAM	1	0	20.80	20.88	20.85	20.66	20.75	21.00
		1	13	20.80	20.88	20.72	20.64	20.55	21.00
		1	24	20.72	20.77	20.87	20.74	20.69	21.00
		12	0	19.88	19.83	19.84	19.69	19.73	20.00
		12	6	19.85	19.81	19.80	19.76	19.77	20.00
		12	13	19.71	19.60	19.85	19.82	19.57	20.00
		25	0	19.63	19.66	19.88	19.82	19.52	20.00
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					Tune-up Limit
				39700/2501	40160/2547	40620/2593	41080/2639	41540/2685	
10MHz	QPSK	1	0	21.55	21.79	21.73	21.86	21.84	22.00
		1	25	21.83	21.78	21.57	21.69	21.87	22.00
		1	49	21.71	21.83	21.79	21.80	21.78	22.00
		25	0	20.83	20.86	20.82	20.84	20.83	21.00
		25	13	20.91	20.96	20.92	20.89	20.85	21.00

		25	25	20.94	20.93	20.92	20.94	20.91	21.00
		50	0	20.89	20.88	20.86	20.88	20.90	21.00
	16QAM	1	0	21.20	21.31	21.18	21.11	21.40	21.50
		1	25	21.19	21.32	21.17	21.08	21.24	21.50
		1	49	21.35	21.34	21.31	21.26	21.37	21.50
		25	0	20.22	20.26	20.16	20.20	20.32	20.50
		25	13	20.22	20.29	20.18	20.06	20.32	20.50
		25	25	20.27	20.35	20.21	20.19	20.41	20.50
		50	0	20.12	20.18	20.06	19.96	20.20	20.50
	64QAM	1	0	20.82	20.87	20.87	20.65	20.77	21.00
		1	25	20.83	20.88	20.75	20.64	20.58	21.00
		1	49	20.71	20.79	20.86	20.76	20.72	21.00
		25	0	19.91	19.88	19.87	19.74	19.73	20.00
		25	13	19.87	19.85	19.82	19.80	19.80	20.00
		25	25	19.74	19.65	19.88	19.87	19.61	20.00
		50	0	19.66	19.71	19.91	19.87	19.56	20.00
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					Tune-up Limit
				39725/2503.5	40173/2548.3	40620/2593	41068/2637.8	41515/2682.5	
15MHz	QPSK	1	0	21.54	21.75	21.72	21.82	21.82	22.00
		1	38	21.81	21.77	21.55	21.68	21.84	22.00
		1	74	21.68	21.78	21.76	21.75	21.74	22.00
		36	0	20.81	20.82	20.80	20.80	20.80	21.00
		36	18	20.88	20.91	20.89	20.84	20.81	21.00
		36	39	20.91	20.90	20.89	20.91	20.87	21.00
		75	0	20.87	20.84	20.84	20.84	20.85	21.00
	16QAM	1	0	21.15	21.29	21.13	21.09	21.38	21.50
		1	38	21.17	21.29	21.15	21.05	21.22	21.50
		1	74	21.32	21.30	21.28	21.22	21.34	21.50
		36	0	20.19	20.24	20.13	20.18	20.29	20.50
		36	18	20.19	20.24	20.15	20.01	20.28	20.50
		36	39	20.25	20.31	20.19	20.15	20.38	20.50
		75	0	20.09	20.13	20.03	19.91	20.16	20.50
	64QAM	1	0	20.77	20.85	20.82	20.63	20.75	21.00
		1	38	20.81	20.85	20.73	20.61	20.56	21.00
		1	74	20.72	20.78	20.87	20.75	20.73	21.00
		36	0	19.90	19.90	19.86	19.76	19.74	20.00
		36	18	19.85	19.82	19.80	19.77	19.79	20.00
		36	39	19.72	19.61	19.86	19.83	19.58	20.00
		75	0	19.63	19.66	19.88	19.82	19.52	20.00
Bandwidth	Modulation	RB allocation	offset	Channel/Frequency(MHz)					Tune-up Limit
				39750/2506	40185/2549.5	40620/2593	41055/2636.5	41490/2680	
20MHz	QPSK	1	0	21.61	21.81	21.79	**21.88**	21.89	22.00
		1	50	**21.90**	21.83	21.64	21.74	**21.92**	22.00

		1	99	21.76	**21.87**	**21.84**	21.84	21.81	22.00
		50	0	20.88	20.87	20.87	20.85	20.86	21.00
		50	25	20.96	**20.97**	**20.97**	20.90	20.88	21.00
		50	50	**20.98**	20.95	20.96	**20.96**	**20.93**	21.00
		100	0	**20.94**	20.89	20.91	20.89	**20.91**	21.00
	16QAM	1	0	21.34	21.35	21.28	21.15	21.43	21.50
		1	50	21.23	21.37	21.21	21.13	21.28	21.50
		1	99	21.40	21.37	21.36	21.29	21.42	21.50
		50	0	20.26	20.30	20.20	20.24	20.36	20.50
		50	25	20.26	20.32	20.22	20.09	20.35	20.50
		50	50	20.32	20.36	20.26	20.20	20.44	20.50
		100	0	20.17	20.19	20.11	19.97	20.23	20.50
	64QAM	1	0	20.85	20.91	20.90	20.69	20.80	21.00
		1	50	20.87	20.93	20.79	20.69	20.62	21.00
		1	99	20.76	20.82	20.91	20.79	20.77	21.00
		50	0	19.95	19.92	19.91	19.78	19.77	20.00
		50	25	19.91	19.88	19.86	19.83	19.83	20.00
		50	50	19.79	19.66	19.93	19.88	19.64	20.00
		100	0	19.71	19.72	19.96	19.88	19.59	20.00

Full power& Level1& Level2& Level 4-D1															
Antenna	CA Combanation	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)
2	CA_7C	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	23.45	25.00
	CA_7C	QPSK	7	20	1	0	21100	3100	7	20	21298	1	99	23.35	25.00
	CA_7C	QPSK	7	20	1	99	21100	3100	7	20	20902	1	0	23.51	25.00
	CA_7C	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	23.62	25.00
2	CA-41C	QPSK	41	20	1	99	39750	39750	41	20	39948	1	0	23.65	25.00
	CA-41C	QPSK	41	20	1	0	40185	40185	41	20	40383	1	0	23.52	25.00
	CA-41C	QPSK	41	20	1	99	40185	40185	41	20	39987	1	0	23.66	25.00
	CA-41C	QPSK	41	20	1	0	40620	40620	41	20	40818	1	0	23.58	25.00
	CA-41C	QPSK	41	20	1	99	40620	40620	41	20	40422	1	0	23.69	25.00
	CA-41C	QPSK	41	20	1	0	41055	41055	41	20	41253	1	0	23.62	25.00
	CA-41C	QPSK	41	20	1	99	41055	41055	41	20	40857	1	0	23.54	25.00
	CA-41C	QPSK	41	20	1	0	41490	41490	41	20	41292	1	99	23.71	25.00

Level 3&Level 4-D2															
Antenna	CA Combanation	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)
2	CA_7C	QPSK	7	20	1	99	20850	2850	7	20	21048	1	0	19.65	21.00
	CA_7C	QPSK	7	20	1	0	21100	3100	7	20	21298	1	99	19.63	21.00
	CA_7C	QPSK	7	20	1	99	21100	3100	7	20	20902	1	0	19.68	21.00
	CA_7C	QPSK	7	20	1	0	21350	3350	7	20	21152	1	99	19.70	21.00
2	CA-41C	QPSK	41	20	1	99	39750	39750	41	20	39948	1	0	21.32	22.00
	CA-41C	QPSK	41	20	1	0	40185	40185	41	20	40383	1	0	21.09	22.00
	CA-41C	QPSK	41	20	1	99	40185	40185	41	20	39987	1	0	21.11	22.00
	CA-41C	QPSK	41	20	1	0	40620	40620	41	20	40818	1	0	21.25	22.00
	CA-41C	QPSK	41	20	1	99	40620	40620	41	20	40422	1	0	21.13	22.00
	CA-41C	QPSK	41	20	1	0	41055	41055	41	20	41253	1	0	21.02	22.00
	CA-41C	QPSK	41	20	1	99	41055	41055	41	20	40857	1	0	21.18	22.00
	CA-41C	QPSK	41	20	1	0	41490	41490	41	20	41292	1	99	21.21	22.00

9.4 NR Mode

ANT 5 -NR n41 Level3				Maximum Output Power (dBm)			Tune-up Limit (dBm)
				501204	518598	535998	
Bandwidth (MHz)	2506.2	2592.99	2679.99	2506.2	2592.99	2679.99	
20	DFT-s-OFDM BPSK	1	1	17.91	18.03	17.97	19.00
		1	49	17.55	17.76	17.63	19.00
		25	12	17.93	17.94	17.77	19.00
	DFT-s-OFDM QPSK	1	1	18.16	17.98	18.01	19.00
		1	49	17.95	17.76	17.89	19.00
		25	12	17.92	17.94	17.74	19.00
	DFT-s-OFDM 16QAM	1	1	16.67	16.74	16.62	18.00
		1	49	16.93	16.46	16.43	18.00
		25	12	16.92	16.89	16.80	18.00
	DFT-s-OFDM 64QAM	1	1	15.75	15.61	15.51	17.00
		1	49	15.49	15.36	15.41	17.00
		25	12	15.61	15.39	15.32	17.00
	DFT-s-OFDM 256QAM	1	1	13.32	13.15	13.17	14.00
		1	49	13.16	13.01	12.83	14.00
		25	12	13.66	13.49	13.63	14.00
	CP-OFDM QPSK	1	1	16.51	16.41	16.37	17.00
	CP-OFDM 16QAM	1	1	15.92	15.85	15.70	16.50
	CP-OFDM 64QAM	1	1	14.70	14.67	14.57	15.50
	CP-OFDM 256QAM	1	1	11.67	11.67	11.46	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	503202	518598	534000	Tune-up Limit (dBm)
				2516.01	2592.99	2670	
40	DFT-s-OFDM BPSK	1	1	17.90	17.99	17.95	19.00
		1	104	17.53	17.75	17.60	19.00
		50	25	17.90	17.89	17.73	19.00
	DFT-s-OFDM QPSK	1	1	18.14	17.94	17.98	19.00
		1	104	17.92	17.71	17.85	19.00
		50	25	17.89	17.91	17.70	19.00
	DFT-s-OFDM 16QAM	1	1	16.65	16.70	16.57	18.00
		1	104	16.88	16.44	16.41	18.00
		50	25	16.90	16.86	16.78	18.00
	DFT-s-OFDM 64QAM	1	1	15.72	15.57	15.48	17.00
		1	104	15.46	15.34	15.38	17.00
		50	25	15.58	15.34	15.28	17.00
	DFT-s-OFDM	1	1	13.30	13.11	13.14	14.00

	256QAM	1	104	13.13	12.96	12.79	14.00
		50	25	13.61	13.47	13.61	14.00
	CP-OFDM QPSK	1	1	16.49	16.38	16.35	17.00
	CP-OFDM 16QAM	1	1	15.93	15.84	15.71	16.50
	CP-OFDM 64QAM	1	1	14.69	14.69	14.58	15.50
	CP-OFDM 256QAM	1	1	11.65	11.64	11.45	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	505200	518598	531996	Tune-up Limit (dBm)
				2526	2595.99	2659.98	
60	DFT-s-OFDM BPSK	1	1	17.86	17.98	17.91	19.00
		1	160	17.51	17.67	17.57	19.00
		81	40	17.89	17.89	17.71	19.00
	DFT-s-OFDM QPSK	1	1	18.10	17.88	17.93	19.00
		1	160	17.90	17.67	17.82	19.00
		81	40	17.87	17.85	17.65	19.00
	DFT-s-OFDM 16QAM	1	1	16.60	16.67	16.54	18.00
		1	160	16.87	16.39	16.36	18.00
		81	40	16.85	16.83	16.73	18.00
	DFT-s-OFDM 64QAM	1	1	15.70	15.56	15.46	17.00
		1	160	15.43	15.27	15.34	17.00
		81	40	15.56	15.33	15.26	17.00
	DFT-s-OFDM 256QAM	1	1	13.26	13.05	13.09	14.00
		1	160	13.11	12.92	12.76	14.00
		81	40	13.62	13.46	13.56	14.00
	CP-OFDM QPSK	1	1	16.44	16.39	16.30	17.00
	CP-OFDM 16QAM	1	1	15.87	15.77	15.61	16.50
	CP-OFDM 64QAM	1	1	14.62	14.54	14.50	15.50
	CP-OFDM 256QAM	1	1	11.61	11.59	11.37	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	507204	518598	529998	Tune-up Limit (dBm)
				2536.02	2595.99	2649.99	
80	DFT-s-OFDM BPSK	1	1	17.88	17.99	17.94	19.00
		1	215	17.54	17.72	17.61	19.00
		108	54	17.91	17.93	17.74	19.00
	DFT-s-OFDM QPSK	1	1	18.13	17.93	17.97	19.00
		1	215	17.93	17.72	17.86	19.00
		108	54	17.89	17.89	17.70	19.00
	DFT-s-OFDM 16QAM	1	1	16.64	16.69	16.58	18.00
		1	215	16.89	16.42	16.38	18.00
		108	54	16.88	16.87	16.76	18.00

	DFT-s-OFDM 64QAM	1	1	15.73	15.58	15.49	17.00
		1	215	15.46	15.32	15.38	17.00
		108	54	15.58	15.37	15.29	17.00
	DFT-s-OFDM 256QAM	1	1	13.29	13.10	13.13	14.00
		1	215	13.14	12.97	12.80	14.00
		108	54	13.64	13.45	13.58	14.00
	CP-OFDM QPSK	1	1	16.47	16.39	16.33	17.00
	CP-OFDM 16QAM	1	1	15.86	15.79	15.64	16.50
	CP-OFDM 64QAM	1	1	14.65	14.59	14.50	15.50
	CP-OFDM 256QAM	1	1	11.63	11.63	11.40	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	509202	518598	528000	Tune-up Limit (dBm)
				2546.01	2592.99	2640	
100	DFT-s-OFDM BPSK	1	1	17.84	17.91	17.89	19.00
		1	271	17.51	17.67	17.56	19.00
		135	67	17.86	17.87	17.67	19.00
	DFT-s-OFDM QPSK	1	1	18.08	18.10	17.90	19.00
		1	271	17.88	17.63	17.79	19.00
		135	67	17.80	17.81	17.62	19.00
	DFT-s-OFDM 16QAM	1	1	16.59	16.60	16.49	18.00
		1	271	16.51	16.36	16.31	18.00
		135	67	16.82	16.82	16.70	18.00
	DFT-s-OFDM 64QAM	1	1	15.68	15.51	15.44	17.00
		1	271	15.40	15.26	15.32	17.00
		135	67	15.52	15.30	15.22	17.00
	DFT-s-OFDM 256QAM	1	1	13.24	13.01	13.06	14.00
		1	271	13.09	12.88	12.73	14.00
		135	67	13.57	13.39	13.51	14.00
	CP-OFDM QPSK	1	1	16.41	16.34	16.27	17.00
	CP-OFDM 16QAM	1	1	15.81	15.72	15.59	16.50
	CP-OFDM 64QAM	1	1	14.59	14.53	14.44	15.50
	CP-OFDM 256QAM	1	1	11.57	11.56	11.33	12.00

ANT 5 -NR n41 Full power&Level2				Maximum Output Power (dBm)			Tune-up Limit (dBm)
				501204	518598	535998	
Bandwidth (MHz)	Modulation	RB size	RB offset	2506.2	2592.99	2679.99	
20	DFT-s-OFDM BPSK	1	1	19.65	19.77	19.69	21.00
		1	49	19.38	19.58	19.55	21.00

		25	12	19.76	19.82	19.68	21.00
	DFT-s-OFDM QPSK	1	1	20.02	19.84	19.79	21.00
		1	49	19.79	19.62	19.76	21.00
		25	12	19.70	19.70	19.49	21.00
	DFT-s-OFDM 16QAM	1	1	18.67	18.79	18.60	20.00
		1	49	18.90	18.44	18.41	20.00
		25	12	18.89	18.92	18.84	20.00
	DFT-s-OFDM 64QAM	1	1	17.73	17.67	17.57	19.00
		1	49	17.46	17.39	17.45	19.00
		25	12	17.57	17.40	17.32	19.00
	DFT-s-OFDM 256QAM	1	1	15.26	15.14	15.15	16.00
		1	49	15.20	15.07	14.80	16.00
		25	12	15.74	15.54	15.68	16.00
	CP-OFDM QPSK	1	1	18.48	18.37	18.34	19.00
	CP-OFDM 16QAM	1	1	17.93	17.88	17.65	18.50
	CP-OFDM 64QAM	1	1	16.62	16.56	16.57	17.50
	CP-OFDM 256QAM	1	1	13.48	13.63	13.43	14.00
Bandwidth (MHz)	Modulation	RB size	RB offset	503202	518598	534000	Tune-up Limit (dBm)
				2516.01	2592.99	2670	
40	DFT-s-OFDM BPSK	1	1	19.64	19.73	19.67	21.00
		1	104	19.36	19.57	19.52	21.00
		50	25	19.73	19.77	19.64	21.00
	DFT-s-OFDM QPSK	1	1	19.98	19.80	19.76	21.00
		1	104	19.76	19.57	19.72	21.00
		50	25	19.67	19.67	19.45	21.00
	DFT-s-OFDM 16QAM	1	1	18.65	18.75	18.55	20.00
		1	104	18.85	18.42	18.39	20.00
		50	25	18.87	18.89	18.82	20.00
	DFT-s-OFDM 64QAM	1	1	17.70	17.63	17.54	19.00
		1	104	17.43	17.37	17.42	19.00
		50	25	17.54	17.35	17.28	19.00
	DFT-s-OFDM 256QAM	1	1	15.24	15.10	15.12	16.00
		1	104	15.17	15.02	14.76	16.00
		50	25	15.69	15.52	15.66	16.00
	CP-OFDM QPSK	1	1	18.46	18.34	18.32	19.00
	CP-OFDM 16QAM	1	1	17.94	17.87	17.66	18.50
	CP-OFDM 64QAM	1	1	16.61	16.58	16.58	17.50
	CP-OFDM 256QAM	1	1	13.35	13.60	13.42	14.00
Bandwidth (MHz)	Modulation	RB	RB	505200	518598	531996	Tune-up

		size	offset	2526	2595.99	2659.98	Limit (dBm)
60	DFT-s-OFDM BPSK	1	1	19.58	19.67	19.60	21.00
		1	160	19.33	19.49	19.47	21.00
		81	40	19.68	19.71	19.57	21.00
	DFT-s-OFDM QPSK	1	1	19.92	19.70	19.68	21.00
		1	160	19.72	19.49	19.64	21.00
		81	40	19.62	19.60	19.37	21.00
	DFT-s-OFDM 16QAM	1	1	18.62	18.69	18.49	20.00
		1	160	18.82	18.34	18.31	20.00
		81	40	18.80	18.85	18.75	20.00
	DFT-s-OFDM 64QAM	1	1	17.65	17.58	17.48	19.00
		1	160	17.38	17.29	17.36	19.00
		81	40	17.48	17.28	17.21	19.00
	DFT-s-OFDM 256QAM	1	1	15.18	15.00	15.04	16.00
		1	160	15.13	14.94	14.68	16.00
		81	40	15.64	15.48	15.58	16.00
	CP-OFDM QPSK	1	1	18.39	18.34	18.25	19.00
	CP-OFDM 16QAM	1	1	17.89	17.79	17.56	18.50
	CP-OFDM 64QAM	1	1	16.54	16.46	16.52	17.50
	CP-OFDM 256QAM	1	1	13.49	13.51	13.32	14.00
Bandwidth (MHz)	Modulation	RB size	RB offset	507204	518598	529998	Tune-up Limit (dBm)
				2536.02	2595.99	2649.99	
80	DFT-s-OFDM BPSK	1	1	19.60	19.68	19.63	21.00
		1	215	19.36	19.54	19.51	21.00
		108	54	19.70	19.75	19.60	21.00
	DFT-s-OFDM QPSK	1	1	19.95	19.75	19.72	21.00
		1	215	19.75	19.54	19.68	21.00
		108	54	19.64	19.64	19.42	21.00
	DFT-s-OFDM 16QAM	1	1	18.66	18.71	18.53	20.00
		1	215	18.84	18.37	18.33	20.00
		108	54	18.83	18.89	18.78	20.00
	DFT-s-OFDM 64QAM	1	1	17.68	17.60	17.51	19.00
		1	215	17.41	17.34	17.40	19.00
		108	54	17.50	17.32	17.24	19.00
	DFT-s-OFDM 256QAM	1	1	15.21	15.05	15.08	16.00
		1	215	15.16	14.99	14.72	16.00
		108	54	15.66	15.47	15.60	16.00
	CP-OFDM QPSK	1	1	18.42	18.34	18.28	19.00
	CP-OFDM 16QAM	1	1	17.88	17.81	17.59	18.50

	CP-OFDM 64QAM	1	1	16.57	16.51	16.52	17.50
	CP-OFDM 256QAM	1	1	13.44	13.55	13.35	14.00
Bandwidth (MHz)	Modulation	RB size	RB offset	509202	518598	528000	Tune-up Limit (dBm)
				2546.01	2592.99	2640	
100	DFT-s-OFDM BPSK	1	1	19.56	19.60	19.58	21.00
		1	271	19.56	19.49	19.46	21.00
		135	67	19.65	19.69	19.53	21.00
	DFT-s-OFDM QPSK	1	1	19.70	19.76	19.65	21.00
		1	271	19.72	19.45	19.61	21.00
		135	67	19.58	19.59	19.34	21.00
	DFT-s-OFDM 16QAM	1	1	18.61	18.62	18.44	20.00
		1	271	18.46	18.31	18.33	20.00
		135	67	18.77	18.84	18.72	20.00
	DFT-s-OFDM 64QAM	1	1	17.63	17.53	17.46	19.00
		1	271	17.35	17.28	17.34	19.00
		135	67	17.44	17.25	17.35	19.00
	DFT-s-OFDM 256QAM	1	1	15.16	14.96	15.01	16.00
		1	271	15.11	14.90	14.65	16.00
		135	67	15.59	15.41	15.53	16.00
	CP-OFDM QPSK	1	1	18.36	18.29	18.22	19.00
	CP-OFDM 16QAM	1	1	17.69	17.74	17.54	18.50
	CP-OFDM 64QAM	1	1	16.51	16.45	16.34	17.50
	CP-OFDM 256QAM	1	1	13.59	13.48	13.28	14.00

ANT 5 -NR n41 Level1				Maximum Output Power (dBm)			Tune-up Limit (dBm)
				501204	518598	535998	
Bandwidth (MHz)	Modulation	RB size	RB offset	2506.2	2592.99	2679.99	
20	DFT-s-OFDM BPSK	1	1	17.06	17.49	17.17	18.00
		1	49	16.65	16.91	16.74	18.00
		25	12	17.15	17.19	16.99	18.00
	DFT-s-OFDM QPSK	1	1	17.42	17.69	17.30	18.00
		1	49	17.11	16.98	17.16	18.00
		25	12	17.07	17.11	16.93	18.00
	DFT-s-OFDM 16QAM	1	1	15.55	15.83	15.77	17.00
		1	49	15.99	15.54	15.51	17.00
		25	12	15.97	15.85	15.87	17.00
	DFT-s-OFDM 64QAM	1	1	14.85	14.77	14.62	16.00
		1	49	14.58	14.43	14.47	16.00
		25	12	14.76	14.54	14.46	16.00

	DFT-s-OFDM 256QAM	1	1	12.46	12.34	12.30	13.00
		1	49	12.26	12.17	12.01	13.00
		25	12	12.91	12.69	12.83	13.00
	CP-OFDM QPSK	1	1	15.56	15.45	15.47	16.00
	CP-OFDM 16QAM	1	1	14.93	14.89	14.77	15.50
	CP-OFDM 64QAM	1	1	13.74	13.67	13.56	14.50
	CP-OFDM 256QAM	1	1	10.73	10.68	10.56	11.00
Bandwidth (MHz)	Modulation	RB size	RB offset	503202	518598	534000	Tune-up Limit (dBm)
				2516.01	2592.99	2670	
40	DFT-s-OFDM BPSK	1	1	16.94	17.26	17.02	18.00
		1	104	16.60	16.83	16.64	18.00
		50	25	16.99	16.99	16.78	18.00
	DFT-s-OFDM QPSK	1	1	17.30	17.47	17.13	18.00
		1	104	17.01	16.78	16.95	18.00
		50	25	16.92	16.98	16.76	18.00
	DFT-s-OFDM 16QAM	1	1	15.55	15.64	15.60	17.00
		1	104	15.81	15.37	15.32	17.00
		50	25	15.83	15.78	15.73	17.00
	DFT-s-OFDM 64QAM	1	1	14.72	14.59	14.46	16.00
		1	104	14.46	14.32	14.35	16.00
		50	25	14.58	14.32	14.25	16.00
	DFT-s-OFDM 256QAM	1	1	12.34	12.12	12.13	13.00
		1	104	12.16	11.97	11.80	13.00
		50	25	12.69	12.52	12.64	13.00
	CP-OFDM QPSK	1	1	15.42	15.38	15.33	16.00
	CP-OFDM 16QAM	1	1	14.84	14.74	14.65	15.50
	CP-OFDM 64QAM	1	1	13.64	13.60	13.48	14.50
	CP-OFDM 256QAM	1	1	10.56	10.48	10.38	11.00
Bandwidth (MHz)	Modulation	RB size	RB offset	505200	518598	531996	Tune-up Limit (dBm)
				2526	2595.99	2659.98	
60	DFT-s-OFDM BPSK	1	1	17.01	17.40	17.11	18.00
		1	160	16.63	16.87	16.70	18.00
		81	40	17.09	17.12	16.91	18.00
	DFT-s-OFDM QPSK	1	1	17.37	17.60	17.23	18.00
		1	160	17.07	16.90	17.08	18.00
		81	40	17.01	17.05	16.86	18.00
	DFT-s-OFDM 16QAM	1	1	15.54	15.75	15.70	17.00
		1	160	15.93	15.47	15.43	17.00

		81	40	15.91	15.82	15.81	17.00
	DFT-s-OFDM 64QAM	1	1	14.80	14.70	14.56	16.00
		1	160	14.53	14.38	14.42	16.00
		81	40	14.69	14.46	14.38	16.00
	DFT-s-OFDM 256QAM	1	1	12.41	12.25	12.23	13.00
		1	160	12.22	12.09	11.93	13.00
		81	40	12.83	12.62	12.75	13.00
	CP-OFDM QPSK	1	1	15.50	15.42	15.41	16.00
	CP-OFDM 16QAM	1	1	14.88	14.82	14.71	15.50
	CP-OFDM 64QAM	1	1	13.69	13.62	13.51	14.50
	CP-OFDM 256QAM	1	1	10.66	10.60	10.48	11.00
Bandwidth (MHz)	Modulation	RB size	RB offset	507204	518598	529998	Tune-up Limit (dBm)
				2536.02	2595.99	2649.99	
80	DFT-s-OFDM BPSK	1	1	16.96	17.31	17.05	18.00
		1	215	16.61	16.83	16.66	18.00
		108	54	17.03	17.05	16.83	18.00
	DFT-s-OFDM QPSK	1	1	17.32	17.51	17.16	18.00
		1	215	17.03	16.82	17.00	18.00
		108	54	16.95	16.99	16.79	18.00
	DFT-s-OFDM 16QAM	1	1	15.53	15.67	15.63	17.00
		1	215	15.87	15.40	15.35	17.00
		108	54	15.85	15.79	15.75	17.00
	DFT-s-OFDM 64QAM	1	1	14.75	14.63	14.50	16.00
		1	215	14.48	14.33	14.37	16.00
		108	54	14.62	14.38	14.30	16.00
	DFT-s-OFDM 256QAM	1	1	12.36	12.16	12.16	13.00
		1	215	12.18	12.01	11.85	13.00
		108	54	12.75	12.55	12.67	13.00
	CP-OFDM QPSK	1	1	15.44	15.39	15.35	16.00
	CP-OFDM 16QAM	1	1	14.83	14.75	14.65	15.50
	CP-OFDM 64QAM	1	1	13.64	13.57	13.46	14.50
	CP-OFDM 256QAM	1	1	10.59	10.52	10.40	11.00
Bandwidth (MHz)	Modulation	RB size	RB offset	509202	518598	528000	Tune-up Limit (dBm)
				2546.01	2592.99	2640	
100	DFT-s-OFDM BPSK	1	1	16.91	17.22	16.99	18.00
		1	271	16.59	16.79	16.62	18.00
		135	67	16.97	16.98	16.75	18.00
	DFT-s-OFDM	1	1	17.27	17.42	17.09	18.00

	QPSK	1	271	16.99	16.74	16.92	18.00
		135	67	16.89	16.93	16.72	18.00
	DFT-s-OFDM 16QAM	1	1	15.52	15.59	15.56	17.00
		1	271	15.49	15.33	15.27	17.00
		135	67	15.79	15.76	15.69	17.00
	DFT-s-OFDM 64QAM	1	1	14.70	14.56	14.44	16.00
		1	271	14.43	14.28	14.32	16.00
		135	67	14.55	14.30	14.22	16.00
	DFT-s-OFDM 256QAM	1	1	12.31	12.07	12.09	13.00
		1	271	12.14	11.93	11.77	13.00
		135	67	12.67	12.48	12.59	13.00
	CP-OFDM QPSK	1	1	15.38	15.36	15.29	16.00
	CP-OFDM 16QAM	1	1	14.78	14.68	14.59	15.50
	CP-OFDM 64QAM	1	1	13.59	13.52	13.41	14.50
	CP-OFDM 256QAM	1	1	10.52	10.44	10.32	11.00

ANT 2 -NR n41 Full power&Level1&Level2&Level3& Level4-D1&Level4-D2				Maximum Output Power (dBm)			Tune-up Limit (dBm)
				501204	518598	535998	
Bandwidth (MHz)	Modulation	RB size	RB offset	2506.2	2592.99	2679.99	
20	DFT-s-OFDM BPSK	1	1	18.14	18.29	18.21	19.00
		1	49	17.80	17.97	17.89	19.00
		25	12	18.21	18.21	18.06	19.00
	DFT-s-OFDM QPSK	1	1	18.42	18.26	18.28	19.00
		1	49	18.23	18.09	18.15	19.00
		25	12	18.21	18.21	17.98	19.00
	DFT-s-OFDM 16QAM	1	1	16.94	17.06	16.86	18.00
		1	49	17.19	16.73	16.67	18.00
		25	12	17.18	17.14	17.03	18.00
	DFT-s-OFDM 64QAM	1	1	15.99	15.91	15.81	17.00
		1	49	15.72	15.63	15.69	17.00
		25	12	15.86	15.74	15.66	17.00
	DFT-s-OFDM 256QAM	1	1	13.55	13.48	13.49	14.00
		1	49	13.39	13.26	13.09	14.00
		25	12	13.96	13.76	13.90	14.00
	CP-OFDM QPSK	1	1	16.77	16.66	16.63	17.00
	CP-OFDM 16QAM	1	1	16.15	16.10	15.94	16.50
	CP-OFDM 64QAM	1	1	14.91	14.85	14.76	15.50

	CP-OFDM 256QAM	1	1	11.91	11.92	11.69	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	503202	518598	534000	Tune-up Limit (dBm)
				2516.01	2592.99	2670	
40	DFT-s-OFDM BPSK	1	1	18.13	18.25	18.19	19.00
		1	104	17.78	17.96	17.86	19.00
		50	25	18.18	18.16	18.02	19.00
	DFT-s-OFDM QPSK	1	1	18.40	18.22	18.25	19.00
		1	104	18.20	18.04	18.11	19.00
		50	25	18.18	18.18	17.94	19.00
	DFT-s-OFDM 16QAM	1	1	16.92	17.02	16.81	18.00
		1	104	17.14	16.71	16.65	18.00
		50	25	17.16	17.11	17.01	18.00
	DFT-s-OFDM 64QAM	1	1	15.96	15.87	15.78	17.00
		1	104	15.69	15.61	15.66	17.00
		50	25	15.83	15.69	15.62	17.00
	DFT-s-OFDM 256QAM	1	1	13.53	13.44	13.46	14.00
		1	104	13.36	13.21	13.05	14.00
		50	25	13.91	13.74	13.88	14.00
	CP-OFDM QPSK	1	1	16.75	16.63	16.61	17.00
	CP-OFDM 16QAM	1	1	16.16	16.09	15.95	16.50
	CP-OFDM 64QAM	1	1	14.90	14.87	14.77	15.50
	CP-OFDM 256QAM	1	1	11.89	11.89	11.68	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	505200	518598	531996	Tune-up Limit (dBm)
				2526	2595.99	2659.98	
60	DFT-s-OFDM BPSK	1	1	18.07	18.19	18.12	19.00
		1	160	17.75	17.88	17.81	19.00
		81	40	18.13	18.10	17.95	19.00
	DFT-s-OFDM QPSK	1	1	18.34	18.12	18.17	19.00
		1	160	18.16	17.96	18.03	19.00
		81	40	18.13	18.11	17.86	19.00
	DFT-s-OFDM 16QAM	1	1	16.89	16.96	16.75	18.00
		1	160	17.11	16.63	16.57	18.00
		81	40	17.09	17.07	16.94	18.00
	DFT-s-OFDM 64QAM	1	1	15.91	15.82	15.72	17.00
		1	160	15.64	15.53	15.60	17.00
		81	40	15.77	15.62	15.55	17.00
	DFT-s-OFDM 256QAM	1	1	13.47	13.34	13.38	14.00
		1	160	13.32	13.13	12.97	14.00
		81	40	13.86	13.70	13.80	14.00

	CP-OFDM QPSK	1	1	16.68	16.63	16.54	17.00
	CP-OFDM 16QAM	1	1	16.11	16.01	15.85	16.50
	CP-OFDM 64QAM	1	1	14.83	14.75	14.71	15.50
	CP-OFDM 256QAM	1	1	11.82	11.80	11.58	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	507204	518598	529998	Tune-up Limit (dBm)
				2536.02	2595.99	2649.99	
80	DFT-s-OFDM BPSK	1	1	18.08	18.16	18.13	19.00
		1	215	17.76	17.92	17.82	19.00
		108	54	18.12	18.09	17.94	19.00
	DFT-s-OFDM QPSK	1	1	18.35	18.13	18.18	19.00
		1	215	18.16	17.96	18.03	19.00
		108	54	18.12	18.12	17.87	19.00
	DFT-s-OFDM 16QAM	1	1	16.91	16.94	16.74	18.00
		1	215	17.08	16.64	16.57	18.00
		108	54	17.10	17.08	16.95	18.00
	DFT-s-OFDM 64QAM	1	1	15.91	15.80	15.72	17.00
		1	215	15.64	15.56	15.61	17.00
		108	54	15.76	15.61	15.54	17.00
	DFT-s-OFDM 256QAM	1	1	13.48	13.35	13.39	14.00
		1	215	13.32	13.13	12.97	14.00
		108	54	13.83	13.67	13.80	14.00
	CP-OFDM QPSK	1	1	16.69	16.60	16.55	17.00
	CP-OFDM 16QAM	1	1	16.11	16.02	15.89	16.50
	CP-OFDM 64QAM	1	1	14.85	14.82	14.72	15.50
	CP-OFDM 256QAM	1	1	11.82	11.81	11.60	12.00
Bandwidth (MHz)	Modulation	RB size	RB offset	509202	518598	528000	Tune-up Limit (dBm)
				2546.01	2592.99	2640	
100	DFT-s-OFDM BPSK	1	1	18.05	18.12	18.10	19.00
		1	271	17.75	17.88	17.80	19.00
		135	67	18.10	18.08	17.91	19.00
	DFT-s-OFDM QPSK	1	1	18.32	18.48	18.14	19.00
		1	271	18.14	17.92	18.00	19.00
		135	67	18.09	18.10	17.83	19.00
	DFT-s-OFDM 16QAM	1	1	16.88	16.89	16.70	18.00
		1	271	16.75	16.60	16.52	18.00
		135	67	17.06	17.06	16.91	18.00
	DFT-s-OFDM 64QAM	1	1	15.89	15.77	15.70	17.00
		1	271	15.61	15.52	15.58	17.00

		135	67	15.73	15.59	15.51	17.00
	DFT-s-OFDM 256QAM	1	1	13.45	13.30	13.35	14.00
		1	271	13.30	13.09	12.94	14.00
		135	67	13.81	13.63	13.75	14.00
	CP-OFDM QPSK	1	1	16.65	16.58	16.51	17.00
	CP-OFDM 16QAM	1	1	16.05	15.96	15.83	16.50
	CP-OFDM 64QAM	1	1	14.80	14.74	14.65	15.50
	CP-OFDM 256QAM	1	1	11.78	11.77	11.54	12.00

9.5 WLAN Mode

Receive on

Wi-Fi 2.4G Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant9		Tune-up	Meas.
802.11b (1M)	1/2412	14	12.97
	6/2437	14	**13.26**
	11/2462	14	12.78
802.11g (6M)	1/2412	13.5	12.25
	6/2437	13.5	11.85
	11/2462	13.5	12.29
802.11n-HT20 (MCS0)	1/2412	13.5	11.97
	6/2437	13.5	12.39
	11/2462	13.5	12.39
802.11n-HT40 (MCS0)	3/2422	13.5	11.95
	6/2437	13.5	11.87
	9/2452	13.5	11.86
802.11ax HE20 (MCS0)	1/2412	13.5	12.28
	6/2437	13.5	12.20
	11/2462	13.5	12.00
802.11ax HE40 (MCS0)	3/2422	13.5	12.21
	6/2437	13.5	12.15
	9/2452	13.5	11.88
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 2.4G Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant8		Tune-up	Meas.
802.11b (1M)	1/2412	14.0	12.62
	6/2437	14.0	**13.37**
	11/2462	14.0	12.94
802.11g (6M)	1/2412	13.5	12.68
	6/2437	13.5	12.37
	11/2462	13.5	11.99
802.11n-HT20 (MCS0)	1/2412	13.5	12.19
	6/2437	13.5	12.07
	11/2462	13.5	12.32
802.11n-HT40	3/2422	13.5	12.54

(MCS0)	6/2437	13.5	11.90
	9/2452	13.5	11.88
802.11ax HE20 (MCS0)	1/2412	13.5	12.20
	6/2437	13.5	11.93
	11/2462	13.5	12.25
802.11ax HE40 (MCS0)	3/2422	13.5	12.10
	6/2437	13.5	11.81
	9/2452	13.5	11.77
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 2.4G Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
MIMO		Tune-up	Meas.	Ant9	Ant8
802.11n-HT20 (MCS0)	1/2412	16.5	15.09	11.97	12.19
	6/2437	16.5	15.24	12.39	12.07
	11/2462	16.5	**15.37**	12.39	12.32
802.11n-HT40 (MCS0)	3/2422	16.5	15.27	11.95	12.54
	6/2437	16.5	14.90	11.87	11.90
	9/2452	16.5	14.88	11.86	11.88
802.11ax HE20 (MCS0)	1/2412	16.5	15.25	12.28	12.20
	6/2437	16.5	15.08	12.20	11.93
	11/2462	16.5	15.14	12.00	12.25
802.11ax HE40 (MCS0)	3/2422	16.5	15.17	12.21	12.10
	6/2437	16.5	14.99	12.15	11.81
	9/2452	16.5	14.84	11.88	11.77
Note: Initial test configuration is 802.11n-HT20 mode.					

Receive off

Wi-Fi 2.4G Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant9		Tune-up	Meas.
802.11b (1M)	1/2412	20	17.77
	6/2437	20	**19.15**
	11/2462	20	18.43
802.11g (6M)	1/2412	19	17.36
	6/2437	19	17.28
	11/2462	19	17.32
802.11n-HT20 (MCS0)	1/2412	18	16.31
	6/2437	18	16.42
	11/2462	18	16.41

802.11n-HT40 (MCS0)	3/2422	17	15.36
	6/2437	17	15.28
	9/2452	17	15.19
802.11ax HE20 (MCS0)	1/2412	17	15.31
	6/2437	17	15.29
	11/2462	17	15.33
802.11ax HE40 (MCS0)	3/2422	17	15.24
	6/2437	17	15.18
	9/2452	17	15.20
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 2.4G Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant8		Tune-up	Meas.
802.11b (1M)	1/2412	20	18.20
	6/2437	20	**18.95**
	11/2462	20	18.83
802.11g (6M)	1/2412	19	17.71
	6/2437	19	17.43
	11/2462	19	17.32
802.11n-HT20 (MCS0)	1/2412	18	16.53
	6/2437	18	16.49
	11/2462	18	16.53
802.11n-HT40 (MCS0)	3/2422	17	15.61
	6/2437	17	15.34
	9/2452	17	15.28
802.11ax HE20 (MCS0)	1/2412	17	15.30
	6/2437	17	15.27
	11/2462	17	15.26
802.11ax HE40 (MCS0)	3/2422	17	15.13
	6/2437	17	15.16
	9/2452	17	15.08
Note: Initial test configuration is 802.11b mode.			

Wi-Fi 2.4G Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
MIMO		Tune-up	Meas.	Ant9	Ant8
802.11n-HT20 (MCS0)	1/2412	21.00	19.43	16.31	16.53
	6/2437	21.00	**19.47**	16.42	16.49
	11/2462	21.00	19.48	16.41	16.53

802.11n-HT40 (MCS0)	3/2422	20.00	18.50	15.36	15.61
	6/2437	20.00	18.32	15.28	15.34
	9/2452	20.00	18.25	15.19	15.28
802.11ax HE20 (MCS0)	1/2412	20.00	18.32	15.31	15.30
	6/2437	20.00	18.29	15.29	15.27
	11/2462	20.00	18.31	15.33	15.26
802.11ax HE40 (MCS0)	3/2422	20.00	18.20	15.24	15.13
	6/2437	20.00	18.18	15.18	15.16
	9/2452	20.00	18.15	15.20	15.08
Note: Initial test configuration is 802.11n-HT20 mode.					

Receive on

Wi-Fi 5G (U-NII-1) Mode Ant 10	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	13.5	12.39
	40/5200	13.5	12.33
	44/5220	13.5	12.39
	48/5240	13.5	12.41
802.11n-HT20 (MCS0)	36/5180	14.0	12.65
	40/5200	14.0	12.80
	44/5220	14.0	13.00
	48/5240	14.0	**13.08**
802.11n-HT40 (MCS0)	38/5190	13.5	11.71
	46/5230	13.5	11.69
802.11ac-VHT20 (MCS0)	36/5180	13.5	11.98
	40/5200	13.5	11.99
	44/5220	13.5	12.15
	48/5240	13.5	12.02
802.11ac-VHT40 (MCS0)	38/5190	13.5	11.65
	46/5230	13.5	12.60
802.11ac-VHT80 (MCS0)	42/5210	13.5	12.49
802.11ax-HE20 (MCS0)	36/5180	13.5	11.88
	40/5200	13.5	11.79
	44/5220	13.5	12.40
	48/5240	13.5	12.51
802.11ax-HE40 (MCS0)	38/5190	13.5	12.48
	46/5230	13.5	12.24
802.11ax-HE80 (MCS0)	42/5210	13.5	12.09
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2A) Mode Ant 10	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	13.5	12.28
	56/5280	13.5	12.35
	60/5300	13.5	12.31
	64/5320	13.5	12.38
802.11n-HT20	52/5260	14.0	13.06

(MCS0)	56/5280	14.0	**13.10**
	60/5300	14.0	12.70
	64/5320	14.0	12.82
802.11n-HT40 (MCS0)	54/5270	13.5	12.59
	62/5310	13.5	12.03
802.11ac-HT20 (MCS0)	52/5260	13.5	12.11
	56/5280	13.5	12.28
	60/5300	13.5	12.39
	64/5320	13.5	12.39
802.11ac-HT40 (MCS0)	54/5270	13.5	13.09
	62/5310	13.5	12.98
802.11ac-HT80 (MCS0)	58/5290	13.5	12.86
802.11ax-HE20 (MCS0)	52/5260	13.5	12.72
	56/5280	13.5	12.67
	60/5300	13.5	12.64
	64/5320	13.5	12.81
802.11ax-HE40 (MCS0)	54/5270	13.5	12.15
	62/5310	13.5	11.94
802.11ax-HE80 (MCS0)	58/5290	13.5	11.80
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2C) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant 10		Tune-up	Meas.
802.11a (6M)	100/5500	13.5	11.73
	116/5580	13.5	11.88
	132/5660	13.5	11.72
	136/5680	13.5	12.06
	140/5700	13.5	11.92
802.11n-HT20 (MCS0)	100/5500	13.5	12.03
	116/5580	13.5	**12.65**
	132/5660	13.5	12.58
	140/5700	13.5	12.26
802.11n-HT40 (MCS0)	102/5510	13.5	11.82
	110/5550	13.5	11.74
	118/5590	13.5	11.91
	134/5670	13.5	11.99
802.11ac-HT20	100/5500	13.5	11.77

(MCS0)	116/5580	13.5	11.75
	132/5660	13.5	11.76
	140/5700	13.5	11.80
802.11ac-HT40 (MCS0)	102/5510	13.5	12.06
	110/5550	13.5	12.25
	118/5590	13.5	12.43
	134/5670	13.5	12.27
802.11ac-HT80 (MCS0)	106/5530	13.5	11.86
	122/5610	13.5	12.42
	138/5690	13.5	12.22
802.11ax-HE20 (MCS0)	100/5500	13.5	12.15
	116/5580	13.5	12.37
	132/5660	13.5	12.43
	140/5700	13.5	11.80
802.11ax-HE40 (MCS0)	102/5510	13.5	11.88
	110/5550	13.5	12.15
	118/5590	13.5	11.97
	134/5670	13.5	12.25
802.11ax-HE80 (MCS0)	106/5530	13.5	11.56
	122/5610	13.5	11.63
	138/5690	13.5	11.55
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-3) Mode Ant 10	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	13.0	11.54
	157/5785	13.0	11.60
	165/5825	13.0	11.62
802.11n-HT20 (MCS0)	149/5745	13.5	12.33
	157/5785	13.5	12.37
	165/5825	13.5	**12.40**
802.11n-HT40 (MCS0)	151/5755	13.0	11.44
	159/5795	13.0	11.74
802.11ac-HT20 (MCS0)	149/5745	13.0	11.69
	157/5785	13.0	11.59
	165/5825	13.0	11.95
802.11ac-HT40 (MCS0)	151/5755	13.0	11.87
	159/5795	13.0	11.94
802.11ac-HT80 (MCS0)	155/5775	13.0	11.95
802.11ax-HE20 (MCS0)	149/5745	13.0	11.63
	157/5785	13.0	11.75
	165/5825	13.0	11.80
802.11ax-HE40 (MCS0)	151/5755	13.0	11.58
	159/5795	13.0	11.37
802.11ax-HE80 (MCS0)	155/5775	13.0	11.67
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power,			

Wi-Fi 5G (U-NII-1) Mode Ant 8	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	12.0	11.02
	40/5200	12.0	11.07
	44/5220	12.0	11.21
	48/5240	12.0	11.10
802.11n-HT20 (MCS0)	36/5180	12.5	**11.41**
	40/5200	12.5	11.02
	44/5220	12.5	10.87

	48/5240	12.5	11.10
802.11n-HT40 (MCS0)	38/5190	12.0	11.20
	46/5230	12.0	11.40
802.11ac-VHT20 (MCS0)	36/5180	12.0	11.10
	40/5200	12.0	11.17
	44/5220	12.0	11.06
	48/5240	12.0	11.25
802.11ac-VHT40 (MCS0)	38/5190	12.0	10.75
	46/5230	12.0	10.60
802.11ac-VHT80 (MCS0)	42/5210	12.0	10.66
802.11ax-HE20 (MCS0)	36/5180	12.0	11.17
	40/5200	12.0	11.18
	44/5220	12.0	11.27
	48/5240	12.0	11.21
802.11ax-HE40 (MCS0)	38/5190	12.0	11.18
	46/5230	12.0	11.23
802.11ax-HE80 (MCS0)	42/5210	12.0	11.14
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2A) Mode Ant 8	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	12.0	10.95
	56/5280	12.0	11.01
	60/5300	12.0	10.97
	64/5320	12.0	10.89
802.11n-HT20 (MCS0)	52/5260	12.5	10.97
	56/5280	12.5	11.00
	60/5300	12.5	10.90
	64/5320	12.5	**11.02**
802.11n-HT40 (MCS0)	54/5270	12.0	10.73
	62/5310	12.0	10.88
802.11ac-HT20 (MCS0)	52/5260	12.0	10.91
	56/5280	12.0	10.76
	60/5300	12.0	10.81
	64/5320	12.0	10.76
802.11ac-HT40 (MCS0)	54/5270	12.0	10.05
	62/5310	12.0	10.12

802.11ac-HT80 (MCS0)	58/5290	12.0	10.07
802.11ax-HE20 (MCS0)	52/5260	12.0	10.53
	56/5280	12.0	10.56
	60/5300	12.0	10.50
	64/5320	12.0	10.37
802.11ax-HE40 (MCS0)	54/5270	12.0	10.71
	62/5310	12.0	10.74
802.11ax-HE80 (MCS0)	58/5290	12.0	10.87
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2C) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant 8		Tune-up	Meas.
802.11a (6M)	100/5500	12.0	11.30
	116/5580	12.0	10.97
	132/5660	12.0	11.24
	136/5680	12.0	11.19
	140/5700	12.0	10.90
802.11n-HT20 (MCS0)	100/5500	12.5	11.46
	116/5580	12.5	**11.71**
	132/5660	12.5	11.51
	140/5700	12.5	10.88
802.11n-HT40 (MCS0)	102/5510	12.0	11.31
	110/5550	12.0	11.23
	118/5590	12.0	11.10
	134/5670	12.0	11.17
802.11ac-HT20 (MCS0)	100/5500	12.0	11.08
	116/5580	12.0	11.30
	132/5660	12.0	11.09
	140/5700	12.0	10.90
802.11ac-HT40 (MCS0)	102/5510	12.0	10.93
	110/5550	12.0	11.01
	118/5590	12.0	11.18
	134/5670	12.0	10.83
802.11ac-HT80 (MCS0)	106/5530	12.0	10.81
	122/5610	12.0	10.73
	138/5690	12.0	10.56
802.11ax-HE20	100/5500	12.0	10.62

(MCS0)	116/5580	12.0	10.75
	132/5660	12.0	10.96
	140/5700	12.0	10.74
802.11ax-HE40 (MCS0)	102/5510	12.0	11.11
	110/5550	12.0	11.02
	118/5590	12.0	11.19
	134/5670	12.0	11.36
802.11ax-HE80 (MCS0)	106/5530	12.0	11.11
	122/5610	12.0	11.07
	138/5690	12.0	11.01
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-3) Mode Ant 8	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	12.0	11.36
	157/5785	12.0	11.17
	165/5825	12.0	11.31
802.11n-HT20 (MCS0)	149/5745	12.5	**12.20**
	157/5785	12.5	11.92
	165/5825	12.5	11.95
802.11n-HT40 (MCS0)	151/5755	12.0	11.36
	159/5795	12.0	11.37
802.11ac-HT20 (MCS0)	149/5745	12.0	11.31
	157/5785	12.0	11.24
	165/5825	12.0	11.22
802.11ac-HT40 (MCS0)	151/5755	12.0	11.34
	159/5795	12.0	11.32
802.11ac-HT80 (MCS0)	155/5775	12.0	11.31
802.11ax-HE20 (MCS0)	149/5745	12.0	11.46
	157/5785	12.0	11.44
	165/5825	12.0	11.56
802.11ax-HE40 (MCS0)	151/5755	12.0	11.36
	159/5795	12.0	11.29
802.11ax-HE80 (MCS0)	155/5775	12.0	11.33
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power,			

Wi-Fi 5G (U-NII-1) Mode MIMO	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	36/5180	15.50	15.08	12.65	11.41
	40/5200	15.50	15.01	12.80	11.02
	44/5220	15.50	15.07	13.00	10.87
	48/5240	15.50	**15.21**	13.08	11.10
802.11n-HT40 (MCS0)	38/5190	15.00	14.47	11.71	11.20
	46/5230	15.00	14.56	11.69	11.40
802.11ac-VHT20	36/5180	15.00	14.57	11.98	11.10

(MCS0)	40/5200	15.00	14.61	11.99	11.17
	44/5220	15.00	14.65	12.15	11.06
	48/5240	15.00	14.66	12.02	11.25
802.11ac-VHT40 (MCS0)	38/5190	15.00	14.23	11.65	10.75
	46/5230	15.00	14.72	12.60	10.60
802.11ac-VHT80 (MCS0)	42/5210	15.00	14.68	12.49	10.66
802.11ax-HE20 (MCS0)	36/5180	15.00	14.55	11.88	11.17
	40/5200	15.00	14.51	11.79	11.18
	44/5220	15.00	14.88	12.40	11.27
	48/5240	15.00	14.92	12.51	11.21
802.11ax-HE40 (MCS0)	38/5190	15.00	14.89	12.48	11.18
	46/5230	15.00	14.77	12.24	11.23
802.11ax-HE80 (MCS0)	42/5210	15.00	14.65	12.09	11.14
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-2A) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
MIMO		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	52/5260	15.50	15.15	13.06	10.97
	56/5280	15.50	**15.19**	13.10	11.00
	60/5300	15.50	14.90	12.70	10.90
	64/5320	15.50	15.02	12.82	11.02
802.11n-HT40 (MCS0)	54/5270	15.00	14.77	12.59	10.73
	62/5310	15.00	14.50	12.03	10.88
802.11ac-HT20 (MCS0)	52/5260	15.00	14.56	12.11	10.91
	56/5280	15.00	14.60	12.28	10.76
	60/5300	15.00	14.68	12.39	10.81
	64/5320	15.00	14.66	12.39	10.76
802.11ac-HT40 (MCS0)	54/5270	15.00	14.84	13.09	10.05
	62/5310	15.00	14.79	12.98	10.12
802.11ac-HT80 (MCS0)	58/5290	15.00	14.70	12.86	10.07
802.11ax-HE20 (MCS0)	52/5260	15.00	14.77	12.72	10.53
	56/5280	15.00	14.75	12.67	10.56
	60/5300	15.00	14.71	12.64	10.50
	64/5320	15.00	14.77	12.81	10.37
802.11ax-HE40 (MCS0)	54/5270	15.00	14.50	12.15	10.71
	62/5310	15.00	14.39	11.94	10.74

802.11ax-HE80 (MCS0)	58/5290	15.00	14.37	11.80	10.87
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-2C) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
MIMO		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	100/5500	15.5	14.76	12.03	11.46
	116/5580	15.5	15.10	12.58	11.53
	132/5660	15.5	**15.20**	12.62	11.71
	140/5700	15.5	14.63	12.26	10.88
802.11n-HT40 (MCS0)	102/5510	15.00	14.58	11.82	11.31
	110/5550	15.00	14.50	11.74	11.23
	118/5590	15.00	14.53	11.91	11.10
	134/5670	15.00	14.61	11.99	11.17
802.11ac-HT20 (MCS0)	100/5500	15.00	14.45	11.77	11.08
	116/5580	15.00	14.54	11.75	11.30
	132/5660	15.00	14.45	11.76	11.09
	140/5700	15.00	14.38	11.80	10.90
802.11ac-HT40 (MCS0)	102/5510	15.00	14.54	12.06	10.93
	110/5550	15.00	14.68	12.25	11.01
	118/5590	15.00	14.86	12.43	11.18
	134/5670	15.00	14.62	12.27	10.83
802.11ac-HT80 (MCS0)	106/5530	15.00	14.38	11.86	10.81
	122/5610	15.00	14.67	12.42	10.73
	138/5690	15.00	14.48	12.22	10.56
802.11ax-HE20 (MCS0)	100/5500	15.00	14.46	12.15	10.62
	116/5580	15.00	14.65	12.37	10.75
	132/5660	15.00	14.77	12.43	10.96
	140/5700	15.00	14.31	11.80	10.74
802.11ax-HE40 (MCS0)	102/5510	15.00	14.52	11.88	11.11
	110/5550	15.00	14.63	12.15	11.02
	118/5590	15.00	14.61	11.97	11.19
	134/5670	15.00	14.84	12.25	11.36
802.11ax-HE80 (MCS0)	106/5530	15.00	14.35	11.56	11.11
	122/5610	15.00	14.37	11.63	11.07
	138/5690	15.00	14.30	11.55	11.01
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-3) Mode / MIMO	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	149/5745	15.5	**15.28**	12.33	12.20
	157/5785	15.5	15.18	12.40	11.92
	165/5825	15.5	15.18	12.37	11.95
802.11n-HT40 (MCS0)	151/5755	15.00	14.41	11.44	11.36
	159/5795	15.00	14.57	11.74	11.37
802.11ac-HT20 (MCS0)	149/5745	15.00	14.51	11.69	11.31
	157/5785	15.00	14.43	11.59	11.24
	165/5825	15.00	14.61	11.95	11.22
802.11ac-HT40 (MCS0)	151/5755	15.00	14.62	11.87	11.34
	159/5795	15.00	14.65	11.94	11.32
802.11ac-HT80 (MCS0)	155/5775	15.00	14.65	11.95	11.31
802.11ax-HE20 (MCS0)	149/5745	15.00	14.56	11.63	11.46
	157/5785	15.00	14.61	11.75	11.44
	165/5825	15.00	14.69	11.80	11.56
802.11ax-HE40 (MCS0)	151/5755	15.00	14.48	11.58	11.36
	159/5795	15.00	14.34	11.37	11.29
802.11ax-HE80 (MCS0)	155/5775	15.00	14.51	11.67	11.33
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power,					

Receive off

Wi-Fi 5G (U-NII-1) Mode / Ant 10	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	19.0	18.06
	40/5200	19.0	18.11
	44/5220	19.0	17.89
	48/5240	19.0	17.91
802.11n-HT20 (MCS0)	36/5180	20.5	19.76
	40/5200	20.5	19.97
	44/5220	20.5	20.08
	48/5240	20.5	**20.11**
802.11n-HT40	38/5190	19.0	17.21

(MCS0)	46/5230	19.0	17.30
802.11ac-VHT20 (MCS0)	36/5180	19.0	17.65
	40/5200	19.0	17.77
	44/5220	19.0	17.65
	48/5240	19.0	17.63
802.11ac-VHT40 (MCS0)	38/5190	20.0	18.32
	46/5230	20.0	19.38
802.11ac-VHT80 (MCS0)	42/5210	20.0	19.27
802.11ax-HE20 (MCS0)	36/5180	20.0	18.30
	40/5200	20.0	18.17
	44/5220	20.0	19.68
	48/5240	20.0	19.81
802.11ax-HE40 (MCS0)	38/5190	19.0	18.18
	46/5230	19.0	18.02
802.11ax-HE80 (MCS0)	42/5210	19.0	17.87
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2A) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant 10		Tune-up	Meas.
802.11a (6M)	52/5260	19.0	17.91
	56/5280	19.0	18.11
	60/5300	19.0	18.13
	64/5320	19.0	18.01
802.11n-HT20 (MCS0)	52/5260	21.0	**20.32**
	56/5280	21.0	20.14
	60/5300	21.0	20.02
	64/5320	21.0	20.08
802.11n-HT40 (MCS0)	54/5270	19.0	18.22
	62/5310	19.0	17.98
802.11ac-HT20 (MCS0)	52/5260	19.0	17.87
	56/5280	19.0	18.10
	60/5300	19.0	18.15
	64/5320	19.0	18.02
802.11ac-HT40 (MCS0)	54/5270	20.0	19.91
	62/5310	20.0	19.61
802.11ac-HT80 (MCS0)	58/5290	20.0	19.81

802.11ax-HE20 (MCS0)	52/5260	20.5	20.24
	56/5280	20.5	20.12
	60/5300	20.5	20.07
	64/5320	20.5	20.07
802.11ax-HE40 (MCS0)	54/5270	19.0	17.78
	62/5310	19.0	17.76
802.11ax-HE80 (MCS0)	58/5290	19.0	17.75
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2C) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant 10		Tune-up	Meas.
802.11a (6M)	100/5500	19.0	17.75
	116/5580	19.0	17.86
	132/5660	19.0	17.81
	136/5680	19.0	17.97
	140/5700	19.0	17.83
802.11n-HT20 (MCS0)	100/5500	20.5	19.05
	116/5580	20.5	**19.59**
	132/5660	20.5	19.45
	140/5700	20.5	19.28
802.11n-HT40 (MCS0)	102/5510	19.0	17.80
	110/5550	19.0	17.76
	118/5590	19.0	17.89
	134/5670	19.0	17.97
802.11ac-HT20 (MCS0)	100/5500	19.0	17.68
	116/5580	19.0	17.77
	132/5660	19.0	17.85
	140/5700	19.0	17.71
802.11ac-HT40 (MCS0)	102/5510	19.5	18.58
	110/5550	19.5	18.84
	118/5590	19.5	18.91
	134/5670	19.5	18.68
802.11ac-HT80 (MCS0)	106/5530	19.5	18.45
	122/5610	19.5	18.83
	138/5690	19.5	18.74
802.11ax-HE20 (MCS0)	100/5500	20.0	19.06
	116/5580	20.0	19.46
	132/5660	20.0	19.34

	140/5700	20.0	18.82
802.11ax-HE40 (MCS0)	102/5510	19.0	17.97
	110/5550	19.0	18.17
	118/5590	19.0	18.06
	134/5670	19.0	18.23
802.11ax-HE80 (MCS0)	106/5530	19.0	17.65
	122/5610	19.0	17.51
	138/5690	19.0	17.53
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-3) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant 10		Tune-up	Meas.
802.11a (6M)	149/5745	19.0	17.66
	157/5785	19.0	17.54
	165/5825	19.0	17.69
802.11n-HT20 (MCS0)	149/5745	20.5	19.29
	157/5785	20.5	19.32
	165/5825	20.5	**19.40**
802.11n-HT40 (MCS0)	151/5755	19.0	17.51
	159/5795	19.0	17.70
802.11ac-HT20 (MCS0)	149/5745	19.0	17.63
	157/5785	19.0	17.55
	165/5825	19.0	17.78
802.11ac-HT40 (MCS0)	151/5755	19.5	17.94
	159/5795	19.5	18.01
802.11ac-HT80 (MCS0)	155/5775	19.5	18.28
802.11ax-HE20 (MCS0)	149/5745	20.0	18.70
	157/5785	20.0	18.92
	165/5825	20.0	19.27
802.11ax-HE40 (MCS0)	151/5755	19.0	17.65
	159/5795	19.0	17.33
802.11ax-HE80 (MCS0)	155/5775	19.0	17.50
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power,			

Wi-Fi 5G (U-NII-1) Mode Ant 8	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	36/5180	18.0	16.90
	40/5200	18.0	16.72
	44/5220	18.0	17.09
	48/5240	18.0	16.98
802.11n-HT20 (MCS0)	36/5180	19.5	**18.96**
	40/5200	19.5	18.57
	44/5220	19.5	18.42
	48/5240	19.5	18.65
802.11n-HT40 (MCS0)	38/5190	18.0	17.08
	46/5230	18.0	17.10
802.11ac-VHT20 (MCS0)	36/5180	18.0	16.98
	40/5200	18.0	17.05
	44/5220	18.0	17.20
	48/5240	18.0	17.90
802.11ac-VHT40 (MCS0)	38/5190	19.0	17.40
	46/5230	19.0	17.25
802.11ac-VHT80 (MCS0)	42/5210	19.0	17.31
802.11ax-HE20 (MCS0)	36/5180	19.0	17.82
	40/5200	19.0	17.83
	44/5220	19.0	17.92
	48/5240	19.0	17.86
802.11ax-HE40 (MCS0)	38/5190	18.0	17.06
	46/5230	18.0	17.11
802.11ax-HE80 (MCS0)	42/5210	18.0	17.02
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2A) Mode Ant 8	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	52/5260	18.0	16.93
	56/5280	18.0	16.96
	60/5300	18.0	17.00
	64/5320	18.0	16.87
802.11n-HT20	52/5260	19.5	18.28

(MCS0)	56/5280	19.5	18.31
	60/5300	19.5	18.26
	64/5320	19.5	**18.38**
802.11n-HT40 (MCS0)	54/5270	18.0	17.06
	62/5310	18.0	16.99
802.11ac-HT20 (MCS0)	52/5260	18.0	17.07
	56/5280	18.0	17.04
	60/5300	18.0	16.97
	64/5320	18.0	16.92
802.11ac-HT40 (MCS0)	54/5270	19.0	17.16
	62/5310	19.0	17.40
802.11ac-HT80 (MCS0)	58/5290	19.0	17.23
802.11ax-HE20 (MCS0)	52/5260	19.0	17.64
	56/5280	19.0	17.67
	60/5300	19.0	17.61
	64/5320	19.0	17.53
802.11ax-HE40 (MCS0)	54/5270	18.0	17.04
	62/5310	18.0	17.02
802.11ax-HE80 (MCS0)	58/5290	18.0	16.98
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-2C) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
Ant 8		Tune-up	Meas.
802.11a (6M)	100/5500	18.0	17.20
	116/5580	18.0	17.02
	132/5660	18.0	17.14
	136/5680	18.0	17.09
	140/5700	18.0	16.99
802.11n-HT20 (MCS0)	100/5500	19.5	17.84
	116/5580	19.5	18.16
	132/5660	19.5	**18.61**
	140/5700	19.5	17.97
802.11n-HT40 (MCS0)	102/5510	18.0	17.21
	110/5550	18.0	17.28
	118/5590	18.0	17.15
	134/5670	18.0	17.22
802.11ac-HT20	100/5500	18.0	17.32

(MCS0)	116/5580	18.0	17.20
	132/5660	18.0	17.18
	140/5700	18.0	17.14
802.11ac-HT40 (MCS0)	102/5510	19.0	17.71
	110/5550	19.0	17.97
	118/5590	19.0	17.77
	134/5670	19.0	17.09
802.11ac-HT80 (MCS0)	106/5530	19.0	17.36
	122/5610	19.0	17.28
	138/5690	19.0	17.11
802.11ax-HE20 (MCS0)	100/5500	19.0	17.67
	116/5580	19.0	18.39
	132/5660	19.0	18.01
	140/5700	19.0	17.79
802.11ax-HE40 (MCS0)	102/5510	18.0	17.20
	110/5550	18.0	17.11
	118/5590	18.0	17.09
	134/5670	18.0	17.26
802.11ax-HE80 (MCS0)	106/5530	18.0	17.20
	122/5610	18.0	17.12
	138/5690	18.0	17.10
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.			

Wi-Fi 5G (U-NII-3) Mode / Ant 8	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
802.11a (6M)	149/5745	18.0	17.28
	157/5785	18.0	17.11
	165/5825	18.0	17.23
802.11n-HT20 (MCS0)	149/5745	19.5	**19.14**
	157/5785	19.5	18.84
	165/5825	19.5	18.89
802.11n-HT40 (MCS0)	151/5755	18.0	17.28
	159/5795	18.0	17.31
802.11ac-HT20 (MCS0)	149/5745	18.0	17.23
	157/5785	18.0	17.18
	165/5825	18.0	17.14
802.11ac-HT40 (MCS0)	151/5755	19.0	17.78
	159/5795	19.0	17.81
802.11ac-HT80 (MCS0)	155/5775	19.0	17.68
802.11ax-HE20 (MCS0)	149/5745	19.0	18.45
	157/5785	19.0	18.31
	165/5825	19.0	18.48
802.11ax-HE40 (MCS0)	151/5755	18.0	17.30
	159/5795	18.0	17.21
802.11ax-HE80 (MCS0)	155/5775	18.0	17.27
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power			

Wi-Fi 5G (U-NII-1) Mode / MIMO	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	36/5180	22.50	22.39	19.76	18.96
	40/5200	22.50	22.34	19.97	18.57
	44/5220	22.50	22.34	20.08	18.42
	48/5240	22.50	**22.45**	20.11	18.65
802.11n-HT40 (MCS0)	38/5190	21.00	20.16	17.21	17.08
	46/5230	21.00	20.21	17.30	17.10
802.11ac-VHT20	36/5180	21.00	20.34	17.65	16.98

(MCS0)	40/5200	21.00	20.44	17.77	17.05
	44/5220	21.00	20.44	17.65	17.20
	48/5240	21.00	20.78	17.63	17.90
802.11ac-VHT40 (MCS0)	38/5190	22.00	20.89	18.32	17.40
	46/5230	22.00	21.45	19.38	17.25
802.11ac-VHT80 (MCS0)	42/5210	22.00	21.41	19.27	17.31
802.11ax-HE20 (MCS0)	36/5180	22.00	21.08	18.30	17.82
	40/5200	22.00	21.01	18.17	17.83
	44/5220	22.00	21.90	19.68	17.92
	48/5240	22.00	21.95	19.81	17.86
802.11ax-HE40 (MCS0)	38/5190	21.00	20.67	18.18	17.06
	46/5230	21.00	20.60	18.02	17.11
802.11ax-HE80 (MCS0)	42/5210	21.00	20.48	17.87	17.02
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-2A) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
MIMO		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	52/5260	22.50	**22.43**	20.32	18.28
	56/5280	22.50	22.33	20.14	18.31
	60/5300	22.50	22.24	20.02	18.26
	64/5320	22.50	22.32	20.08	18.38
802.11n-HT40 (MCS0)	54/5270	21.00	20.69	18.22	17.06
	62/5310	21.00	20.52	17.98	16.99
802.11ac-HT20 (MCS0)	52/5260	21.00	20.50	17.87	17.07
	56/5280	21.00	20.61	18.10	17.04
	60/5300	21.00	20.61	18.15	16.97
	64/5320	21.00	20.52	18.02	16.92
802.11ac-HT40 (MCS0)	54/5270	22.00	21.76	19.91	17.16
	62/5310	22.00	21.65	19.61	17.40
802.11ac-HT80 (MCS0)	58/5290	22.00	21.72	19.81	17.23
802.11ax-HE20 (MCS0)	52/5260	22.50	22.14	20.24	17.64
	56/5280	22.50	22.08	20.12	17.67
	60/5300	22.50	22.02	20.07	17.61
	64/5320	22.00	21.99	20.07	17.53
802.11ax-HE40 (MCS0)	54/5270	21.00	20.44	17.78	17.04
	62/5310	21.00	20.42	17.76	17.02

802.11ax-HE80 (MCS0)	58/5290	21.00	20.39	17.75	16.98
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-2C) Mode	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
MIMO		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	100/5500	22.5	21.50	19.05	17.84
	116/5580	22.5	21.94	19.59	18.16
	132/5660	22.5	**22.06**	19.45	18.61
	140/5700	22.5	21.68	19.28	17.97
802.11n-HT40 (MCS0)	102/5510	21.0	20.53	17.80	17.21
	110/5550	21.0	20.54	17.76	17.28
	118/5590	21.0	20.55	17.89	17.15
	134/5670	21.0	20.62	17.97	17.22
802.11ac-HT20 (MCS0)	100/5500	22.0	20.51	17.68	17.32
	116/5580	22.0	20.50	17.77	17.20
	132/5660	22.0	20.54	17.85	17.18
	140/5700	22.0	20.44	17.71	17.14
802.11ac-HT40 (MCS0)	102/5510	22.0	21.18	18.58	17.71
	110/5550	22.0	21.44	18.84	17.97
	118/5590	22.0	21.39	18.91	17.77
	134/5670	22.0	20.97	18.68	17.09
802.11ac-HT80 (MCS0)	106/5530	22.0	20.95	18.45	17.36
	122/5610	22.0	21.13	18.83	17.28
	138/5690	22.0	21.01	18.74	17.11
802.11ax-HE20 (MCS0)	100/5500	22.0	21.43	19.06	17.67
	116/5580	22.0	21.97	19.46	18.39
	132/5660	22.0	21.74	19.34	18.01
	140/5700	22.0	21.35	18.82	17.79
802.11ax-HE40 (MCS0)	102/5510	21.0	20.61	17.97	17.20
	110/5550	21.0	20.68	18.17	17.11
	118/5590	21.0	20.61	18.06	17.09
	134/5670	21.0	20.78	18.23	17.26
802.11ax-HE80 (MCS0)	106/5530	21.0	20.44	17.65	17.20
	122/5610	21.0	20.33	17.51	17.12
	138/5690	21.0	20.33	17.53	17.10
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power.					

Wi-Fi 5G (U-NII-3) Mode / MIMO	Channel /Frequency(MHz)	Maximum Output Power (dBm)			
		Tune-up	Meas.	Ant 10	Ant 8
802.11n-HT20 (MCS0)	149/5745	22.5	**22.23**	19.29	19.14
	157/5785	22.5	22.10	19.32	18.84
	165/5825	22.5	22.16	19.40	18.89
802.11n-HT40 (MCS0)	151/5755	21.0	20.41	17.51	17.28
	159/5795	21.0	20.52	17.70	17.31
802.11ac-HT20 (MCS0)	149/5745	21.0	20.44	17.63	17.23
	157/5785	21.0	20.38	17.55	17.18
	165/5825	21.0	20.48	17.78	17.14
802.11ac-HT40 (MCS0)	151/5755	22.0	20.87	17.94	17.78
	159/5795	22.0	20.92	18.01	17.81
802.11ac-HT80 (MCS0)	155/5775	22.0	21.00	18.28	17.68
802.11ax-HE20 (MCS0)	149/5745	22.0	21.59	18.70	18.45
	157/5785	22.0	21.64	18.92	18.31
	165/5825	22.0	21.90	19.27	18.48
802.11ax-HE40 (MCS0)	151/5755	21.0	20.49	17.65	17.30
	159/5795	21.0	20.28	17.33	17.21
802.11ax-HE80 (MCS0)	155/5775	21.0	20.40	17.50	17.27
Note. Initial test configuration is 802.11n-HT20 mode, since the highest maximum output power,					

Receive off

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5GHz Wi-Fi U-NII-1	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	36/5180	13	11.33
		4	40/5200	13	12.04
		8	48/5240	13	11.13
	52	37	36/5180	15	13.45
		38	40/5200	15	14.55
		40	48/5240	15	13.23
	106	53	36/5180	17	16.44
		53	40/5200	17	16.46
		54	48/5240	17	15.94
802.11ax-HE20 (MCS 0)	242	61	36/5180	20	19.44
		61	40/5200	20	**19.58**
		61	48/5240	20	19.22
802.11ax-HE40 (MCS 0)	484	65	38/5190	20	19.27
		65	46/5230	20	19.15
802.11ax-HE80 (MCS 0)	996	67	42/5210	19	18.56
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power					

5GHz Wi-Fi U-NII-2A	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	52/5260	12	10.75
		4	60/5300	12	11.44
		8	64/5320	12	10.57
	52	37	52/5260	14	12.66
		38	60/5300	14	13.58
		40	64/5320	14	13.87
	106	53	52/5260	17	16.44
		53	60/5300	17	16.83
		54	64/5320	17	16.25
802.11ax-HE20 (MCS 0)	242	61	52/5260	20	19.04
		61	60/5300	20	19.11
		61	64/5320	20	19.03
802.11ax-HE40 (MCS 0)	484	65	54/5270	20	19.13
		65	62/5310	20	18.99
802.11ax-HE80 (MCS 0)	996	67	58/5290	19	18.21
Note. Initial test configuration is 802.11ax-HE40 mode, since the highest maximum output power					

5GHz Wi-Fi U-NII-2C	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	100/5500	12	11.03
		4	116/5580	12	11.46
		8	140/5700	12	10.23
		8	144/5720	12	11.67
	52	37	100/5500	14	12.94
		38	116/5580	14	13.29
		40	140/5700	14	13.88
		40	144/5720	14	13.94
	106	53	100/5500	18	16.34
		53	116/5580	18	16.55
		54	140/5700	18	17.04
		54	144/5720	18	16.87
802.11ax-HE20 (MCS 0)	242	61	100/5500	19.5	**18.85**
		61	116/5580	19.5	18.56
		61	140/5700	19.5	18.04
		61	144/5720	19.5	18.03
802.11ax-HE40 (MCS 0)	484	65	102/5510	19.5	18.52
		65	110/5550	19.5	18.67
		65	134/5670	19.5	18.23
		65	142/5710	19.5	18.11
802.11ax-HE80 (MCS 0)	996	67	106/5530	19	17.65
		67	138/5690	19	17.51
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power					

5GHz Wi-Fi U-NII-3	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	149/5745	20	18.57
		4	157/5785	20	18.14
		8	165/5825	20	18.46
	52	37	149/5745	20	**18.77**
		38	157/5785	20	18.45
		40	165/5825	20	18.67
	106	53	149/5745	20	18.73
		53	157/5785	20	18.68
		54	165/5825	20	18.66
802.11ax-HE20 (MCS 0)	242	61	149/5745	19	17.94
		61	157/5785	19	17.85
		61	165/5825	19	18.05
802.11ax-HE40	484	65	151/5755	19	17.89

(MCS 0)		65	159/5795	19	17.92
802.11ax-HE80 (MCS 0)	996	67	155/5775	19	17.46
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power					

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5GHz Wi-Fi U-NII-1	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	36/5180	12.5	11.03
		4	40/5200	12.5	11.42
		8	48/5240	12.5	10.94
	52	37	36/5180	14.5	12.77
		38	40/5200	14.5	13.52
		40	48/5240	14.5	12.71
	106	53	36/5180	17	15.67
		53	40/5200	17	15.72
		54	48/5240	17	15.89
802.11ax-HE20 (MCS 0)	242	61	36/5180	19.5	18.72
		61	40/5200	19.5	18.66
		61	48/5240	19.5	18.82
802.11ax-HE40 (MCS 0)	484	65	38/5190	19.5	18.71
		65	46/5230	19.5	**18.88**
802.11ax-HE80 (MCS 0)	996	67	42/5210	19	18.23
Note. Initial test configuration is 802.11ax-HE40 mode, since the highest maximum output power					

5GHz Wi-Fi U-NII-2A	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	52/5260	11.5	9.99
		4	60/5300	11.5	10.74
		8	64/5320	11.5	10.27
	52	37	52/5260	13.5	11.84
		38	60/5300	13.5	12.78
		40	64/5320	13.5	13.39
	106	53	52/5260	17	15.93
		53	60/5300	17	15.97
		54	64/5320	17	16.04
802.11ax-HE20 (MCS 0)	242	61	52/5260	19.5	18.37
		61	60/5300	19.5	18.48
		61	64/5320	19.5	18.75
802.11ax-HE40 (MCS 0)	484	65	54/5270	19.5	**18.84**
		65	62/5310	19.5	18.76
802.11ax-HE80 (MCS 0)	996	67	58/5290	19	18.02
Note. Initial test configuration is 802.11ax-HE40 mode, since the highest maximum output power					

5GHz Wi-Fi U-NII-2C	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	100/5500	12	10.66
		4	116/5580	12	10.84
		8	140/5700	12	10.23
		8	144/5720	12	11.37
	52	37	100/5500	14	12.57
		38	116/5580	14	12.85
		40	140/5700	14	13.36
		40	144/5720	14	13.17
	106	53	100/5500	17.5	15.54
		53	116/5580	17.5	15.55
		54	140/5700	17.5	16.67
		54	144/5720	17.5	16.38
802.11ax-HE20 (MCS 0)	242	61	100/5500	19	**18.27**
		61	116/5580	19	18.18
		61	140/5700	19	17.77
		61	144/5720	19	17.57
802.11ax-HE40 (MCS 0)	484	65	102/5510	19	17.75
		65	110/5550	19	17.99
		65	134/5670	19	17.63
		65	142/5710	19	17.48
802.11ax-HE80 (MCS 0)	996	67	106/5530	18.5	16.57
		67	138/5690	18.5	16.53
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power					

5GHz Wi-Fi U-NII-3	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)	
				Tune-up	Meas.
802.11ax-HE20 (MCS 0)	26	0	149/5745	19	17.67
		4	157/5785	19	17.47
		8	165/5825	19	**18.55**
	52	37	149/5745	19	17.54
		38	157/5785	19	17.65
		40	165/5825	19	18.49
	106	53	149/5745	19	17.56
		53	157/5785	19	17.58
		54	165/5825	19	18.45
802.11ax-HE20 (MCS 0)	242	61	149/5745	19	17.73
		61	157/5785	19	17.67
		61	165/5825	19	17.71
802.11ax-HE40	484	65	151/5755	19	17.66

(MCS 0)		65	159/5795	19	17.58
802.11ax-HE80 (MCS 0)	996	67	155/5775	19	17.43
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power					

MIMO

5GHz Wi-Fi U-NII-1	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
				Tune-up	Meas.	Ant10	Ant8
802.11ax-HE20 (MCS 0)	26	0	36/5180	15.5	14.04	11.21	10.84
		4	40/5200	15.5	14.66	11.95	11.32
		8	48/5240	15.5	13.96	11.09	10.81
	52	37	36/5180	17.5	15.93	13.24	12.57
		38	40/5200	17.5	16.85	14.29	13.34
		40	48/5240	17.5	15.80	12.97	12.61
	106	53	36/5180	20	18.96	16.32	15.54
		53	40/5200	20	18.94	16.31	15.52
		54	48/5240	20	18.79	15.86	15.69
802.11ax-HE20 (MCS 0)	242	61	36/5180	22.5	21.99	19.32	18.62
		61	40/5200	22.5	**22.02**	19.41	18.56
		61	48/5240	22.5	21.64	18.97	18.26
802.11ax-HE40 (MCS 0)	484	65	38/5190	22.5	21.96	19.25	18.62
		65	46/5230	22.5	21.88	19.11	18.62
802.11ax-HE80 (MCS 0)	996	67	42/5210	22	21.28	18.47	18.06
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power							

5GHz Wi-Fi U-NII-2A	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
				Tune-up	Meas.	Ant10	Ant8
802.11ax-HE20 (MCS 0)	26	0	52/5260	14.50	13.27	10.64	9.85
		4	60/5300	14.50	14.02	11.36	10.63
		8	64/5320	14.50	13.26	10.42	10.07
	52	37	52/5260	16.50	15.11	12.43	11.74
		38	60/5300	16.50	16.02	13.31	12.68
		40	64/5320	16.50	16.47	13.62	13.29
	106	53	52/5260	20.00	19.05	16.24	15.83
		53	60/5300	20.00	19.21	16.51	15.87
		54	64/5320	20.00	19.08	16.18	15.96
802.11ax-HE20 (MCS 0)	242	61	52/5260	22.50	21.63	18.95	18.26
		61	60/5300	22.50	21.71	19.03	18.34
		61	64/5320	22.50	21.75	18.86	18.62
802.11ax-HE40 (MCS 0)	484	65	54/5270	22.50	**21.86**	18.96	18.73
		65	62/5310	22.50	21.77	18.87	18.65
802.11ax-HE80 (MCS 0)	996	67	58/5290	22.00	20.89	17.93	17.82
Note. Initial test configuration is 802.11ax-HE40 mode, since the highest maximum output power							

5GHz Wi-Fi U-NII-2C	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
				Tune-up	Meas.	Ant10	Ant8
802.11ax-HE20 (MCS 0)	26	0	100/5500	15	13.74	10.98	10.46
		4	116/5580	15	13.91	11.10	10.68
		8	140/5700	15	13.10	10.15	10.03
		8	144/5720	15	14.34	11.56	11.09
	52	37	100/5500	17	15.63	12.85	12.37
		38	116/5580	17	15.92	13.03	12.78
		40	140/5700	17	16.52	13.86	13.12
		40	144/5720	17	16.46	13.79	13.08
	106	53	100/5500	20.5	18.76	16.12	15.34
		53	116/5580	20.5	18.91	16.34	15.41
		54	140/5700	20.5	19.73	16.98	16.45
		54	144/5720	20.5	19.50	16.72	16.24
802.11ax-HE20 (MCS 0)	242	61	100/5500	22	**21.39**	18.63	18.11
		61	116/5580	22	21.23	18.34	18.10
		61	140/5700	22	20.76	17.96	17.53
		61	144/5720	22	20.66	17.84	17.46
802.11ax-HE40 (MCS 0)	484	65	102/5510	22	21.01	18.32	17.66
		65	110/5550	22	21.18	18.47	17.84
		65	134/5670	22	20.75	18.01	17.45
		65	142/5710	22	20.49	17.58	17.38
802.11ax-HE80 (MCS 0)	996	67	106/5530	21.5	19.92	17.35	16.42
		67	138/5690	21.5	19.77	17.11	16.37
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power							

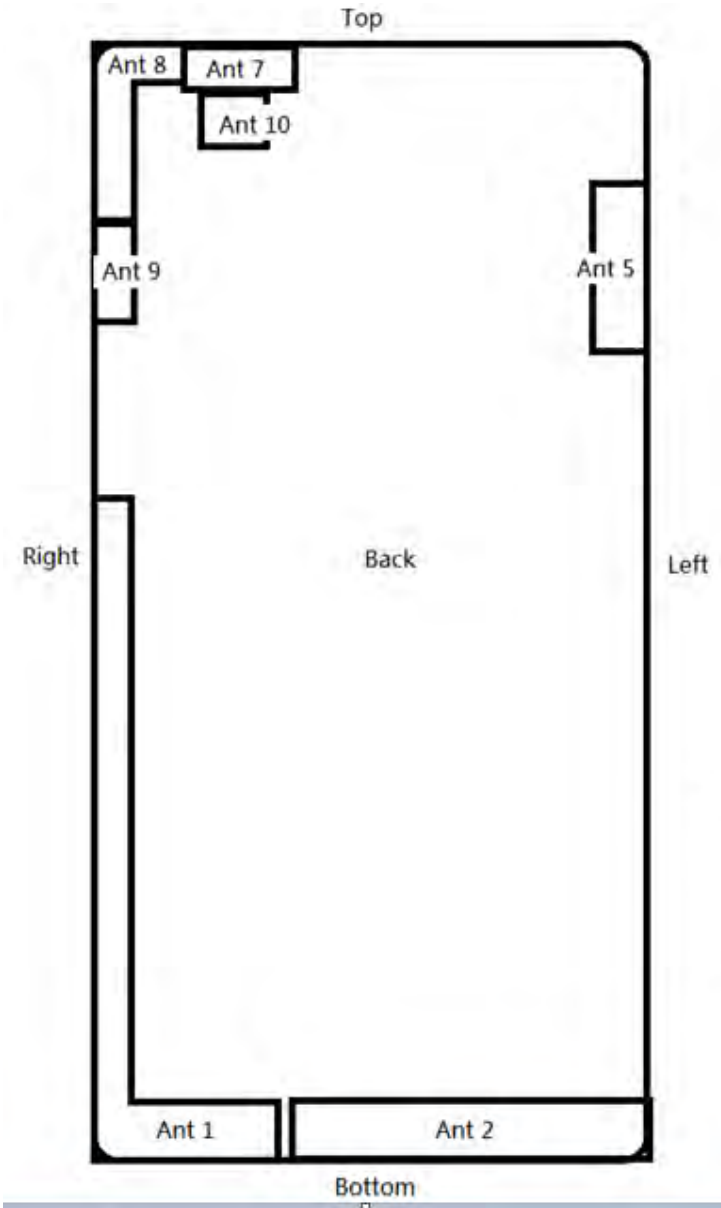
5GHz Wi-Fi U-NII-3	RU Size (Tone)	RU Index	Channel /Freq.(MHz)	Maximum Output Power (dBm)			
				Tune-up	Meas.	Ant10	Ant8
802.11ax-HE20 (MCS 0)	26	0	149/5745	22	20.81	18.11	17.46
		4	157/5785	22	20.65	18.02	17.23
		8	165/5825	22	21.37	18.36	18.35
	52	37	149/5745	22	20.66	18.02	17.24
		38	157/5785	22	20.91	18.39	17.35
		40	165/5825	22	21.24	18.34	18.12
	106	53	149/5745	22	20.83	18.15	17.47
		53	157/5785	22	21.03	18.57	17.39
		54	165/5825	22	**21.40**	18.53	18.24
802.11ax-HE20 (MCS 0)	242	61	149/5745	22	20.73	17.88	17.56
		61	157/5785	22	20.65	17.77	17.51
		61	165/5825	22	20.81	17.96	17.63
802.11ax-HE40 (MCS 0)	484	65	151/5755	22	20.64	17.73	17.52
		65	159/5795	22	20.62	17.72	17.49
802.11ax-HE80 (MCS 0)	996	67	155/5775	22	20.21	17.26	17.13
Note. Initial test configuration is 802.11ax-HE20 mode, since the highest maximum output power							

9.6 Bluetooth Mode

BT	Conducted Power(dBm)			Tune-up Limit (dBm)
	Channel/Frequency(MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	9.97	10.91	10.11	12.00
π/4DQPSK	7.10	7.92	7.14	9.00
8DPSK	7.08	7.89	7.10	9.00
BLE	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	7.64	8.64	7.05	9.00
GFSK(2M)	7.65	8.41	7.17	9.00

10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations



Ant 1:GSM850/WCDMA V/LTE5/12/17/26
Ant 2: GSM1900/WCDMA II/LTE2/4/7/38/41/NR n41
Ant 5: NR n41
Ant 8: Wi-Fi 2.4G/ Wi-Fi 5G CH1
Ant 9: Wi-Fi 2.4G CH0
Ant 10: Wi-Fi 5G CH0

Overall (Length x Width): 162 mm x 76 mm Overall Diagonal: 172 mm/Display Diagonal: 167mm						
Distance of the Antenna to the EUT surface/edge						
Antenna	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Ant 1	＜25mm	＜25mm	＞25mm	＜25mm	＞25mm	＜25mm
Ant 2	＜25mm	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm
Ant 5	＜25mm	＜25mm	＜25mm	＞25mm	＜25mm	＞25mm
Ant 8	＜25mm	＜25mm	＞25mm	＜25mm	＜25mm	＞25mm
Ant 9	＜25mm	＜25mm	＞25mm	＜25mm	＜25mm	＞25mm
Ant 10	＜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
Ant 1	Yes	Yes	No	Yes	No	Yes
Ant 2	Yes	Yes	Yes	Yes	No	Yes
Ant 5	Yes	Yes	Yes	No	Yes	No
Ant 8	Yes	Yes	No	Yes	Yes	No
Ant 9	Yes	Yes	No	Yes	Yes	No
Ant 10	Yes	Yes	No	Yes	Yes	No

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

2.For smart phones with an overall diagonal dimension is 172mm. Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, product specific 10-g SAR must be tested as a phablet to determine SAR compliance. For Phablet, Since hotspot mode 1-g *reported* SAR < 1.2 W/kg, product specific 10-g SAR is no required.

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

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

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

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

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

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

10.2 Measured SAR Results

Head SAR

Band	Antenna	Test Position	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
GSM850	Ant1	Left cheek	Level1	GSM	-	-	190/836.6	33.50	32.89	0.157	-0.120	1.15	0.181	18
		Left Tilt	Level1	GSM	-	-	190/836.6	33.50	32.89	0.059	0.031	1.15	0.067	/
		Right cheek	Level1	GSM	-	-	190/836.6	33.50	32.89	0.129	0.070	1.15	0.148	/
		Right Tilt	Level1	GSM	-	-	190/836.6	33.50	32.89	0.071	0.028	1.15	0.082	/
		Left cheek SIM2	Level1	GSM	-	-	190/836.6	33.50	32.89	0.145	0.012	1.15	0.167	/
		Left cheek Battery2	Level1	GSM	-	-	190/836.6	33.50	32.89	0.117	-0.031	1.15	0.135	/
GSM1900	Ant2	Left cheek	Level1	GSM	-	-	661/1880	31.00	29.87	0.029	0.030	1.30	0.037	19
		Left Tilt	Level1	GSM	-	-	661/1880	31.00	29.87	0.015	0.067	1.30	0.020	/
		Right cheek	Level1	GSM	-	-	661/1880	31.00	29.87	0.023	0.032	1.30	0.030	/
		Right Tilt	Level1	GSM	-	-	661/1880	31.00	29.87	0.014	0.079	1.30	0.019	/
		Left cheek SIM2	Level1	GSM	-	-	661/1880	31.00	29.87	0.021	0.010	1.30	0.027	/
		Left cheek Battery2	Level1	GSM	-	-	661/1880	31.00	29.87	0.019	0.021	1.30	0.025	/
WCDMAII	Ant2	Left cheek	Level1	RMC 12.2K	-	-	9400/1880	25.00	24.44	0.108	0.067	1.14	0.123	20
		Left Tilt	Level1	RMC 12.2K	-	-	9400/1880	25.00	24.44	0.043	0.180	1.14	0.049	/
		Right cheek	Level1	RMC 12.2K	-	-	9400/1880	25.00	24.44	0.082	0.091	1.14	0.093	/
		Right Tilt	Level1	RMC 12.2K	-	-	9400/1880	25.00	24.44	0.052	0.025	1.14	0.060	/
		Left cheek SIM2	Level1	RMC 12.2K	-	-	9400/1880	25.00	24.44	0.101	0.033	1.14	0.115	/
		Left cheek Battery2	Level1	RMC 12.2K	-	-	9400/1880	25.00	24.44	0.104	0.010	1.14	0.118	/
WCDMAIV	Ant2	Left cheek	Level1	RMC 12.2K	-	-	1413/1732.6	25.00	24.77	0.157	0.170	1.05	0.166	21
		Left Tilt	Level1	RMC 12.2K	-	-	1413/1732.6	25.00	24.77	0.088	0.160	1.05	0.092	/
		Right cheek	Level1	RMC 12.2K	-	-	1413/1732.6	25.00	24.77	0.133	0.030	1.05	0.140	/
		Right Tilt	Level1	RMC 12.2K	-	-	1413/1732.6	25.00	24.77	0.054	0.180	1.05	0.057	/
		Left cheek SIM2	Level1	RMC 12.2K	-	-	1413/1732.6	25.00	24.77	0.140	-0.014	1.05	0.148	/
		Left cheek Battery2	Level1	RMC 12.2K	-	-	1413/1732.6	25.00	24.77	0.155	0.024	1.05	0.163	/
WCDMAV	Ant1	Left cheek	Level1	RMC 12.2K	-	-	4183/836.6	25.00	24.32	0.201	0.024	1.17	0.235	22
		Left Tilt	Level1	RMC 12.2K	-	-	4183/836.6	25.00	24.32	0.069	0.029	1.17	0.081	/
		Right cheek	Level1	RMC 12.2K	-	-	4183/836.6	25.00	24.32	0.171	0.101	1.17	0.200	/
		Right Tilt	Level1	RMC 12.2K	-	-	4183/836.6	25.00	24.32	0.085	0.020	1.17	0.100	/

		Left cheek SIM2	Level1	RMC 12.2K	-	-	4183/836.6	25.00	24.32	0.168	0.100	1.17	0.196	/
		Left cheek Battery2	Level1	RMC 12.2K	-	-	4183/836.6	25.00	24.32	0.185	0.070	1.17	0.216	/
LTE 2	Ant2	Left cheek	Level1	QPSK	1	0	18900/1880	25.00	24.25	0.095	0.173	1.19	0.113	23
			Level1	QPSK	50%	50	18700/1860	24.00	23.19	0.081	0.042	1.21	0.097	/
		Left Tilt	Level1	QPSK	1	0	18900/1880	25.00	24.25	0.043	0.180	1.19	0.051	/
			Level1	QPSK	50%	50	18700/1860	24.00	23.19	0.026	0.049	1.21	0.031	/
		Right cheek	Level1	QPSK	1	0	18900/1880	25.00	24.25	0.049	0.021	1.19	0.058	/
			Level1	QPSK	50%	50	18700/1860	24.00	23.19	0.050	0.031	1.21	0.060	/
		Right Tilt	Level1	QPSK	1	0	18900/1880	25.00	24.25	0.036	0.031	1.19	0.043	/
			Level1	QPSK	50%	50	18700/1860	24.00	23.19	0.024	0.044	1.21	0.029	/
		Left cheek SIM2	Level1	QPSK	1	0	18900/1880	25.00	24.25	0.083	0.041	1.19	0.099	/
		Left cheek Battery2	Level1	QPSK	1	0	18900/1880	25.00	24.25	0.087	0.010	1.19	0.103	/
LTE 4	Ant2	Left cheek	Level1	QPSK	1	0	20175/1732.5	25.00	24.41	0.143	0.089	1.15	0.164	24
			Level1	QPSK	50%	0	20300/1745	24.00	23.45	0.118	0.102	1.14	0.134	/
		Left Tilt	Level1	QPSK	1	0	20175/1732.5	25.00	24.41	0.066	0.024	1.15	0.075	/
			Level1	QPSK	50%	0	20300/1745	24.00	23.45	0.054	0.047	1.14	0.061	/
		Right cheek	Level1	QPSK	1	0	20175/1732.5	25.00	24.41	0.116	0.070	1.15	0.133	/
			Level1	QPSK	50%	0	20300/1745	24.00	23.45	0.099	0.099	1.14	0.113	/
		Right Tilt	Level1	QPSK	1	0	20175/1732.5	25.00	24.41	0.062	0.090	1.15	0.071	/
			Level1	QPSK	50%	0	20300/1745	24.00	23.45	0.050	0.180	1.14	0.057	/
		Left cheek SIM2	Level1	QPSK	1	0	20175/1732.5	25.00	24.41	0.132	0.041	1.15	0.151	/
		Left cheek Battery2	Level1	QPSK	1	0	20175/1732.5	25.00	24.41	0.137	-0.049	1.15	0.157	/
LTE 5	Ant1	Left cheek	Level1	QPSK	1	25	20525/836.5	25.00	24.76	0.189	0.010	1.06	0.200	25
			Level1	QPSK	50%	25	20525/836.5	24.00	23.87	0.141	0.072	1.03	0.145	/
		Left Tilt	Level1	QPSK	1	25	20525/836.5	25.00	24.76	0.067	0.170	1.06	0.070	/
			Level1	QPSK	50%	25	20525/836.5	24.00	23.87	0.045	0.058	1.03	0.047	/
		Right cheek	Level1	QPSK	1	25	20525/836.5	25.00	24.76	0.172	0.064	1.06	0.182	/
			Level1	QPSK	50%	25	20525/836.5	24.00	23.87	0.122	0.032	1.03	0.126	/
		Right Tilt	Level1	QPSK	1	25	20525/836.5	25.00	24.76	0.058	-0.130	1.06	0.062	/
			Level1	QPSK	50%	25	20525/836.5	24.00	23.87	0.058	0.029	1.03	0.060	/
		Left cheek SIM2	Level1	QPSK	1	25	20525/836.5	25.00	24.76	0.160	0.025	1.06	0.169	/
		Left cheek Battery2	Level1	QPSK	1	25	20525/836.5	25.00	24.76	0.173	-0.079	1.06	0.183	/
LTE 7	Ant2	Left cheek	Level1	QPSK	1	0	20850/2510	25.00	24.35	0.140	-0.173	1.16	0.163	26
			Level1	QPSK	50%	50	20850/2510	24.00	23.35	0.118	-0.140	1.16	0.137	/
		Left Tilt	Level1	QPSK	1	0	20850/2510	25.00	24.35	0.025	0.170	1.16	0.029	/

			Level1	QPSK	50%	50	20850/2510	24.00	23.35	0.020	0.034	1.16	0.023	/
		Right cheek	Level1	QPSK	1	0	20850/2510	25.00	24.35	0.093	0.060	1.16	0.108	/
			Level1	QPSK	50%	50	20850/2510	24.00	23.35	0.069	-0.040	1.16	0.080	/
		Right Tilt	Level1	QPSK	1	0	20850/2510	25.00	24.35	0.054	0.055	1.16	0.062	/
			Level1	QPSK	50%	50	20850/2510	24.00	23.35	0.036	0.075	1.16	0.042	/
		Left cheek SIM2	Level1	QPSK	1	0	20850/2510	25.00	24.35	0.120	0.042	1.16	0.139	/
		Left cheek Battery2	Level1	QPSK	1	0	20850/2510	25.00	24.35	0.134	-0.011	1.16	0.156	/
		Left cheek	Level1	QPSK	1	0	21350/2560 PCC	25.00	23.62	0.095	0.060	1.37	0.131	/
					1	99	21152/2540.2 SCC							
LTE 12	Ant1	Left cheek	Level1	QPSK	1	0	23060/704	25.00	24.56	0.081	0.076	1.11	0.089	/
			Level1	QPSK	50%	0	23060/704	24.00	23.52	0.072	0.038	1.12	0.081	/
		Left Tilt	Level1	QPSK	1	0	23060/704	25.00	24.56	0.041	-0.026	1.11	0.046	/
			Level1	QPSK	50%	0	23060/704	24.00	23.52	0.031	0.028	1.12	0.034	/
		Right cheek	Level1	QPSK	1	0	23060/704	25.00	24.56	0.087	0.145	1.11	0.097	27
			Level1	QPSK	50%	0	23060/704	24.00	23.52	0.060	0.192	1.12	0.067	/
		Right Tilt	Level1	QPSK	1	0	23060/704	25.00	24.56	0.032	0.032	1.11	0.036	/
			Level1	QPSK	50%	0	23060/704	24.00	23.52	0.026	0.027	1.12	0.029	/
		Right cheek SIM2	Level1	QPSK	1	0	23060/704	25.00	24.56	0.081	0.049	1.11	0.090	/
		Right cheek Battery2	Level1	QPSK	1	0	23060/704	25.00	24.56	0.083	0.020	1.11	0.092	/
LTE 17	Ant1	Left cheek	Level1	QPSK	1	25	23790/710	25.00	24.57	0.079	0.109	1.10	0.087	28
			Level1	QPSK	50%	25	23790/710	24.00	23.52	0.062	0.137	1.12	0.069	/
		Left Tilt	Level1	QPSK	1	25	23790/710	25.00	24.57	0.034	0.033	1.10	0.037	/
			Level1	QPSK	50%	25	23790/710	24.00	23.52	0.024	0.067	1.12	0.027	/
		Right cheek	Level1	QPSK	1	25	23790/710	25.00	24.57	0.063	0.040	1.10	0.070	/
			Level1	QPSK	50%	25	23790/710	24.00	23.52	0.051	0.024	1.12	0.057	/
		Right Tilt	Level1	QPSK	1	25	23790/710	25.00	24.57	0.041	0.041	1.10	0.045	/
			Level1	QPSK	50%	25	23790/710	24.00	23.52	0.031	0.079	1.12	0.034	/
		Left cheek SIM2	Level1	QPSK	1	25	23790/710	25.00	24.57	0.076	0.010	1.10	0.084	/
		Left cheek Battery2	Level1	QPSK	1	25	23790/710	25.00	24.57	0.065	0.021	1.10	0.072	/
LTE 26	Ant1	Left cheek	Level1	QPSK	1	38	26965/841.5	25.00	24.43	0.189	0.051	1.14	0.216	29
			Level1	QPSK	50%	0	26965/841.5	24.00	23.61	0.139	0.035	1.09	0.152	/
		Left Tilt	Level1	QPSK	1	38	26965/841.5	25.00	24.43	0.064	0.180	1.14	0.073	/
			Level1	QPSK	50%	0	26965/841.5	24.00	23.61	0.060	0.025	1.09	0.066	/
		Right cheek	Level1	QPSK	1	38	26965/841.5	25.00	24.43	0.100	0.103	1.14	0.113	/
			Level1	QPSK	50%	0	26965/841.5	24.00	23.61	0.074	0.022	1.09	0.081	/
		Right Tilt	Level1	QPSK	1	38	26965/841.5	25.00	24.43	0.056	0.030	1.14	0.064	/

			Level1	QPSK	50%	0	26965/841.5	24.00	23.61	0.045	0.058	1.09	0.049	/
		Left cheek SIM2	Level1	QPSK	1	38	26965/841.5	25.00	24.43	0.173	0.012	1.14	0.197	/
		Left cheek Battery2	Level1	QPSK	1	38	26965/841.5	25.00	24.43	0.179	-0.085	1.14	0.204	/
LTE 38	Ant2	Left cheek	Level1	QPSK	1	99	37850/2580	25.00	24.19	0.074	-0.022	1.21	0.090	30
			Level1	QPSK	50%	25	37850/2580	24.00	23.34	0.058	-0.025	1.16	0.067	/
		Left Tilt	Level1	QPSK	1	99	37850/2580	25.00	24.19	0.000	0.000	1.21	0.000	/
			Level1	QPSK	50%	25	37850/2580	24.00	23.34	0.000	0.000	1.16	0.000	/
		Right cheek	Level1	QPSK	1	99	37850/2580	25.00	24.19	0.041	0.023	1.21	0.049	/
			Level1	QPSK	50%	25	37850/2580	24.00	23.34	0.036	0.093	1.16	0.042	/
		Right Tilt	Level1	QPSK	1	99	37850/2580	25.00	24.19	0.021	0.021	1.21	0.025	/
			Level1	QPSK	50%	25	37850/2580	24.00	23.34	0.014	0.029	1.16	0.016	/
		Left cheek SIM2	Level1	QPSK	1	99	37850/2580	25.00	24.19	0.052	-0.021	1.21	0.063	/
		Left cheek Battery2	Level1	QPSK	1	99	37850/2580	25.00	24.19	0.068	0.034	1.21	0.082	/
LTE 41	Ant2	Left cheek	Level1	QPSK	1	0	41490/2680	25.00	24.59	0.116	0.100	1.10	0.127	/
			Level1	QPSK	50%	50	40185/2549.5	24.00	23.68	0.098	0.000	1.08	0.105	/
		Left Tilt	Level1	QPSK	1	0	41490/2680	25.00	24.59	0.025	-0.118	1.10	0.027	/
			Level1	QPSK	50%	50	40185/2549.5	24.00	23.68	0.012	0.141	1.08	0.013	/
		Right cheek	Level1	QPSK	1	0	41490/2680	25.00	24.59	0.140	-0.023	1.10	0.154	/
			Level1	QPSK	50%	50	40185/2549.5	24.00	23.68	0.063	0.058	1.08	0.067	/
		Right Tilt	Level1	QPSK	1	0	41490/2680	25.00	24.59	0.087	0.090	1.10	0.095	/
			Level1	QPSK	50%	50	40185/2549.5	24.00	23.68	0.032	0.033	1.08	0.035	/
		Right cheek SIM2	Level1	QPSK	1	0	41490/2680	25.00	24.59	0.145	0.022	1.10	0.159	31
		Right cheek Battery2	Level1	QPSK	1	0	41490/2680	25.00	24.59	0.139	-0.025	1.10	0.153	/
		Right cheek	Level1	QPSK	1	0	41490/2680 PCC	25.00	23.73	0.112	-0.030	1.34	0.150	/
					1	99	41292/2660.2 SCC							
NR n41	Ant 5	Left cheek	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	18.00	17.42	0.263	-0.053	1.14	0.301	/
		Left cheek	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	18.00	16.93	0.223	0.021	1.28	0.285	/
		Left Tilt	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	18.00	17.42	0.069	-0.053	1.14	0.079	/
		Left Tilt	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	18.00	16.93	0.059	-0.160	1.28	0.075	/
		Right cheek	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	18.00	17.42	0.674	0.098	1.14	0.770	32
		Right cheek	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	18.00	16.93	0.523	0.130	1.28	0.669	/
		Right Tilt	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	18.00	17.42	0.204	0.028	1.14	0.233	/

		Right Tilt	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	18.00	16.93	0.168	0.033	1.28	0.215	/
		Right cheek SIM2	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	18.00	17.42	0.642	0.120	1.14	0.734	/
		Right cheek Battery2	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	18.00	17.42	0.584	-0.035	1.14	0.667	/
	Ant 2	Left cheek	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.279	-0.190	1.13	0.314	/
		Left cheek	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.273	-0.066	1.23	0.336	/
		Left Tilt	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.064	0.100	1.13	0.073	/
		Left Tilt	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.062	0.098	1.23	0.076	/
		Right cheek	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.134	0.181	1.13	0.151	/
		Right cheek	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.146	0.028	1.23	0.180	/
		Right Tilt	Level1	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.080	0.120	1.13	0.090	/
		Right Tilt	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.088	0.043	1.23	0.108	/
		Left cheek SIM2	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.223	0.020	1.23	0.274	/
		Left cheek Battery2	Level1	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.246	-0.010	1.23	0.303	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.															

Band	Antenna	Test Position	Power Reduction	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
Wi-Fi2.4G	Ant9	Left cheek	Level1	802.11b	100.0%	6/2437	14.00	13.26	0.148	0.113	1.19	0.175	/
		Left Tilt	Level1	802.11b	100.0%	6/2437	14.00	13.26	0.035	0.147	1.19	0.042	/
		Right cheek	Level1	802.11b	100.0%	6/2437	14.00	13.26	0.066	-0.030	1.19	0.078	/
		Right Tilt	Level1	802.11b	100.0%	6/2437	14.00	13.26	0.012	-0.026	1.19	0.015	/
		Left cheek Battery2	Level1	802.11b	100.0%	6/2437	14.00	13.26	0.123	0.044	1.19	0.146	/
	Ant8	Left cheek	Level1	802.11b	100.0%	6/2437	14.00	13.37	0.186	0.196	1.16	0.215	/
		Left Tilt	Level1	802.11b	100.0%	6/2437	14.00	13.37	0.117	0.027	1.16	0.135	/
		Right cheek	Level1	802.11b	100.0%	6/2437	14.00	13.37	0.078	0.035	1.16	0.090	/
		Right Tilt	Level1	802.11b	100.0%	6/2437	14.00	13.37	0.038	0.130	1.16	0.044	/
		Left cheek Battery2	Level1	802.11b	100.0%	6/2437	14.00	13.37	0.179	0.036	1.16	0.207	/
	MIMO	Left cheek	Level1	802.11n-HT20	100.0%	11/2462	16.50	15.37	0.322	0.031	1.30	0.418	33
		Left Tilt	Level1	802.11n-HT20	100.0%	11/2462	16.50	15.37	0.183	0.039	1.30	0.237	/
		Right cheek	Level1	802.11n-HT20	100.0%	11/2462	16.50	15.37	0.100	-0.100	1.30	0.130	/
		Right Tilt	Level1	802.11n-HT20	100.0%	11/2462	16.50	15.37	0.072	0.040	1.30	0.093	/
		Left cheek Battery2	Level1	802.11n-HT20	100.0%	11/2462	16.50	15.37	0.312	0.024	1.30	0.405	/
U-NII-1	Ant10	Left cheek	Level1	802.11n-HT20	100.0%	48/5240	14.00	13.08	0.029	0.088	1.24	0.035	/
		Left Tilt	Level1	802.11n-HT20	100.0%	48/5240	14.00	13.08	0.019	0.110	1.24	0.023	/
		Right cheek	Level1	802.11n-HT20	100.0%	48/5240	14.00	13.08	0.022	0.097	1.24	0.027	/
		Right Tilt	Level1	802.11n-HT20	100.0%	48/5240	14.00	13.08	0.012	0.021	1.24	0.015	/
		Left cheek Battery2	Level1	802.11n-HT20	100.0%	48/5240	14.00	13.08	0.021	0.000	1.24	0.026	/
	Ant8	Left cheek	Level1	802.11n-HT20	100.0%	36/5180	12.50	11.41	0.279	-0.069	1.29	0.359	34
		Left Tilt	Level1	802.11n-HT20	100.0%	36/5180	12.50	11.41	0.213	0.099	1.29	0.274	/
		Right cheek	Level1	802.11n-HT20	100.0%	36/5180	12.50	11.41	0.144	0.055	1.29	0.185	/
		Right Tilt	Level1	802.11n-HT20	100.0%	36/5180	12.50	11.41	0.101	0.014	1.29	0.130	/
		Left cheek	Level1	802.11n-HT20	100.0%	36/5180	12.50	11.41	0.243	0.102	1.29	0.312	/
	MIMO	Left cheek	Level1	802.11n-HT20	100.0%	48/5240	15.50	15.21	0.230	0.099	1.07	0.246	/
		Left Tilt	Level1	802.11n-HT20	100.0%	48/5240	15.50	15.21	0.172	0.099	1.07	0.184	/
		Right cheek	Level1	802.11n-HT20	100.0%	48/5240	15.50	15.21	0.131	0.073	1.07	0.140	/
		Right Tilt	Level1	802.11n-HT20	100.0%	48/5240	15.50	15.21	0.103	0.099	1.07	0.110	/
		Left cheek Battery2	Level1	802.11n-HT20	100.0%	48/5240	15.50	15.21	0.204	0.114	1.07	0.218	/
U-NII-2A	Ant10	Left cheek	Level1	802.11n-HT20	100.0%	56/5280	14.00	13.10	0.027	0.030	1.23	0.033	/
		Left Tilt	Level1	802.11n-HT20	100.0%	56/5280	14.00	13.10	0.018	0.100	1.23	0.022	/
		Right cheek	Level1	802.11n-HT20	100.0%	56/5280	14.00	13.10	0.020	0.011	1.23	0.025	/
		Right Tilt	Level1	802.11n-HT20	100.0%	56/5280	14.00	13.10	0.010	0.115	1.23	0.012	/

		Left cheek Battery2	Level1	802.11n-HT20	100.0%	56/5280	14.00	13.10	0.025	0.135	1.23	0.031	/
	Ant8	Left cheek	Level1	802.11n-HT20	100.0%	64/5320	12.50	11.02	0.136	0.118	1.41	0.191	/
		Left Tilt	Level1	802.11n-HT20	100.0%	64/5320	12.50	11.02	0.154	0.091	1.41	0.217	/
		Right cheek	Level1	802.11n-HT20	100.0%	64/5320	12.50	11.02	0.103	0.022	1.41	0.145	/
		Right Tilt	Level1	802.11n-HT20	100.0%	64/5320	12.50	11.02	0.101	0.069	1.41	0.142	/
		Left Tilt Battery2	Level1	802.11n-HT20	100.0%	64/5320	12.50	11.02	0.143	0.075	1.41	0.201	/
	MIMO	Left cheek	Level1	802.11n-HT20	100.0%	56/5280	15.50	15.19	0.210	0.061	1.07	0.226	35
		Left Tilt	Level1	802.11n-HT20	100.0%	56/5280	15.50	15.19	0.161	0.099	1.07	0.173	/
		Right cheek	Level1	802.11n-HT20	100.0%	56/5280	15.50	15.19	0.108	0.034	1.07	0.116	/
		Right Tilt	Level1	802.11n-HT20	100.0%	56/5280	15.50	15.19	0.082	0.067	1.07	0.088	/
		Left cheek Battery2	Level1	802.11n-HT20	100.0%	56/5280	15.50	15.19	0.203	0.051	1.07	0.218	/
U-NII-2C	Ant10	Left cheek	Level1	802.11n-HT20	100.0%	116/5580	13.50	12.65	0.037	0.045	1.22	0.045	/
		Left Tilt	Level1	802.11n-HT20	100.0%	116/5580	13.50	12.65	0.029	0.126	1.22	0.035	/
		Right cheek	Level1	802.11n-HT20	100.0%	116/5580	13.50	12.65	0.021	0.015	1.22	0.026	/
		Right Tilt	Level1	802.11n-HT20	100.0%	116/5580	13.50	12.65	0.014	0.026	1.22	0.017	/
		Left cheek Battery2	Level1	802.11n-HT20	100.0%	116/5580	13.50	12.65	0.034	0.041	1.22	0.041	/
	Ant8	Left cheek	Level1	802.11n-HT20	100.0%	116/5580	12.50	11.71	0.197	0.000	1.20	0.236	/
		Left Tilt	Level1	802.11n-HT20	100.0%	116/5580	12.50	11.71	0.180	0.054	1.20	0.216	/
		Right cheek	Level1	802.11n-HT20	100.0%	116/5580	12.50	11.71	0.125	0.160	1.20	0.150	/
		Right Tilt	Level1	802.11n-HT20	100.0%	116/5580	12.50	11.71	0.138	0.044	1.20	0.166	/
		Left cheek Battery2	Level1	802.11n-HT20	100.0%	116/5580	12.50	11.71	0.176	0.034	1.20	0.211	/
	MIMO	Left cheek	Level1	802.11n-HT20	100.0%	132/5660	15.50	15.20	0.239	0.099	1.07	0.256	/
		Left Tilt	Level1	802.11n-HT20	100.0%	132/5660	15.50	15.20	0.250	0.099	1.07	0.268	36
		Right cheek	Level1	802.11n-HT20	100.0%	132/5660	15.50	15.20	0.140	0.102	1.07	0.150	/
		Right Tilt	Level1	802.11n-HT20	100.0%	132/5660	15.50	15.20	0.135	0.048	1.07	0.145	/
		Left cheek Battery2	Level1	802.11n-HT20	100.0%	132/5660	15.50	15.20	0.244	0.112	1.07	0.262	/
U-NII-3	Ant10	Left cheek	Level1	802.11n-HT20	100.0%	165/5825	13.50	12.40	0.062	0.030	1.29	0.079	/
		Left Tilt	Level1	802.11n-HT20	100.0%	165/5825	13.50	12.40	0.077	0.052	1.29	0.099	/
		Right cheek	Level1	802.11n-HT20	100.0%	165/5825	13.50	12.40	0.031	0.031	1.29	0.040	/
		Right Tilt	Level1	802.11n-HT20	100.0%	165/5825	13.50	12.40	0.025	0.017	1.29	0.032	/
		Left Tilt Battery2	Level1	802.11n-HT20	100.0%	165/5825	13.50	12.40	0.074	0.135	1.29	0.095	/
	Ant8	Left cheek	Level1	802.11n-HT20	100.0%	149/5745	12.50	12.20	0.201	0.102	1.07	0.215	/
		Left Tilt	Level1	802.11n-HT20	100.0%	149/5745	12.50	12.20	0.270	-0.101	1.07	0.289	/
		Right cheek	Level1	802.11n-HT20	100.0%	149/5745	12.50	12.20	0.163	0..054	1.07	0.175	/
		Right Tilt	Level1	802.11n-HT20	100.0%	149/5745	12.50	12.20	0.187	0.183	1.07	0.200	/
		Left Tilt	Level1	802.11n-HT20	100.0%	149/5745	12.50	12.20	0.253	0.052	1.07	0.271	/

		Battery2											
	MIMO	Left cheek	Level1	802.11n-HT20	100.0%	149/5745	15.50	15.28	0.286	-0.046	1.05	0.301	/
		Left Tilt	Level1	802.11n-HT20	100.0%	149/5745	15.50	15.28	0.302	0.135	1.05	0.318	37
		Right cheek	Level1	802.11n-HT20	100.0%	149/5745	15.50	15.28	0.172	0.070	1.05	0.181	/
		Right Tilt	Level1	802.11n-HT20	100.0%	149/5745	15.50	15.28	0.180	0.068	1.05	0.190	/
		Left Tilt Battery2	Level1	802.11n-HT20	100.0%	149/5745	15.50	15.28	0.286	0.033	1.05	0.301	/
Bluetooth	BT	Left cheek	Level1	DH5	76.9%	39/2441	12.00	10.91	0.090	-0.105	1.67	0.150	38
		Left Tilt	Level1	DH5	76.9%	39/2441	12.00	10.91	0.013	0.104	1.67	0.022	/
		Right cheek	Level1	DH5	76.9%	39/2441	12.00	10.91	0.035	-0.039	1.67	0.058	/
		Right Tilt	Level1	DH5	76.9%	39/2441	12.00	10.91	0.010	0.063	1.67	0.016	/
		Left cheek Battery2	Level1	DH5	76.9%	39/2441	12.00	10.91	0.082	0.066	1.67	0.137	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.													

Body-worn SAR

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
GSM 850	Ant1	Back Side	Level2	15	GSM	-	-	190/836.6	33.50	32.89	0.273	-0.190	1.15	0.314	39
		Front Side	Level2	15	GSM	-	-	190/836.6	33.50	32.89	0.245	0.090	1.15	0.282	/
		Back Side SIM2	Level2	15	GSM	-	-	190/836.6	33.50	32.89	0.240	0.022	1.15	0.276	/
		Back Side Battery2	Level2	15	GSM	-	-	190/836.6	33.50	32.89	0.266	0.010	1.15	0.306	/
GSM 1900	Ant2	Back Side	Level2	15	GSM	-	-	661/1880	31.00	29.87	0.120	-0.110	1.30	0.156	40
		Front Side	Level2	15	GSM	-	-	661/1880	31.00	29.87	0.102	-0.150	1.30	0.132	/
		Back Side SIM2	Level2	15	GSM	-	-	661/1880	31.00	29.87	0.109	0.010	1.30	0.141	/
		Back Side Battery2	Level2	15	GSM	-	-	661/1880	31.00	29.87	0.108	-0.124	1.30	0.140	/
WCDMA II	Ant2	Back Side	Level2	15	RMC	-	-	9400/1880	25.00	24.44	0.357	0.150	1.14	0.406	41
		Front Side	Level2	15	RMC	-	-	9400/1880	25.00	24.44	0.224	0.110	1.14	0.255	/
		Back Side SIM2	Level2	15	RMC	-	-	9400/1880	25.00	24.44	0.311	0.033	1.14	0.354	/
		Back Side Battery2	Level2	15	RMC	-	-	9400/1880	25.00	24.44	0.348	0.041	1.14	0.396	/
WCDMA IV	Ant2	Back Side	Level2	15	RMC	-	-	1413/1732.6	25.00	24.77	0.304	0.120	1.05	0.321	/
		Front Side	Level2	15	RMC	-	-	1413/1732.6	25.00	24.77	0.454	0.040	1.05	0.479	42
		Front Side SIM2	Level2	15	RMC	-	-	1413/1732.6	25.00	24.77	0.450	0.012	1.05	0.474	/
		Front Side Battery2	Level2	15	RMC	-	-	1413/1732.6	25.00	24.77	0.444	0.074	1.05	0.468	/
WCDMA	Ant1	Back Side	Level2	15	RMC	-	-	4183/836.6	25.00	24.32	0.236	-0.054	1.17	0.276	43

V		Front Side	Level2	15	RMC	-	-	4183/836.6	25.00	24.32	0.180	0.090	1.17	0.211	/
		Back Side SIM2	Level2	15	RMC	-	-	4183/836.6	25.00	24.32	0.230	0.018	1.17	0.269	/
		Back Side Battery2	Level2	15	RMC	-	-	4183/836.6	25.00	24.32	0.227	0.010	1.17	0.265	/
LTE 2	Ant2	Back Side	Level2	15	QPSK	1	0	18900/1880	25.00	24.25	0.316	0.010	1.19	0.376	44
			Level2	15	QPSK	50%	50	18700/1860	24.00	23.19	0.154	0.024	1.21	0.186	/
		Front Side	Level2	15	QPSK	1	0	18900/1880	25.00	24.25	0.135	0.160	1.19	0.160	/
			Level2	15	QPSK	50%	50	18700/1860	24.00	23.19	0.140	0.033	1.21	0.169	/
		Back Side SIM2	Level2	15	QPSK	1	0	18900/1880	25.00	24.25	0.315	0.024	1.19	0.374	/
		Back Side Battery2	Level2	15	QPSK	1	0	18900/1880	25.00	24.25	0.301	0.022	1.19	0.358	/
LTE 4	Ant2	Back Side	Level2	15	QPSK	1	0	20175/1732.5	25.00	24.41	0.389	0.090	1.15	0.446	45
			Level2	15	QPSK	50%	0	20300/1745	24.00	23.45	0.260	0.037	1.14	0.295	/
		Front Side	Level2	15	QPSK	1	0	20175/1732.5	25.00	24.41	0.287	0.021	1.15	0.329	/
			Level2	15	QPSK	50%	0	20300/1745	24.00	23.45	0.188	0.070	1.14	0.213	/
		Back Side SIM2	Level2	15	QPSK	1	0	20175/1732.5	25.00	24.41	0.380	-0.011	1.15	0.435	/
		Back Side Battery2	Level2	15	QPSK	1	0	20175/1732.5	25.00	24.41	0.376	0.014	1.15	0.431	/
LTE 5	Ant1	Back Side	Level2	15	QPSK	1	25	20525/836.5	25.00	24.76	0.260	-0.064	1.06	0.275	46
			Level2	15	QPSK	50%	25	20525/836.5	24.00	23.87	0.258	0.110	1.03	0.266	/
		Front Side	Level2	15	QPSK	1	25	20525/836.5	25.00	24.76	0.221	0.045	1.06	0.234	/
			Level2	15	QPSK	50%	25	20525/836.5	24.00	23.87	0.227	0.081	1.03	0.234	/
		Back Side SIM2	Level2	15	QPSK	1	25	20525/836.5	25.00	24.76	0.256	-0.054	1.06	0.271	/
		Back Side Battery2	Level2	15	QPSK	1	25	20525/836.5	25.00	24.76	0.255	0.031	1.06	0.269	/
LTE 7	Ant2	Back Side	Level2	15	QPSK	1	0	20850/2510	25.00	24.35	0.553	-0.100	1.16	0.642	47
			Level2	15	QPSK	50%	50	20850/2510	24.00	23.35	0.451	0.031	1.16	0.524	/
		Front Side	Level2	15	QPSK	1	0	20850/2510	25.00	24.35	0.359	0.024	1.16	0.417	/
			Level2	15	QPSK	50%	50	20850/2510	24.00	23.35	0.299	0.016	1.16	0.347	/
		Back Side SIM2	Level2	15	QPSK	1	0	20850/2510	25.00	24.35	0.530	0.047	1.16	0.616	/
		Back Side Battery2	Level2	15	QPSK	1	0	20850/2510	25.00	24.35	0.550	0.082	1.16	0.639	/
		Back Side	Level2	15	QPSK	1	0	21350/2560 PCC	25.00	23.62	0.371	-0.060	1.37	0.510	/
						1	99	21152/2540.2 SCC							
LTE 12	Ant1	Back Side	Level2	15	QPSK	1	0	23060/704	25.00	24.56	0.208	-0.040	1.11	0.230	48
			Level2	15	QPSK	50%	0	23060/704	24.00	23.52	0.167	0.170	1.12	0.187	/
		Front Side	Level2	15	QPSK	1	0	23060/704	25.00	24.56	0.141	0.053	1.11	0.156	/
			Level2	15	QPSK	50%	0	23060/704	24.00	23.52	0.162	0.060	1.12	0.181	/

		Back Side SIM2	Level2	15	QPSK	1	0	23060/704	25.00	24.56	0.201	0.037	1.11	0.222	/
		Back Side Battery2	Level2	15	QPSK	1	0	23060/704	25.00	24.56	0.206	0.010	1.11	0.228	/
LTE 17	Ant1	Back Side	Level2	15	QPSK	1	25	23790/710	25.00	24.57	0.234	0.180	1.10	0.258	49
			Level2	15	QPSK	50%	25	23790/710	24.00	23.52	0.179	0.080	1.12	0.200	/
		Front Side	Level2	15	QPSK	1	25	23790/710	25.00	24.57	0.112	0.050	1.10	0.124	/
			Level2	15	QPSK	50%	25	23790/710	24.00	23.52	0.119	0.030	1.12	0.133	/
		Back Side SIM2	Level2	15	QPSK	1	25	23790/710	25.00	24.57	0.182	0.020	1.10	0.201	/
		Back Side Battery2	Level2	15	QPSK	1	25	23790/710	25.00	24.57	0.205	0.016	1.10	0.226	/
LTE 26	Ant1	Back Side	Level2	15	QPSK	1	38	26965/841.5	25.00	24.43	0.277	-0.100	1.14	0.316	50
			Level2	15	QPSK	50%	0	26965/841.5	24.00	23.61	0.226	0.012	1.09	0.247	/
		Front Side	Level2	15	QPSK	1	38	26965/841.5	25.00	24.43	0.145	0.100	1.14	0.165	/
			Level2	15	QPSK	50%	0	26965/841.5	24.00	23.61	0.200	-0.028	1.09	0.219	/
		Back Side SIM2	Level2	15	QPSK	1	38	26965/841.5	25.00	24.43	0.230	-0.047	1.14	0.262	/
		Back Side Battery2	Level2	15	QPSK	1	38	26965/841.5	25.00	24.43	0.269	0.028	1.14	0.307	/
LTE 38	Ant2	Back Side	Level2	15	QPSK	1	99	37850/2580	25.00	24.19	0.295	0.039	1.21	0.355	51
			Level2	15	QPSK	50%	25	37850/2580	24.00	23.34	0.260	0.180	1.16	0.303	/
		Front Side	Level2	15	QPSK	1	99	37850/2580	25.00	24.19	0.234	0.020	1.21	0.282	/
			Level2	15	QPSK	50%	25	37850/2580	24.00	23.34	0.189	-0.040	1.16	0.220	/
		Back Side	Level2	15	QPSK	1	99	37850/2580	25.00	24.19	0.290	-0.126	1.21	0.349	/
			Level2	15	QPSK	1	99	37850/2580	25.00	24.19	0.240	0.018	1.21	0.289	/
LTE 41	Ant2	Back Side	Level2	15	QPSK	1	0	41490/2680	25.00	24.59	0.293	0.119	1.10	0.322	52
			Level2	15	QPSK	50%	50	40185/2549.5	24.00	23.68	0.275	0.048	1.08	0.296	/
		Front Side	Level2	15	QPSK	1	0	41490/2680	25.00	24.59	0.224	0.166	1.10	0.246	/
			Level2	15	QPSK	50%	50	40185/2549.5	24.00	23.68	0.191	0.021	1.08	0.206	/
		Back Side SIM2	Level2	15	QPSK	1	0	41490/2680	25.00	24.59	0.281	0.029	1.10	0.309	/
		Back Side Battery2	Level2	15	QPSK	1	0	41490/2680	25.00	24.59	0.291	0.037	1.10	0.320	/
		Back Side	Level2	15	QPSK	1	0	41490/2680 PCC	25.00	23.73	0.232	-0.015	1.34	0.311	/
						1	99	41292/2660.2 SCC							
NR n41	Ant5	Back Side	Level2	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	21.00	19.76	0.150	0.070	1.33	0.200	/
			Level2	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	21.00	19.59	0.049	0.000	1.38	0.068	/
		Front Side	Level2	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	21.00	19.76	0.143	0.076	1.33	0.190	/
			Level2	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	21.00	19.59	0.052	-0.190	1.38	0.072	/

	Ant2	Back Side	Level2	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.151	0.120	1.13	0.170	/
			Level2	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.150	0.082	1.23	0.185	/
		Front Side	Level2	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.195	-0.010	1.13	0.220	53
			Level2	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.170	0.060	1.23	0.209	/
		Back Side SIM2	Level2	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.133	-0.087	1.13	0.150	/
		Back Side Battery2	Level2	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.145	0.147	1.13	0.163	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.															

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
Wi-Fi2.4G	Ant9	Back Side	Level2	15	802.11b	100.0%	6/2437	20.00	19.15	0.000	0.000	1.22	0.000	/
		Front Side	Level2	15	802.11b	100.0%	6/2437	20.00	19.15	0.066	0.070	1.22	0.080	/
		Front Side Battery2	Level2	15	802.11b	100.0%	6/2437	20.00	19.15	0.061	0.064	1.22	0.074	/
	Ant8	Back Side	Level2	15	802.11b	100.0%	6/2437	20.00	18.95	0.000	0.000	1.27	0.000	/
		Front Side	Level2	15	802.11b	100.0%	6/2437	20.00	18.95	0.046	0.180	1.27	0.058	/
		Front Side Battery2	Level2	15	802.11b	100.0%	6/2437	20.00	18.95	0.042	0.110	1.27	0.054	/
	MIMO	Back Side	Level2	15	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.047	0.028	1.42	0.066	/
		Front Side	Level2	15	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.068	0.021	1.42	0.096	54
		Front Side Battery2	Level2	15	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.061	0.032	1.42	0.087	/
U-NII-1	Ant10	Back Side	Level2	15	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.056	0.100	1.09	0.061	/
		Front Side	Level2	15	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.071	0.020	1.09	0.078	/
		Front Side Battery2	Level2	15	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.064	0.012	1.09	0.070	/
	Ant8	Back Side	Level2	15	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.195	0.062	1.13	0.221	55
		Front Side	Level2	15	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.106	0.110	1.13	0.120	/
		Back Side Battery2	Level2	15	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.187	0.031	1.13	0.212	/
	MIMO	Back Side	Level2	15	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.119	0.018	1.01	0.120	/
		Front Side	Level2	15	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.066	0.045	1.01	0.066	/
		Back Side Battery2	Level2	15	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.011	0.014	1.01	0.011	/
U-NII-2A	Ant10	Back Side	Level2	15	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.069	0.044	1.17	0.080	/
		Front Side	Level2	15	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.053	0.100	1.17	0.062	/
		Back Side	Level2	15	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.067	0.025	1.17	0.078	/

		Battery2												
	Ant8	Back Side	Level2	15	802.11n-HT20	100.0%	64/5320	19.50	18.38	0.180	0.032	1.29	0.233	56
		Front Side	Level2	15	802.11n-HT20	100.0%	64/5320	19.50	18.38	0.115	0.060	1.29	0.149	/
		Back Side Battery2	Level2	15	802.11n-HT20	100.0%	64/5320	19.50	18.38	0.173	0.033	1.29	0.224	/
	MIMO	Back Side	Level2	15	802.11n-HT20	100.0%	52/5260	22.50	22.43	0.171	-0.063	1.02	0.174	/
		Front Side	Level2	15	802.11n-HT20	100.0%	52/5260	22.50	22.43	0.092	0.028	1.02	0.094	/
		Back Side Battery2	Level2	15	802.11n-HT20	100.0%	52/5260	22.50	22.43	0.162	0.021	1.02	0.165	/
U-NII-2C	Ant10	Back Side	Level2	15	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.074	0.000	1.23	0.091	/
		Front Side	Level2	15	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.090	0.095	1.23	0.111	/
		Front Side Battery2	Level2	15	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.087	0.045	1.23	0.108	/
	Ant8	Back Side	Level2	15	802.11n-HT20	100.0%	132/5660	19.50	18.61	0.152	0.041	1.23	0.187	57
		Front Side	Level2	15	802.11n-HT20	100.0%	132/5660	19.50	18.61	0.134	0.190	1.23	0.164	/
		Back Side Battery2	Level2	15	802.11n-HT20	100.0%	132/5660	19.50	18.61	0.142	0.034	1.23	0.174	/
	MIMO	Back Side	Level2	15	802.11n-HT20	100.0%	132/5660	22.50	22.06	0.083	0.052	1.11	0.092	/
		Front Side	Level2	15	802.11n-HT20	100.0%	132/5660	22.50	22.06	0.145	0.032	1.11	0.160	/
		Front Side Battery2	Level2	15	802.11n-HT20	100.0%	132/5660	22.50	22.06	0.124	0.023	1.11	0.137	/
U-NII-3	Ant10	Back Side	Level2	15	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.087	-0.029	1.29	0.112	/
		Front Side	Level2	15	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.073	0.160	1.29	0.094	/
		Back Side Battery2	Level2	15	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.080	0.152	1.29	0.102	/
	Ant8	Back Side	Level2	15	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.101	0.012	1.09	0.110	/
		Front Side	Level2	15	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.222	0.053	1.09	0.241	58
		Front Side Battery2	Level2	15	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.206	0.050	1.09	0.224	/
	MIMO	Back Side	Level2	15	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.061	0.100	1.07	0.065	/
		Front Side	Level2	15	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.143	0.100	1.07	0.152	/
		Front Side Battery2	Level2	15	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.134	0.020	1.07	0.143	/

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

Hotspot SAR

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
GSM 850	Ant1	Back Side	Level3	10	2TX Slots	-	-	190/836.6	31.50	31.08	0.531	-0.029	1.10	0.585	/
		Front Side	Level3	10	2TX Slots	-	-	190/836.6	31.50	31.08	0.521	-0.030	1.10	0.574	/
		Left Edge	Level3	10	2TX Slots	-	-	190/836.6	31.50	31.08	0.135	0.040	1.10	0.149	/

		Right Edge	Level3	10	2TX Slots	-	-	190/836.6	31.50	31.08	0.365	0.090	1.10	0.402	/
		Bottom Edge	Level3	10	2TX Slots	-	-	190/836.6	31.50	31.08	0.869	0.116	1.10	0.957	/
			Level3	10	2TX Slots	-	-	128/824.2	31.50	30.85	0.993	0.010	1.16	1.153	59
			Level3	10	2TX Slots	-	-	251/848.8	31.50	31.01	0.875	-0.010	1.12	0.980	/
		Bottom Edge Repeated	Level3	10	2TX Slots	-	-	128/824.2	31.50	30.85	0.975	0.030	1.16	1.132	/
		Bottom Edge SIM2	Level3	10	2TX Slots			128/824.2	31.50	30.85	0.870	0.081	1.16	1.010	/
		Bottom Edge Battery2	Level3	10	2TX Slots			128/824.2	31.50	30.85	0.980	-0.129	1.16	1.138	/
GSM 1900	Ant2	Back Side	Level3	10	2TX Slots	-	-	661/1880	29.00	27.67	0.210	0.035	1.36	0.285	/
		Front Side	Level3	10	2TX Slots	-	-	661/1880	29.00	27.67	0.160	0.028	1.36	0.217	/
		Left Edge	Level3	10	2TX Slots	-	-	661/1880	29.00	27.67	0.048	-0.160	1.36	0.065	/
		Right Edge	Level3	10	2TX Slots	-	-	661/1880	29.00	27.67	0.000	-0.024	1.36	0.000	/
		Bottom Edge	Level3	10	2TX Slots	-	-	661/1880	29.00	27.67	0.429	-0.030	1.36	0.583	60
		Bottom Edge SIM2	Level3	10	2TX Slots	-	-	661/1880	29.00	27.67	0.410	0.031	1.36	0.557	/
		Bottom Edge Battery2	Level3	10	2TX Slots	-	-	661/1880	29.00	27.67	0.420	0.014	1.36	0.570	/
WCDMA II	Ant2	Back Side	Level3	10	RMC	-	-	9400/1880	23.00	22.62	0.728	0.021	1.09	0.795	/
		Front Side	Level3	10	RMC	-	-	9400/1880	23.00	22.62	0.618	-0.033	1.09	0.675	/
		Left Edge	Level3	10	RMC	-	-	9400/1880	23.00	22.62	0.190	0.060	1.09	0.207	/
		Right Edge	Level3	10	RMC	-	-	9400/1880	23.00	22.62	0.102	0.042	1.09	0.111	/
		Bottom Edge	Level3	10	RMC	-	-	9400/1880	23.00	22.62	0.802	-0.080	1.09	0.875	/
		Bottom Edge	Level3	10	RMC	-	-	9262/1852.4	23.00	22.61	0.965	0.099	1.09	1.056	61
		Bottom Edge	Level3	10	RMC	-	-	9538/1907.6	23.00	22.53	0.892	0.013	1.11	0.994	/
		Bottom Edge Repeated	Level3	10	RMC	-	-	9262/1852.4	23.00	22.61	0.958	0.033	1.09	1.048	/
		Bottom Edge SIM2	Level3	10	RMC	-	-	9262/1852.4	23.00	22.61	0.954	0.110	1.09	1.044	/
		Bottom Edge Battery2	Level3	10	RMC	-	-	9262/1852.4	23.00	22.61	0.941	0.023	1.09	1.029	/
WCDMAIV	Ant2	Back Side	Level3	10	RMC	-	-	1413/1732.6	22.00	21.49	0.748	0.024	1.12	0.841	/
		Front Side	Level3	10	RMC	-	-	1413/1732.6	22.00	21.49	0.582	0.013	1.12	0.655	/
		Left Edge	Level3	10	RMC	-	-	1413/1732.6	22.00	21.49	0.196	-0.026	1.12	0.220	/
		Right Edge	Level3	10	RMC	-	-	1413/1732.6	22.00	21.49	0.102	-0.010	1.12	0.115	/
		Bottom Edge	Level3	10	RMC	-	-	1413/1732.6	22.00	21.49	0.816	-0.035	1.12	0.918	/
		Bottom Edge	Level3	10	RMC	-	-	1312/1712.4	22.00	21.25	0.992	0.052	1.19	1.179	62
		Bottom Edge	Level3	10	RMC	-	-	1513/1752.6	22.00	21.43	0.788	-0.080	1.14	0.899	/
		Bottom Edge Repeated	Level3	10	RMC	-	-	1312/1712.4	22.00	21.25	0.976	0.016	1.19	1.160	/
		Bottom Edge SIM2	Level3	10	RMC	-	-	1312/1712.4	22.00	21.25	0.913	0.102	1.19	1.085	/

		Bottom Edge Battery2	Level3	10	RMC	-	-	1312/1712.4	22.00	21.25	0.933	0.113	1.19	1.109	/
WCDMA V	Ant1	Back Side	Level3	10	RMC	-	-	4183/836.6	25.00	24.32	0.578	-0.190	1.17	0.676	63
		Front Side	Level3	10	RMC	-	-	4183/836.6	25.00	24.32	0.517	0.060	1.17	0.605	/
		Left Edge	Level3	10	RMC	-	-	4183/836.6	25.00	24.32	0.149	-0.020	1.17	0.174	/
		Right Edge	Level3	10	RMC	-	-	4183/836.6	25.00	24.32	0.389	0.060	1.17	0.455	/
		Bottom Edge	Level3	10	RMC	-	-	4183/836.6	25.00	24.32	0.533	0.090	1.17	0.623	/
		Back Side SIM2	Level3	10	RMC	-	-	4183/836.6	25.00	24.32	0.560	0.107	1.17	0.655	/
		Back Side Battery2	Level3	10	RMC	-	-	4183/836.6	25.00	24.32	0.550	-0.014	1.17	0.643	/
LTE 2	Ant2	Back Side	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	0.363	0.110	1.19	0.431	/
			Level3	10	QPSK	50%	50	18700/1860	24.00	23.19	0.341	0.027	1.21	0.411	/
		Front Side	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	0.285	0.050	1.19	0.339	/
			Level3	10	QPSK	50%	50	18700/1860	24.00	23.19	0.249	-0.015	1.21	0.300	/
		Left Edge	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	0.116	0.099	1.19	0.138	/
			Level3	10	QPSK	50%	50	18700/1860	24.00	23.19	0.148	0.028	1.21	0.178	/
		Right Edge	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	0.046	-0.019	1.19	0.055	/
			Level3	10	QPSK	50%	50	18700/1860	24.00	23.19	0.055	0.100	1.21	0.066	/
		Bottom Edge	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	1.000	0.091	1.19	1.189	64
			Level3	10	QPSK	50%	50	18700/1860	24.00	23.19	0.826	0.037	1.21	0.995	/
		Bottom Edge	Level3	10	QPSK	1	0	18700/1860	25.00	24.10	0.647	0.090	1.23	0.796	/
		Bottom Edge	Level3	10	QPSK	1	0	19100/1900	25.00	24.13	0.860	0.080	1.22	1.051	/
		Bottom Edge	Level3	10	QPSK	100%	0	18700/1860	24.00	23.14	0.755	0.071	1.22	0.920	/
		Bottom Edge SIM2	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	0.988	0.018	1.19	1.174	/
		Bottom Edge Battery2	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	0.876	0.058	1.19	1.041	/
		Bottom Edge	Level3	10	QPSK	50%	25	18900/1880	24.00	23.15	0.842	0.019	1.22	1.024	/
		Bottom Edge	Level3	10	QPSK	50%	0	19100/1900	24.00	23.16	0.815	-0.020	1.21	0.989	/
		Bottom Edge	Level3	10	QPSK	100%	0	18900/1880	24.00	23.02	0.729	0.040	1.25	0.914	/
		Bottom Edge	Level3	10	QPSK	100%	0	19100/1900	24.00	23.10	0.741	0.019	1.23	0.912	/
		Bottom Edge Repeated	Level3	10	QPSK	1	0	18900/1880	25.00	24.25	0.981	-0.031	1.19	1.166	/
LTE 4	Ant2	Back Side	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	0.454	-0.012	1.13	0.514	/
			Level3	10	QPSK	50%	0	20300/1745	22.00	21.42	0.357	0.046	1.14	0.408	/
		Front Side	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	0.394	-0.070	1.13	0.446	/
			Level3	10	QPSK	50%	0	20300/1745	22.00	21.42	0.326	-0.024	1.14	0.373	/
		Left Edge	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	0.063	0.035	1.13	0.071	/
			Level3	10	QPSK	50%	0	20300/1745	22.00	21.42	0.049	-0.028	1.14	0.056	/
		Right Edge	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	0.076	-0.021	1.13	0.086	/
			Level3	10	QPSK	50%	0	20300/1745	22.00	21.42	0.042	0.090	1.14	0.048	/
		Bottom Edge	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	1.050	0.048	1.13	1.189	65

			Level3	10	QPSK	50%	0	20300/1745	22.00	21.42	0.725	-0.034	1.14	0.829	/
		Bottom Edge	Level3	10	QPSK	1	0	20050/1720	23.00	22.08	0.677	0.015	1.24	0.837	/
		Bottom Edge	Level3	10	QPSK	1	0	20175/1732.5	23.00	22.40	0.938	-0.022	1.15	1.077	/
		Bottom Edge	Level3	10	QPSK	50%	0	20050/1720	22.00	21.23	0.915	0.146	1.19	1.092	/
		Bottom Edge	Level3	10	QPSK	50%	0	20175/1732.5	22.00	21.35	0.864	0.120	1.16	1.003	/
		Bottom Edge	Level3	10	QPSK	100%	0	20175/1732.5	22.00	21.32	0.675	0.038	1.17	0.789	/
		Bottom Edge Repeated	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	0.992	0.032	1.13	1.123	/
		Back Side SIM2	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	0.971	0.021	1.13	1.100	/
		Back Side Battery2	Level3	10	QPSK	1	0	20300/1745	23.00	22.46	0.975	0.031	1.13	1.104	/
LTE 5	Ant1	Back Side	Level3	10	QPSK	1	25	20525/836.5	25.00	24.76	0.336	-0.062	1.06	0.355	/
			Level3	10	QPSK	50%	25	20525/836.5	24.00	23.87	0.299	0.028	1.03	0.308	/
		Front Side	Level3	10	QPSK	1	25	20525/836.5	25.00	24.76	0.564	-0.046	1.06	0.596	66
			Level3	10	QPSK	50%	25	20525/836.5	24.00	23.87	0.120	-0.050	1.03	0.124	/
		Left Edge	Level3	10	QPSK	1	25	20525/836.5	25.00	24.76	0.000	-0.147	1.06	0.000	/
			Level3	10	QPSK	50%	25	20525/836.5	24.00	23.87	0.082	0.046	1.03	0.084	/
		Right Edge	Level3	10	QPSK	1	25	20525/836.5	25.00	24.76	0.244	-0.020	1.06	0.258	/
			Level3	10	QPSK	50%	25	20525/836.5	24.00	23.87	0.254	0.055	1.03	0.262	/
		Bottom Edge	Level3	10	QPSK	1	25	20525/836.5	25.00	24.76	0.390	-0.038	1.06	0.412	/
			Level3	10	QPSK	50%	25	20525/836.5	24.00	23.87	0.361	0.017	1.03	0.372	/
		Front Side SIM2	Level3	10	QPSK	1	25	20525/836.5	25.00	24.76	0.550	0.072	1.06	0.581	/
		Front Side Battery2	Level3	10	QPSK	1	25	20525/836.5	25.00	24.76	0.532	0.129	1.06	0.562	/
LTE 7	Ant2	Back Side	Level3	10	QPSK	1	0	21350/2560	21.00	20.56	0.660	0.030	1.11	0.730	/
			Level3	10	QPSK	50%	50	21100/2535	20.00	19.69	0.567	0.013	1.07	0.609	/
		Front Side	Level3	10	QPSK	1	0	21350/2560	21.00	20.56	0.502	0.044	1.11	0.556	/
			Level3	10	QPSK	50%	25	21100/2535	20.00	19.69	0.490	0.036	1.07	0.526	/
		Left Edge	Level3	10	QPSK	1	0	21350/2560	21.00	20.56	0.307	0.021	1.11	0.340	/
			Level3	10	QPSK	50%	25	21100/2535	20.00	19.69	0.289	0.055	1.07	0.310	/
		Right Edge	Level3	10	QPSK	1	0	21350/2560	21.00	20.56	0.282	0.041	1.11	0.312	/
			Level3	10	QPSK	50%	25	21100/2535	20.00	19.69	0.266	0.043	1.07	0.286	/
		Bottom Edge	Level3	10	QPSK	1	0	21350/2560	21.00	20.56	1.010	0.025	1.11	1.118	67
			Level3	10	QPSK	50%	25	21100/2535	20.00	19.69	0.802	0.110	1.07	0.861	/
		Bottom Edge	Level3	10	QPSK	1	0	20850/2510	21.00	20.53	0.854	0.112	1.11	0.952	/
		Bottom Edge	Level3	10	QPSK	1	99	21100/2535	21.00	20.47	0.913	0.105	1.13	1.032	/
		Bottom Edge	Level3	10	QPSK	100%	0	20850/2510	20.00	19.72	0.786	0.109	1.07	0.838	/
		Bottom Edge SIM2	Level3	10	QPSK	1	0	21350/2560	21.00	20.56	0.809	0.030	1.11	0.895	/
		Bottom Edge Battery2	Level3	10	QPSK	1	0	21350/2560	21.00	20.56	0.823	0.022	1.11	0.911	/

		Bottom Edge	Level3	10	QPSK	1	0	21350/2560 PCC	21.00	19.70	0.807	0.028	1.35	1.089	/
						1	99	21152/2540.2 SCC							
LTE 12	Ant1	Back Side	Level3	10	QPSK	1	0	23060/704	25.00	24.56	0.280	-0.034	1.11	0.310	/
			Level3	10	QPSK	50%	0	23060/704	24.00	23.52	0.180	0.029	1.12	0.201	/
		Front Side	Level3	10	QPSK	1	0	23060/704	25.00	24.56	0.338	-0.060	1.11	0.374	68
			Level3	10	QPSK	50%	0	23060/704	24.00	23.52	0.174	0.021	1.12	0.194	/
		Left Edge	Level3	10	QPSK	1	0	23060/704	25.00	24.56	0.047	0.028	1.11	0.052	/
			Level3	10	QPSK	50%	0	23060/704	24.00	23.52	0.048	-0.032	1.12	0.054	/
		Right Edge	Level3	10	QPSK	1	0	23060/704	25.00	24.56	0.252	0.054	1.11	0.279	/
			Level3	10	QPSK	50%	0	23060/704	24.00	23.52	0.188	0.080	1.12	0.210	/
		Bottom Edge	Level3	10	QPSK	1	0	23060/704	25.00	24.56	0.192	-0.099	1.11	0.212	/
			Level3	10	QPSK	50%	0	23060/704	24.00	23.52	0.214	0.021	1.12	0.239	/
		Front Side SIM2	Level3	10	QPSK	1	0	23060/704	25.00	24.56	0.325	0.033	1.11	0.360	/
		Front Side Battery2	Level3	10	QPSK	1	0	23060/704	25.00	24.56	0.330	0.144	1.11	0.365	/
LTE 17	Ant1	Back Side	Level3	10	QPSK	1	25	23790/710	25.00	24.57	0.383	0.010	1.10	0.423	69
			Level3	10	QPSK	50%	25	23790/710	24.00	23.52	0.280	0.021	1.12	0.313	/
		Front Side	Level3	10	QPSK	1	25	23790/710	25.00	24.57	0.178	0.075	1.10	0.197	/
			Level3	10	QPSK	50%	25	23790/710	24.00	23.52	0.129	-0.092	1.12	0.144	/
		Left Edge	Level3	10	QPSK	1	25	23790/710	25.00	24.57	0.063	0.040	1.10	0.070	/
			Level3	10	QPSK	50%	25	23790/710	24.00	23.52	0.108	0.033	1.12	0.121	/
		Right Edge	Level3	10	QPSK	1	25	23790/710	25.00	24.57	0.182	0.012	1.10	0.201	/
			Level3	10	QPSK	50%	25	23790/710	24.00	23.52	0.214	0.038	1.12	0.239	/
		Bottom Edge	Level3	10	QPSK	1	25	23790/710	25.00	24.57	0.167	-0.015	1.10	0.184	/
			Level3	10	QPSK	50%	25	23790/710	24.00	23.52	0.203	0.020	1.12	0.227	/
		Back Side SIM2	Level3	10	QPSK	1	25	23790/710	25.00	24.57	0.376	0.014	1.10	0.415	/
		Back Side Battery2	Level3	10	QPSK	1	25	23790/710	25.00	24.57	0.380	0.128	1.10	0.420	/
LTE 26	Ant1	Back Side	Level3	10	QPSK	1	38	26965/841.5	25.00	24.43	0.574	-0.140	1.14	0.655	70
			Level3	10	QPSK	50%	0	26965/841.5	24.00	23.61	0.293	0.013	1.09	0.321	/
		Front Side	Level3	10	QPSK	1	38	26965/841.5	25.00	24.43	0.124	-0.032	1.14	0.141	/
			Level3	10	QPSK	50%	0	26965/841.5	24.00	23.61	0.290	-0.040	1.09	0.317	/
		Left Edge	Level3	10	QPSK	1	38	26965/841.5	25.00	24.43	0.080	0.028	1.14	0.091	/
			Level3	10	QPSK	50%	0	26965/841.5	24.00	23.61	0.085	-0.049	1.09	0.093	/
		Right Edge	Level3	10	QPSK	1	38	26965/841.5	25.00	24.43	0.323	-0.030	1.14	0.368	/
			Level3	10	QPSK	50%	0	26965/841.5	24.00	23.61	0.251	0.028	1.09	0.275	/
		Bottom Edge	Level3	10	QPSK	1	38	26965/841.5	25.00	24.43	0.380	0.070	1.14	0.433	/
			Level3	10	QPSK	50%	0	26965/841.5	24.00	23.61	0.388	0.013	1.09	0.424	/
		Back Side	Level3	10	QPSK	1	38	26965/841.5	25.00	24.43	0.561	0.010	1.14	0.640	/

		SIM2													
		Back Side Battery2	Level3	10	QPSK	1	38	26965/841.5	25.00	24.43	0.570	0.027	1.14	0.650	/
LTE 38	Ant2	Back Side	Level3	10	QPSK	1	99	37850/2580	22.00	21.54	0.621	0.022	1.11	0.690	/
			Level3	10	QPSK	50%	50	38000/2595	21.00	20.62	0.537	0.041	1.09	0.586	/
		Front Side	Level3	10	QPSK	1	99	37850/2580	22.00	21.54	0.540	0.013	1.11	0.600	/
			Level3	10	QPSK	50%	50	38000/2595	21.00	20.62	0.461	0.033	1.09	0.503	/
		Left Edge	Level3	10	QPSK	1	99	37850/2580	22.00	21.54	0.316	0.023	1.11	0.351	/
			Level3	10	QPSK	50%	50	38000/2595	21.00	20.62	0.307	0.030	1.09	0.335	/
		Right Edge	Level3	10	QPSK	1	99	37850/2580	22.00	21.54	0.298	0.105	1.11	0.331	/
			Level3	10	QPSK	50%	50	38000/2595	21.00	20.62	0.250	0.110	1.09	0.273	/
		Bottom Edge	Level3	10	QPSK	1	99	37850/2580	22.00	21.54	0.863	0.113	1.11	0.959	/
			Level3	10	QPSK	50%	50	38000/2595	21.00	20.62	0.707	0.024	1.09	0.772	/
		Bottom Edge	Level3	10	QPSK	1	99	38000/2595	22.00	21.43	0.988	0.079	1.14	1.127	71
		Bottom Edge	Level3	10	QPSK	1	50	38150/2610	22.00	21.51	0.859	0.052	1.12	0.962	/
		Bottom Edge	Level3	10	QPSK	100%	0	38000/2595	21.00	20.61	0.725	0.032	1.09	0.793	/
		Bottom Edge Repeated	Level3	10	QPSK	1	99	38000/2595	22.00	21.43	0.976	0.018	1.14	1.113	/
		Bottom Edge SIM2	Level3	10	QPSK	1	99	38000/2595	22.00	21.43	0.897	0.023	1.14	1.023	/
		Bottom Edge Battery2	Level3	10	QPSK	1	99	38000/2595	22.00	21.43	0.969	0.033	1.14	1.105	/
LTE 41	Ant2	Back Side	Level3	10	QPSK	1	50	41490/2680	22.00	21.92	0.363	0.020	1.02	0.370	/
			Level3	10	QPSK	50%	50	39750/2506	21.00	20.98	0.325	0.112	1.00	0.327	/
		Front Side	Level3	10	QPSK	1	50	41490/2680	22.00	21.92	0.278	0.105	1.02	0.283	/
			Level3	10	QPSK	50%	50	39750/2506	21.00	20.98	0.243	0.041	1.00	0.244	/
		Left Edge	Level3	10	QPSK	1	50	41490/2680	22.00	21.92	0.054	0.067	1.02	0.055	/
			Level3	10	QPSK	50%	50	39750/2506	21.00	20.98	0.083	0.065	1.00	0.083	/
		Right Edge	Level3	10	QPSK	1	50	41490/2680	22.00	21.92	0.049	0.119	1.02	0.050	/
			Level3	10	QPSK	50%	50	39750/2506	21.00	20.98	0.055	-0.040	1.00	0.055	/
		Bottom Edge	Level3	10	QPSK	1	50	41490/2680	22.00	21.92	0.718	0.022	1.02	0.731	72
			Level3	10	QPSK	50%	50	39750/2506	21.00	20.98	0.533	0.064	1.00	0.535	/
		Bottom Edge SIM2	Level3	10	QPSK	1	50	41490/2680	22.00	21.92	0.691	0.044	1.02	0.704	/
		Bottom Edge Battery2	Level3	10	QPSK	1	50	41490/2680	22.00	21.92	0.698	0.023	1.02	0.711	/
		Bottom Edge	Level3	10	QPSK	1	99	39750/2506 PCC	22.00	21.32	0.528	0.010	1.17	0.617	/
						1	0	39948/2525.8 SCC							
NR n41	Ant5	Back Side	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.10	0.261	-0.040	1.23	0.321	/
			Level3	10	DFT-s-OFD	135	67	518598/2592.99	19.00	17.81	0.240	-0.020	1.32	0.316	/

					M QPSK										
		Front Side	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.10	0.150	-0.030	1.23	0.185	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	17.81	0.124	-0.070	1.32	0.163	/
		Left Edge	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.10	0.431	0.033	1.23	0.530	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	17.81	0.370	0.026	1.32	0.487	/
		Right Edge	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.10	0.011	0.028	1.23	0.013	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	17.81	0.007	-0.036	1.32	0.010	/
		Top Edge	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.10	0.067	0.150	1.23	0.082	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	17.81	0.052	0.054	1.32	0.068	/
	Ant2	Back Side	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.465	-0.040	1.13	0.524	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.411	-0.046	1.23	0.506	/
		Front Side	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.295	0.046	1.13	0.333	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.280	0.042	1.23	0.344	/
		Left Edge	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.166	0.032	1.13	0.187	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.148	0.190	1.23	0.182	/
		Right Edge	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.005	-0.099	1.13	0.006	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.006	0.020	1.23	0.007	/
		Bottom Edge	Level3	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	19.00	18.48	0.619	0.030	1.13	0.698	/
			Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.637	0.190	1.23	0.784	73
		Bottom Edge SIM2	Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.610	0.036	1.23	0.750	/
		Bottom Edge Battery2	Level3	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	19.00	18.10	0.630	-0.014	1.23	0.775	/

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

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	Plot No.
Wi-Fi2.4G	Ant9	Back Side	Level2	10	802.11b	100.0%	6/2437	20.00	19.15	0.040	0.105	1.22	0.049	/
		Front Side	Level2	10	802.11b	100.0%	6/2437	20.00	19.15	0.053	-0.088	1.22	0.064	/
		Left Edge	Level2	10	802.11b	100.0%	6/2437	20.00	19.15	0.000	0.030	1.22	0.000	/
		Right Edge	Level2	10	802.11b	100.0%	6/2437	20.00	19.15	0.424	0.071	1.22	0.516	/
		Top Edge	Level2	10	802.11b	100.0%	6/2437	20.00	19.15	0.000	0.000	1.22	0.000	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Right Edge Battery2	Level2	10	802.11b	100.0%	6/2437	20.00	19.15	0.403	0.023	1.22	0.490	/
	Ant8	Back Side	Level2	10	802.11b	100.0%	6/2437	20.00	18.95	0.050	0.059	1.27	0.064	/
		Front Side	Level2	10	802.11b	100.0%	6/2437	20.00	18.95	0.084	-0.015	1.27	0.106	/
		Left Edge	Level2	10	802.11b	100.0%	6/2437	20.00	18.95	0.000	0.000	1.27	0.000	/
		Right Edge	Level2	10	802.11b	100.0%	6/2437	20.00	18.95	0.043	0.106	1.27	0.055	/
		Top Edge	Level2	10	802.11b	100.0%	6/2437	20.00	18.95	0.067	0.071	1.27	0.085	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Front Side Battery2	Level2	10	802.11b	100.0%	6/2437	20.00	18.95	0.076	0.110	1.27	0.097	/
	MIMO	Back Side	Level2	10	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.177	0.066	1.42	0.251	/
		Front Side	Level2	10	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.309	0.062	1.42	0.438	/
		Left Edge	Level2	10	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.020	0.129	1.42	0.028	/
		Right Edge	Level2	10	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.437	-0.025	1.42	0.620	74
		Top Edge	Level2	10	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.169	0.100	1.42	0.240	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Right Edge Battery2	Level2	10	802.11n-HT20	100.0%	11/2462	21.00	19.48	0.403	0.102	1.42	0.572	/
U-NII-1	Ant10	Back Side	Level2	10	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.119	0.000	1.09	0.130	/
		Front Side	Level2	10	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.051	0.024	1.09	0.056	/
		Left Edge	Level2	10	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.042	0.031	1.09	0.046	/
		Right Edge	Level2	10	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.064	0.125	1.09	0.070	/
		Top Edge	Level2	10	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.056	0.035	1.09	0.061	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Back Side Battery2	Level2	10	802.11n-HT20	100.0%	48/5240	20.50	20.11	0.102	0.033	1.09	0.112	/
	Ant8	Back Side	Level2	10	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.320	0.135	1.13	0.362	75
		Front Side	Level2	10	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.150	0.121	1.13	0.170	/
		Left Edge	Level2	10	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.058	0.133	1.13	0.066	/
		Right Edge	Level2	10	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.171	0.104	1.13	0.194	/
		Top Edge	Level2	10	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.199	0.151	1.13	0.225	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Back Side Battery2	Level2	10	802.11n-HT20	100.0%	36/5180	19.50	18.96	0.311	0.033	1.13	0.352	/

	MIMO	Back Side	Level2	10	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.231	0.086	1.01	0.234	/
		Front Side	Level2	10	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.158	0.010	1.01	0.158	/
		Left Edge	Level2	10	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.047	-0.024	1.01	0.000	/
		Right Edge	Level2	10	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.164	0.030	1.01	0.000	/
		Top Edge	Level2	10	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.158	0.019	1.01	0.000	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Back Side Battery2	Level2	10	802.11n-HT20	100.0%	48/5240	22.50	22.45	0.214	0.085	1.01	0.216	/
U-NII-3	Ant10	Back Side	Level2	10	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.169	0.166	1.29	0.218	/
		Front Side	Level2	10	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.052	0.033	1.29	0.067	/
		Left Edge	Level2	10	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.056	0.045	1.29	0.072	/
		Right Edge	Level2	10	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.206	0.185	1.29	0.265	/
		Top Edge	Level2	10	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.142	0.106	1.29	0.183	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Right Edge	Level2	10	802.11n-HT20	100.0%	165/5825	20.50	19.40	0.157	0.113	1.29	0.202	/
	Ant8	Back Side	Level2	10	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.207	0.034	1.09	0.225	/
		Front Side	Level2	10	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.327	0.022	1.09	0.355	/
		Left Edge	Level2	10	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.078	0.046	1.09	0.085	/
		Right Edge	Level2	10	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.398	0.060	1.09	0.432	76
		Top Edge	Level2	10	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.191	0.022	1.09	0.208	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Right Edge	Level2	10	802.11n-HT20	100.0%	149/5745	19.50	19.14	0.385	0.033	1.09	0.418	/
	MIMO	Back Side	Level2	10	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.131	0.025	1.07	0.140	/
		Front Side	Level2	10	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.244	-0.051	1.07	0.260	/
		Left Edge	Level2	10	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.039	0.099	1.07	0.042	/
		Right Edge	Level2	10	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.206	0.011	1.07	0.219	/
		Top Edge	Level2	10	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.187	0.025	1.07	0.199	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Front Side	Level2	10	802.11n-HT20	100.0%	149/5745	22.50	22.23	0.216	0.065	1.07	0.230	/
Bluetooth	BT	Back Side	Level2	10	DH5	76.9%	39/2441	12.00	10.91	0.019	0.053	1.67	0.032	/
		Front Side	Level2	10	DH5	76.9%	39/2441	12.00	10.91	0.028	-0.038	1.67	0.047	/
		Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Right Edge	Level2	10	DH5	76.9%	39/2441	12.00	10.91	0.056	0.097	1.67	0.094	77
		Top Edge	Level2	10	DH5	76.9%	39/2441	12.00	10.91	0.004	-0.049	1.67	0.006	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Right Edge	Level2	10	DH5	76.9%	39/2441	12.00	10.91	0.047	0.118	1.67	0.079	/

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

Product-specific 10g SAR

Band	Antenna	Test Position	Power Reduction	RB	offset	Channel Frequency(MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Measured SAR1g	Scaling Factor	Report SAR1g	0mm SAR
WCDMA II	Ant2	Back Side	RMC	-	-	9400/1880	25.00	23.00	0.422	0.795	1.58	1.259	Yes

		Front Side	RMC	-	-	9400/1880	25.00	23.00	0.364	0.675	1.58	1.069	No
		Left Edge	RMC	-	-	9400/1880	25.00	23.00	0.108	0.207	1.58	0.329	No
		Right Edge	RMC	-	-	9400/1880	25.00	23.00	0.062	0.111	1.58	0.176	No
		Bottom Edge	RMC	-	-	9400/1880	25.00	23.00	0.442	0.875	1.58	1.387	Yes
		Bottom Edge	RMC	-	-	9262/1852.4	25.00	23.00	0.514	1.056	1.58	1.673	Yes
		Bottom Edge	RMC	-	-	9538/1907.6	25.00	23.00	0.472	0.994	1.58	1.575	Yes
WCDMA IV	Ant2	Back Side	RMC	-	-	1413/1732.6	25.00	22.00	0.444	0.841	2.00	1.678	Yes
		Front Side	RMC	-	-	1413/1732.6	25.00	22.00	0.360	0.655	2.00	1.306	Yes
		Left Edge	RMC	-	-	1413/1732.6	25.00	22.00	0.110	0.220	2.00	0.440	No
		Right Edge	RMC	-	-	1413/1732.6	25.00	22.00	0.062	0.115	2.00	0.229	No
		Bottom Edge	RMC	-	-	1413/1732.6	25.00	22.00	0.452	0.918	2.00	1.831	Yes
		Bottom Edge	RMC	-	-	1312/1712.4	25.00	22.00	0.534	1.179	2.00	2.352	Yes
		Bottom Edge	RMC	-	-	1513/1752.6	25.00	22.00	0.448	0.899	2.00	1.793	Yes
LTE 4	Ant2	Back Side	QPSK	1	0	20300/1745	25.00	23.00	0.272	0.514	1.58	0.815	No
			QPSK	50%	0	20300/1745	24.00	22.00	0.216	0.408	1.58	0.647	No
		Front Side	QPSK	1	0	20300/1745	25.00	23.00	0.243	0.446	1.58	0.707	No
			QPSK	50%	0	20300/1745	24.00	22.00	0.200	0.373	1.58	0.590	No
		Left Edge	QPSK	1	0	20300/1745	25.00	23.00	0.038	0.071	1.58	0.113	No
			QPSK	50%	0	20300/1745	24.00	22.00	0.022	0.056	1.58	0.089	No
		Right Edge	QPSK	1	0	20300/1745	25.00	23.00	0.046	0.086	1.58	0.136	No
			QPSK	50%	0	20300/1745	24.00	22.00	0.024	0.048	1.58	0.076	No
		Bottom Edge	QPSK	1	0	20300/1745	25.00	23.00	0.575	1.189	1.58	1.884	Yes
			QPSK	50%	0	20300/1745	24.00	22.00	0.399	0.829	1.58	1.313	Yes
		Bottom Edge	QPSK	1	0	20050/1720	25.00	23.00	0.363	0.837	1.58	1.326	Yes
		Bottom Edge	QPSK	1	0	20175/1732.5	25.00	23.00	0.518	1.077	1.58	1.707	Yes
		Bottom Edge	QPSK	50%	0	20050/1720	24.00	22.00	0.487	1.092	1.58	1.731	Yes
		Bottom Edge	QPSK	50%	0	20175/1732.5	24.00	22.00	0.452	1.003	1.58	1.590	Yes
		Bottom Edge	QPSK	100%	0	20175/1732.5	24.00	22.00	0.371	0.789	1.58	1.251	Yes
LTE 7	Ant2	Back Side	QPSK	1	0	21350/2560	25.00	21.00	0.330	0.730	2.51	1.835	Yes
			QPSK	50%	50	21100/2535	24.00	20.00	0.285	0.609	2.51	1.530	Yes
		Front Side	QPSK	1	0	21350/2560	25.00	21.00	0.258	0.556	2.51	1.395	Yes
			QPSK	50%	25	21100/2535	24.00	20.00	0.249	0.526	2.51	1.322	Yes
		Left Edge	QPSK	1	0	21350/2560	25.00	21.00	0.158	0.340	2.51	0.853	No
			QPSK	50%	25	21100/2535	24.00	20.00	0.148	0.310	2.51	0.780	No
		Right Edge	QPSK	1	0	21350/2560	25.00	21.00	0.147	0.312	2.51	0.784	No
			QPSK	50%	25	21100/2535	24.00	20.00	0.139	0.286	2.51	0.718	No
		Bottom Edge	QPSK	1	0	21350/2560	25.00	21.00	0.495	1.118	2.51	2.808	Yes
			QPSK	50%	25	21100/2535	24.00	20.00	0.396	0.861	2.51	2.164	Yes
		Bottom Edge	QPSK	1	0	20850/2510	25.00	21.00	0.418	0.952	2.51	2.390	Yes
		Bottom Edge	QPSK	1	99	21100/2535	25.00	21.00	0.437	0.981	2.51	2.463	Yes
		Bottom Edge	QPSK	100%	0	20850/2510	24.00	20.00	0.396	0.838	2.51	2.106	Yes
LTE 38	Ant2	Back Side	QPSK	1	99	37850/2580	25.00	22.00	0.287	0.690	2.00	1.377	Yes
			QPSK	50%	50	38000/2595	24.00	21.00	0.244	0.586	2.00	1.169	No

		Front Side	QPSK	1	99	37850/2580	25.00	22.00	0.246	0.600	2.00	1.198	No
			QPSK	50%	50	38000/2595	24.00	21.00	0.207	0.503	2.00	1.004	No
		Left Edge	QPSK	1	99	37850/2580	25.00	22.00	0.136	0.351	2.00	0.701	No
			QPSK	50%	50	38000/2595	24.00	21.00	0.131	0.335	2.00	0.669	No
		Right Edge	QPSK	1	99	37850/2580	25.00	22.00	0.128	0.331	2.00	0.661	No
			QPSK	50%	50	38000/2595	24.00	21.00	0.100	0.273	2.00	0.544	No
		Bottom Edge	QPSK	1	99	37850/2580	25.00	22.00	0.392	0.959	2.00	1.914	Yes
			QPSK	50%	50	38000/2595	24.00	21.00	0.323	0.772	2.00	1.540	Yes
		Bottom Edge	QPSK	1	99	38000/2595	25.00	22.00	0.465	1.127	2.00	2.248	Yes
		Bottom Edge	QPSK	1	50	38150/2610	25.00	22.00	0.395	0.962	2.00	1.919	Yes
		Bottom Edge	QPSK	100%	0	38000/2595	24.00	21.00	0.403	0.957	2.00	1.910	Yes
LTE 41	Ant2	Back Side	QPSK	1	50	41490/2680	25.00	22.00	0.175	0.370	2.00	0.738	No
			QPSK	50%	50	39750/2506	24.00	21.00	0.171	0.327	2.00	0.651	No
		Front Side	QPSK	1	50	41490/2680	25.00	22.00	0.135	0.283	2.00	0.565	No
			QPSK	50%	50	39750/2506	24.00	21.00	0.127	0.244	2.00	0.487	No
		Left Edge	QPSK	1	50	41490/2680	25.00	22.00	0.029	0.055	2.00	0.110	No
			QPSK	50%	50	39750/2506	24.00	21.00	0.043	0.083	2.00	0.166	No
		Right Edge	QPSK	1	50	41490/2680	25.00	22.00	0.028	0.050	2.00	0.100	No
			QPSK	50%	50	39750/2506	24.00	21.00	0.032	0.055	2.00	0.110	No
		Bottom Edge	QPSK	1	50	41490/2680	25.00	22.00	0.337	0.731	2.00	1.459	Yes
			QPSK	50%	50	39750/2506	24.00	21.00	0.257	0.535	2.00	1.068	No
		Bottom Edge	QPSK	1	50	39750/2506	25.00	22.00	0.332	0.692	2.00	1.380	Yes
		Bottom Edge	QPSK	1	0	41055/2636.5	25.00	22.00	0.330	0.708	2.00	1.413	Yes
NR n41	Ant5	Back Side	DFT-s-OFDM QPSK	1	1	518598/2592.99	21.00	19.00	0.129	0.321	1.58	0.509	No
			DFT-s-OFDM QPSK	135	67	518598/2592.99	21.00	19.00	0.115	0.316	1.58	0.501	No
		Front Side	DFT-s-OFDM QPSK	1	1	518598/2592.99	21.00	19.00	0.073	0.185	1.58	0.292	No
			DFT-s-OFDM QPSK	135	67	518598/2592.99	21.00	19.00	0.060	0.163	1.58	0.259	No
		Left Edge	DFT-s-OFDM QPSK	1	1	518598/2592.99	21.00	19.00	0.195	0.530	1.58	0.840	No
			DFT-s-OFDM QPSK	135	67	518598/2592.99	21.00	19.00	0.167	0.487	1.58	0.772	No
		Right Edge	DFT-s-OFDM QPSK	1	1	518598/2592.99	21.00	19.00	0.004	0.013	1.58	0.021	No
			DFT-s-OFDM QPSK	135	67	518598/2592.99	21.00	19.00	0.003	0.010	1.58	0.016	No
		Top Edge	DFT-s-OFDM QPSK	1	1	518598/2592.99	21.00	19.00	0.030	0.082	1.58	0.130	No
			DFT-s-OFDM QPSK	135	67	518598/2592.99	21.00	19.00	0.023	0.068	1.58	0.108	No

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	Plot No.
WCDMA II	Ant2	Back Side	Level4-D2	0	RMC	-	-	9400/1880	23.00	22.62	2.890	0.085	1.09	3.154	/
		Bottom Edge	Level4-D2	0	RMC	-	-	9400/1880	23.00	22.62	3.010	0.039	1.09	3.285	78
		Bottom Edge	Level4-D2	0	RMC	-	-	9262/1852.4	23.00	22.61	2.820	0.014	1.09	3.085	/
		Bottom Edge	Level4-D2	0	RMC	-	-	9538/1907.6	23.00	22.53	2.660	0.037	1.11	2.964	/
		Bottom Edge SIM2	Level4-D2	0	RMC	-	-	9400/1880	23.00	22.62	2.680	-0.090	1.09	2.925	/
		Bottom Edge Battery2	Level4-D2	0	RMC	-	-	9400/1880	23.00	22.62	2.820	0.035	1.09	3.078	/
WCDMA IV	Ant2	Back Side	Level4-D2	0	RMC	-	-	1413/1732.6	22.00	21.49	1.920	0.125	1.12	2.159	/
		Front Side	Level4-D2	0	RMC	-	-	1413/1732.6	22.00	21.49	1.710	0.085	1.12	1.923	/
		Bottom Edge	Level4-D2	0	RMC	-	-	1413/1732.6	22.00	21.49	2.380	0.036	1.12	2.677	/
		Bottom Edge	Level4-D2	0	RMC	-	-	1312/1712.4	22.00	21.25	2.440	0.100	1.19	2.900	/
		Bottom Edge	Level4-D2	0	RMC	-	-	1513/1752.6	22.00	21.43	2.450	0.016	1.14	2.794	79
		Bottom Edge SIM2	Level4-D2	0	RMC	-	-	1312/1712.4	22.00	21.25	2.340	-0.020	1.19	2.781	/
		Bottom Edge Battery2	Level4-D2	0	RMC	-	-	1312/1712.4	22.00	21.25	2.180	0.016	1.19	2.591	/
LTE B4	Ant2	Bottom Edge	Level4-D2	0	QPSK	1	0	20300/1745	23.00	22.46	2.780	0.110	1.13	3.148	/
			Level4-D2	0	QPSK	50%	0	20300/1745	22.00	21.42	2.250	0.034	1.14	2.571	/
		Bottom Edge	Level4-D2	0	QPSK	1	0	20050/1720	23.00	22.08	2.840	0.030	1.24	3.510	80
		Bottom Edge	Level4-D2	0	QPSK	1	0	20175/1732.5	23.00	22.40	2.830	0.034	1.15	3.249	/
		Bottom Edge	Level4-D2	0	QPSK	100%	0	20175/1732.5	22.00	21.32	2.250	0.036	1.17	2.631	/
		Bottom Edge SIM2	Level4-D2	0	QPSK	1	0	20050/1720	23.00	22.08	2.590	-0.032	1.24	3.201	/
		Bottom Edge Battery2	Level4-D2	0	QPSK	1	0	20050/1720	23.00	22.08	2.570	-0.010	1.24	3.176	/
LTE 7	Ant2	Back Side	Level4-D2	0	QPSK	1	0	21350/2560	21.00	20.56	1.750	-0.042	1.11	1.937	/
			Level4-D2	0	QPSK	50%	50	21100/2535	20.00	19.69	1.510	0.033	1.07	1.622	/
		Front Side	Level4-D2	0	QPSK	1	0	21350/2560	21.00	20.56	1.390	0.028	1.11	1.538	/
			Level4-D2	0	QPSK	50%	25	21100/2535	20.00	19.69	1.110	-0.042	1.07	1.192	/
		Bottom Edge	Level4-D2	0	QPSK	1	0	21350/2560	21.00	20.56	1.890	0.052	1.11	2.092	81
			Level4-D2	0	QPSK	50%	25	21100/2535	20.00	19.69	1.390	-0.033	1.07	1.493	/
		Bottom Edge	Level4-D2	0	QPSK	1	0	20850/2510	21.00	20.53	1.730	-0.040	1.11	1.928	/
		Bottom Edge	Level4-D2	0	QPSK	1	99	21100/2535	20.00	20.47	1.790	0.080	0.90	1.606	/
		Bottom Edge	Level4-D2	0	QPSK	100%	0	20850/2510	20.00	19.72	1.340	-0.010	1.07	1.429	/
		Bottom Edge	Level4-D2	0	QPSK	1	0	21350/2560 PCC	21.00	19.70	1.460	-0.180	1.35	1.969	/
						1	99	21152/2540.2 SCC							
		Bottom Edge SIM2	Level4-D2	0	QPSK	1	0	21350/2560	21.00	20.56	1.740	0.024	1.11	1.926	/

		Bottom Edge Battery2	Level4-D2	0	QPSK	1	0	21350/2560	21.00	20.56	1.810	-0.013	1.11	2.003	/
LTE 38	Ant2	Back Side	Level4-D2	0	QPSK	1	99	37850/2580	22.00	21.54	1.540	0.040	1.11	1.712	82
		Bottom Edge	Level4-D2	0	QPSK	1	99	37850/2580	22.00	21.54	1.250	-0.143	1.11	1.390	/
			Level4-D2	0	QPSK	50%	50	38000/2595	21.00	20.62	1.020	0.080	1.09	1.113	/
		Bottom Edge	Level4-D2	0	QPSK	1	99	38000/2595	22.00	21.43	1.220	0.021	1.14	1.391	/
		Bottom Edge	Level4-D2	0	QPSK	1	50	38150/2610	22.00	21.51	1.250	0.089	1.12	1.399	/
		Bottom Edge	Level4-D2	0	QPSK	100%	0	38000/2595	21.00	20.61	0.955	0.150	1.09	1.045	/
		Bottom Edge SIM2	Level4-D2	0	QPSK	1	99	37850/2580	22.00	21.54	1.440	0.018	1.11	1.601	/
		Bottom Edge Battery2	Level4-D2	0	QPSK	1	99	37850/2580	22.00	21.54	1.280	-0.070	1.11	1.423	/
LTE 41	Ant2	Bottom Edge	Level4-D2	0	QPSK	1	50	41490/2680	22.00	21.92	1.260	0.070	1.02	1.283	/
		Bottom Edge	Level4-D2	0	QPSK	1	50	39750/2506	22.00	21.90	1.330	0.100	1.02	1.361	/
		Bottom Edge	Level4-D2	0	QPSK	1	99	40620/2593	22.00	21.84	1.510	0.049	1.04	1.567	83
		Bottom Edge	Level4-D2	0	QPSK	1	99	39750/2506 PCC	22.00	21.32	1.120	0.022	1.17	1.310	/
						1	0	39948/2525.8 SCC							
		Bottom Edge SIM2	Level4-D2	0	QPSK	1	99	40620/2593	22.00	21.84	1.380	-0.050	1.04	1.432	/
		Bottom Edge Battery2	Level4-D2	0	QPSK	1	99	40620/2593	22.00	21.84	1.190	0.026	1.04	1.235	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.															

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	Duty Cycle	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	Plot No.
U-NII-2A	Ant10	Back Side	Level2	0	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.125	0.031	1.17	0.146	/
		Front Side	Level2	0	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.005	0.028	1.17	0.006	/
		Left Edge	Level2	0	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.003	-0.017	1.17	0.004	/
		Right Edge	Level2	0	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.002	0.000	1.17	0.002	/
		Top Edge	Level2	0	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.104	0.030	1.17	0.122	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Back Side Battery2	Level2	0	802.11n-HT20	100.0%	52/5260	21.00	20.32	0.113	0.190	1.17	0.132	/
U-NII-2A	Ant8	Back Side	Level2	0	802.11n-HT20	100.0%	64/5320	19.50	18.38	0.426	-0.021	1.29	0.551	/
		Front Side	Level2	0	802.11n-HT20	100.0%	64/5320	19.50	18.38	0.665	-0.151	1.29	0.861	/
		Left Edge	Level2	0	802.11n-HT20	100.0%	64/5320	19.50	18.38	0.126	0.034	1.29	0.163	/
		Right Edge	Level2	0	802.11n-HT20	100.0%	64/5320	19.50	18.38	0.313	0.028	1.29	0.405	/
		Top Edge	Level2	0	802.11n-HT20	100.0%	64/5320	19.50	18.38	1.310	0.046	1.29	1.695	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Top Edge Battery2	Level2	0	802.11n-HT20	100.0%	64/5320	19.50	18.38	1.240	0.028	1.29	1.605	/
U-NII-2A	MIMO	Back Side	Level2	0	802.11n-HT20	100.0%	52/5260	22.50	22.43	0.450	-0.020	1.02	0.457	/
		Front Side	Level2	0	802.11n-HT20	100.0%	52/5260	22.50	22.43	0.631	0.036	1.02	0.641	/
		Left Edge	Level2	0	802.11n-HT20	100.0%	52/5260	22.50	22.43	0.092	0.017	1.02	0.093	/
		Right Edge	Level2	0	802.11n-HT20	100.0%	52/5260	22.50	22.43	0.572	0.144	1.02	0.581	/
		Top Edge	Level2	0	802.11n-HT20	100.0%	52/5260	22.50	22.43	1.390	0.109	1.02	1.413	84
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Top Edge Battery2	Level2	0	802.11n-HT20	100.0%	52/5260	22.50	22.43	1.300	0.121	1.02	1.321	/
U-NII-2C	Ant10	Back Side	Level2	0	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.189	0.099	1.23	0.233	/
		Front Side	Level2	0	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.073	-0.039	1.23	0.090	/
		Left Edge	Level2	0	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.027	0.047	1.23	0.033	/
		Right Edge	Level2	0	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.101	0.021	1.23	0.125	/
		Top Edge	Level2	0	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.171	-0.002	1.23	0.211	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Back Side Battery2	Level2	0	802.11n-HT20	100.0%	116/5580	20.50	19.59	0.177	0.026	1.23	0.218	/
U-NII-2C	Ant8	Back Side	Level2	0	802.11n-HT20	100.0%	132/5660	19.50	18.61	0.355	0.030	1.23	0.436	/
		Front Side	Level2	0	802.11n-HT20	100.0%	132/5660	19.50	18.61	0.680	0.019	1.23	0.835	/
		Left Edge	Level2	0	802.11n-HT20	100.0%	132/5660	19.50	18.61	0.058	-0.004	1.23	0.071	/
		Right Edge	Level2	0	802.11n-HT20	100.0%	132/5660	19.50	18.61	0.549	0.021	1.23	0.674	/
		Top Edge	Level2	0	802.11n-HT20	100.0%	132/5660	19.50	18.61	1.430	0.078	1.23	1.755	85
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Top Edge	Level2	0	802.11n-HT20	100.0%	132/5660	19.50	18.61	1.370	0.036	1.23	1.682	/

		Battery2												
U-NII-2C	MIMO	Back Side	Level2	0	802.11n-HT20	100.0%	132/5660	22.50	22.06	0.376	0.028	1.11	0.416	/
		Front Side	Level2	0	802.11n-HT20	100.0%	132/5660	22.50	22.06	0.808	0.112	1.11	0.894	/
		Left Edge	Level2	0	802.11n-HT20	100.0%	132/5660	22.50	22.06	0.062	0.101	1.11	0.069	/
		Right Edge	Level2	0	802.11n-HT20	100.0%	132/5660	22.50	22.06	0.790	0.081	1.11	0.874	/
		Top Edge	Level2	0	802.11n-HT20	100.0%	132/5660	22.50	22.06	1.320	0.217	1.11	1.461	/
		Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Top Edge Battery2	Level2	0	802.11n-HT20	100.0%	132/5660	22.50	22.06	1.290	-0.189	1.11	1.427	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.														

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

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	Plot No.
WCDMA II	Ant2	Back Side	Level4-D1	6	RMC	-	-	9400/1880	25.00	24.44	0.545	0.040	1.14	0.620	/
		Front Side	Level4-D1	6	RMC	-	-	9400/1880	25.00	24.44	0.423	0.059	1.14	0.481	/
		Bottom Edge	Level4-D1	14	RMC	-	-	9400/1880	25.00	24.44	0.684	0.060	1.14	0.778	/
WCDMA IV	Ant2	Back Side	Level4-D1	6	RMC	-	-	1413/1732.6	25.00	24.77	0.745	-0.036	1.05	0.786	/
		Front Side	Level4-D1	6	RMC	-	-	1413/1732.6	25.00	24.77	0.554	0.044	1.05	0.584	/
		Bottom Edge	Level4-D1	14	RMC	-	-	1413/1732.6	25.00	24.77	0.826	0.050	1.05	0.871	/
LTE 4	Ant2	Back Side	Level4-D1	6	QPSK	1	0	20175/1732.5	25.00	24.41	0.636	-0.050	1.15	0.729	/
			Level4-D1	6	QPSK	50%	0	20300/1745	24.00	23.45	0.487	-0.098	1.14	0.553	/
		Front Side	Level4-D1	6	QPSK	1	0	20175/1732.5	25.00	24.41	0.464	0.070	1.15	0.532	/
			Level4-D1	6	QPSK	50%	0	20300/1745	24.00	23.45	0.357	0.100	1.14	0.405	/
		Bottom Edge	Level4-D1	14	QPSK	1	0	20175/1732.5	25.00	24.41	0.666	0.080	1.15	0.763	/
			Level4-D1	14	QPSK	50%	0	20300/1745	24.00	23.45	0.323	0.021	1.14	0.367	/
LTE 7	Ant2	Back Side	Level4-D1	6	QPSK	1	0	20850/2510	25.00	24.35	0.827	0.090	1.16	0.961	/
			Level4-D1	6	QPSK	50%	50	20850/2510	24.00	23.35	0.678	-0.060	1.16	0.787	/
		Front Side	Level4-D1	6	QPSK	1	0	20850/2510	25.00	24.35	0.675	-0.081	1.16	0.784	/
			Level4-D1	6	QPSK	50%	50	20850/2510	24.00	23.35	0.515	-0.034	1.16	0.598	/
		Bottom Edge	Level4-D1	14	QPSK	1	0	20850/2510	25.00	24.35	0.281	0.045	1.16	0.326	/
			Level4-D1	14	QPSK	50%	50	20850/2510	24.00	23.35	0.142	0.032	1.16	0.165	/
LTE 38	Ant2	Back Side	Level4-D1	6	QPSK	1	99	37850/2580	25.00	24.19	0.508	-0.065	1.21	0.612	/
			Level4-D1	6	QPSK	50%	25	37850/2580	24.00	23.34	0.424	0.027	1.16	0.494	/
		Front Side	Level4-D1	6	QPSK	1	99	37850/2580	25.00	24.19	0.387	-0.020	1.21	0.466	/
			Level4-D1	6	QPSK	50%	25	37850/2580	24.00	23.34	0.306	-0.110	1.16	0.356	/
		Bottom Edge	Level4-D1	14	QPSK	1	99	37850/2580	25.00	24.19	0.316	-0.120	1.21	0.381	/
			Level4-D1	14	QPSK	50%	25	37850/2580	24.00	23.34	0.212	0.060	1.16	0.247	/
LTE 41	Ant2	Back Side	Level4-D1	6	QPSK	1	0	41490/2680	25.00	24.59	0.540	0.100	1.10	0.593	/

			Level4-D1	6	QPSK	50%	50	40185/2549.5	24.00	23.68	0.446	0.020	1.08	0.480	/
		Front Side	Level4-D1	6	QPSK	1	0	41490/2680	25.00	24.59	0.423	0.150	1.10	0.465	/
			Level4-D1	6	QPSK	50%	50	40185/2549.5	24.00	23.68	0.319	0.040	1.08	0.343	/
		Bottom Edge	Level4-D1	14	QPSK	1	0	41490/2680	25.00	24.59	0.293	-0.031	1.10	0.322	/
			Level4-D1	14	QPSK	50%	50	40185/2549.5	24.00	23.68	0.164	-0.090	1.08	0.177	/

Band	Antenna	Test Position	Power Reduction	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
LTE 2	Ant2	Left cheek	10dB	QPSK	1	0	18900/1880	10.00	25.00	0.113	0.03	0.004
			10dB	QPSK	50%	50	18700/1860	10.00	24.00	0.097	0.04	0.004
		Left Tilt	10dB	QPSK	1	0	18900/1880	10.00	25.00	0.051	0.03	0.002
			10dB	QPSK	50%	50	18700/1860	10.00	24.00	0.031	0.04	0.001
		Right cheek	10dB	QPSK	1	0	18900/1880	10.00	25.00	0.058	0.03	0.002
			10dB	QPSK	50%	50	18700/1860	10.00	24.00	0.060	0.04	0.002
		Right Tilt	10dB	QPSK	1	0	18900/1880	10.00	25.00	0.043	0.03	0.001
			10dB	QPSK	50%	50	18700/1860	10.00	24.00	0.029	0.04	0.001
		Left cheek SIM2	10dB	QPSK	1	0	18900/1880	10.00	25.00	0.099	0.03	0.003
		Left cheek Battery2	10dB	QPSK	1	0	18900/1880	10.00	25.00	0.103	0.03	0.003
LTE 7	Ant2	Left cheek	10dB	QPSK	1	0	20850/2510	10.00	25.00	0.163	0.03	0.005
			10dB	QPSK	50%	50	20850/2510	10.00	24.00	0.137	0.04	0.005
		Left Tilt	10dB	QPSK	1	0	20850/2510	10.00	25.00	0.029	0.03	0.001
			10dB	QPSK	50%	50	20850/2510	10.00	24.00	0.023	0.04	0.001
		Right cheek	10dB	QPSK	1	0	20850/2510	10.00	25.00	0.108	0.03	0.003
			10dB	QPSK	50%	50	20850/2510	10.00	24.00	0.080	0.04	0.003
		Right Tilt	10dB	QPSK	1	0	20850/2510	10.00	25.00	0.062	0.03	0.002
			10dB	QPSK	50%	50	20850/2510	10.00	24.00	0.042	0.04	0.002
		Left cheek SIM2	10dB	QPSK	1	0	20850/2510	10.00	25.00	0.139	0.03	0.004
		Left cheek Battery2	10dB	QPSK	1	0	20850/2510	10.00	25.00	0.156	0.03	0.005
NR n41	Ant 5	Left cheek	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	18.00	0.301	0.16	0.048
		Left cheek	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	18.00	0.285	0.16	0.045
		Left Tilt	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	18.00	0.079	0.16	0.012
		Left Tilt	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	18.00	0.075	0.16	0.012
		Right cheek	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	18.00	0.770	0.16	0.122
		Right cheek	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	18.00	0.669	0.16	0.106
		Right Tilt	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	18.00	0.233	0.16	0.037

		Right Tilt	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	18.00	0.215	0.16	0.034
	Ant 2	Left cheek	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.314	0.13	0.040
		Left cheek	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.336	0.13	0.042
		Left Tilt	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.073	0.13	0.009
		Left Tilt	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.076	0.13	0.010
		Right cheek	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.151	0.13	0.019
		Right cheek	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.180	0.13	0.023
		Right Tilt	10dB	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.090	0.13	0.011
		Right Tilt	10dB	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.108	0.13	0.014

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
LTE 2	Ant2	Back Side	10dB	15	QPSK	1	0	18900/1880	10.00	25.00	0.376	0.03	0.012
			10dB	15	QPSK	50%	50	18700/1860	10.00	24.00	0.186	0.04	0.007
		Front Side	10dB	15	QPSK	1	0	18900/1880	10.00	25.00	0.160	0.03	0.005
			10dB	15	QPSK	50%	50	18700/1860	10.00	24.00	0.169	0.04	0.007
		Back Side SIM2	10dB	15	QPSK	1	0	18900/1880	10.00	25.00	0.374	0.03	0.012
		Back Side Battery2	10dB	15	QPSK	1	0	18900/1880	10.00	25.00	0.358	0.03	0.011
LTE 7	Ant2	Back Side	10dB	15	QPSK	1	0	20850/2510	10.00	25.00	0.642	0.03	0.020
			10dB	15	QPSK	50%	50	20850/2510	10.00	24.00	0.524	0.04	0.021
		Front Side	10dB	15	QPSK	1	0	20850/2510	10.00	25.00	0.417	0.03	0.013
			10dB	15	QPSK	50%	50	20850/2510	10.00	24.00	0.347	0.04	0.014
		Back Side SIM2	10dB	15	QPSK	1	0	20850/2510	10.00	25.00	0.616	0.03	0.019
		Back Side Battery2	10dB	15	QPSK	1	0	20850/2510	10.00	25.00	0.639	0.03	0.020
NR n41	Ant5	Back Side	10dB	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	21.00	0.200	0.08	0.016
			10dB	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	21.00	0.068	0.08	0.005
		Front Side	10dB	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	21.00	0.190	0.08	0.015
			10dB	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	21.00	0.072	0.08	0.006
	Ant2	Back Side	10dB	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.170	0.13	0.021
			10dB	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.185	0.13	0.023
		Front Side	10dB	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.220	0.13	0.028
			10dB	15	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.209	0.13	0.026
		Back Side SIM2	10dB	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.150	0.13	0.019

		Back Side Battery2	10dB	15	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.163	0.13	0.021

Band	Antenna	Test Position	Power Reduction	Dist. (mm)	Mode	RB	offset	Ch./Freq. (MHz)	Tune-up (dBm)	Measured power (dBm)	Measured SAR1g	Scaling Factor	Report SAR1g
LTE 2	Ant2	Back Side	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	0.431	0.03	0.014
			10dB	10	QPSK	50%	50	18700/1860	10.00	24.00	0.411	0.04	0.016
		Front Side	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	0.339	0.03	0.011
			10dB	10	QPSK	50%	50	18700/1860	10.00	24.00	0.300	0.04	0.012
		Left Edge	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	0.138	0.03	0.004
			10dB	10	QPSK	50%	50	18700/1860	10.00	24.00	0.178	0.04	0.007
		Right Edge	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	0.055	0.03	0.002
			10dB	10	QPSK	50%	50	18700/1860	10.00	24.00	0.066	0.04	0.003
		Bottom Edge	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	1.189	0.03	0.038
			10dB	10	QPSK	50%	50	18700/1860	10.00	24.00	0.995	0.04	0.040
		Bottom Edge	10dB	10	QPSK	1	0	18700/1860	10.00	25.00	0.796	0.03	0.025
		Bottom Edge	10dB	10	QPSK	1	0	19100/1900	10.00	25.00	1.051	0.03	0.033
		Bottom Edge	10dB	10	QPSK	100%	0	18700/1860	10.00	24.00	0.920	0.04	0.037
		Bottom Edge SIM2	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	1.174	0.03	0.037
		Bottom Edge Battery2	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	1.041	0.03	0.033
		Bottom Edge	10dB	10	QPSK	50%	25	18900/1880	10.00	24.00	1.024	0.04	0.041
		Bottom Edge	10dB	10	QPSK	50%	0	19100/1900	10.00	24.00	0.989	0.04	0.039
		Bottom Edge	10dB	10	QPSK	100%	0	18900/1880	10.00	24.00	0.914	0.04	0.036
		Bottom Edge	10dB	10	QPSK	100%	0	19100/1900	10.00	24.00	0.912	0.04	0.036
		Bottom Edge Repeated	10dB	10	QPSK	1	0	18900/1880	10.00	25.00	1.166	0.03	0.037
LTE 7	Ant2	Back Side	10dB	10	QPSK	1	0	21350/2560	10.00	21.00	0.730	0.08	0.058
			10dB	10	QPSK	50%	50	21100/2535	10.00	20.00	0.609	0.10	0.061
		Front Side	10dB	10	QPSK	1	0	21350/2560	10.00	21.00	0.556	0.08	0.044
			10dB	10	QPSK	50%	25	21100/2535	10.00	20.00	0.526	0.10	0.053
		Left Edge	10dB	10	QPSK	1	0	21350/2560	10.00	21.00	0.340	0.08	0.027
			10dB	10	QPSK	50%	25	21100/2535	10.00	20.00	0.310	0.10	0.031
		Right Edge	10dB	10	QPSK	1	0	21350/2560	10.00	21.00	0.312	0.08	0.025
			10dB	10	QPSK	50%	25	21100/2535	10.00	20.00	0.286	0.10	0.029
		Bottom Edge	10dB	10	QPSK	1	0	21350/2560	10.00	21.00	1.118	0.08	0.089
			10dB	10	QPSK	50%	25	21100/2535	10.00	20.00	0.861	0.10	0.086
		Bottom Edge	10dB	10	QPSK	1	0	20850/2510	10.00	21.00	0.952	0.08	0.076
		Bottom Edge	10dB	10	QPSK	1	99	21100/2535	10.00	21.00	1.032	0.08	0.082
		Bottom Edge	10dB	10	QPSK	100%	0	20850/2510	10.00	20.00	0.838	0.10	0.084
		Bottom Edge	10dB	10	QPSK	1	0	21350/2560	10.00	21.00	0.895	0.08	0.071

		SIM2											
		Bottom Edge Battery2	10dB	10	QPSK	1	0	21350/2560	10.00	21.00	0.911	0.08	0.072
NR n41	Ant5	Back Side	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.321	0.13	0.040
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.316	0.13	0.040
		Front Side	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.185	0.13	0.023
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.163	0.13	0.021
		Left Edge	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.530	0.13	0.067
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.487	0.13	0.061
		Right Edge	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.013	0.13	0.002
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.010	0.13	0.001
		Top Edge	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.082	0.13	0.010
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.068	0.13	0.009
	Ant2	Back Side	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.524	0.13	0.066
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.506	0.13	0.064
		Front Side	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.333	0.13	0.042
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.344	0.13	0.043
		Left Edge	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.187	0.13	0.024
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.182	0.13	0.023
		Right Edge	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.006	0.13	0.001
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.007	0.13	0.001
		Bottom Edge	10dB	10	DFT-s-OFDM QPSK	1	1	518598/2592.99	10.00	19.00	0.698	0.13	0.088
			10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.784	0.13	0.099

	Bottom Edge SIM2	10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.750	0.13	0.094
	Bottom Edge Battery2	10dB	10	DFT-s-OFDM QPSK	135	67	518598/2592.99	10.00	19.00	0.775	0.13	0.098

10.3 Simultaneous Transmission Analysis

Simultaneous Transmission Configurations	Head	Body-worn	Hotspot	Product Specific 10-g SAR
GSM Voice+ BT	Yes	Yes	Yes	Yes
GSM DATA + BT	N/A	Yes	Yes	Yes
GSM Voice + Wi-Fi 2.4G	Yes	Yes	Yes	Yes
GSM DATA + Wi-Fi 2.4G	N/A	Yes	Yes	Yes
GSM Voice + Wi-Fi 5G	Yes	Yes	Yes	Yes
GSM DATA + Wi-Fi 5G	N/A	Yes	Yes	Yes
WCDMA + BT	Yes	Yes	Yes	Yes
WCDMA + Wi-Fi 2.4G	Yes	Yes	Yes	Yes
WCDMA + Wi-Fi 5G	Yes	Yes	Yes	Yes
LTE + BT	Yes	Yes	Yes	Yes
LTE + Wi-Fi 2.4G	Yes	Yes	Yes	Yes
LTE + Wi-Fi 5G	Yes	Yes	Yes	Yes
Wi-Fi 2.4G (Ant 9)+ Wi-Fi 5G (Ant 8)	Yes	Yes	Yes	Yes
Wi-Fi 2.4G (Ant 9)+ Wi-Fi 5G (Ant 10)	Yes	Yes	Yes	Yes
Wi-Fi 2.4G (Ant 8) + Wi-Fi 5G (Ant 10)	Yes	Yes	Yes	Yes
Wi-Fi 2.4G (Ant 8) + Wi-Fi 5G (Ant 8)	N/A	N/A	N/A	N/A

General Note:

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

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

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

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

The maximum SAR_{1g} Value for GSM/ WCDMA/LTE/NR-Antenna

$SAR_{1g/}$ (W/kg) / Test Position		LTE 2	NR n41	DC_ 2A_n41A	LTE 2	NR n41	DC_ 2A_n41A	DC_2A_n41A MAX.SAR $_{1g}$
		1	2	1+2	3	4	3+4	
Head	Left Cheek	0.113	0.048	0.161	0.004	0.301	0.305	0.305
	Left Tilt	0.051	0.012	0.063	0.002	0.079	0.081	0.081
	Right Cheek	0.060	0.122	0.182	0.002	0.770	0.772	0.772
	Right Tilt	0.043	0.037	0.080	0.001	0.233	0.234	0.234
Body worn	Back Side	0.376	0.016	0.392	0.012	0.185	0.197	0.392
	Front Side	0.169	0.015	0.184	0.007	0.176	0.183	0.184
Hotspot	Back Side	0.431	0.040	0.471	0.016	0.321	0.337	0.471
	Front Side	0.339	0.023	0.362	0.012	0.185	0.197	0.362
	Left Edge	0.178	0.067	0.245	0.007	0.530	0.537	0.537
	Right Edge	0.066	0.002	0.068	0.003	0.013	0.016	0.068
	Top Edge	NA	0.010	0.010	0.000	0.082	0.082	0.082
	Bottom Edge	1.189	0.000	1.189	0.041	0.000	0.041	1.189

$SAR_{1g/10g}$ (W/kg) / Test Position		GSM 850	GSM 1900	WCDM A II	WCDM A IV	WCDM A V	LTE 2	LTE 4	LTE 5	LTE 7	LTE 12	LTE 17	LTE 26	LTE 38	LTE 41	NR n41	DC_2A_ n41A	MAX. $SAR_{1g/10g}$
Head	Left Cheek	0.181	0.037	0.123	0.166	0.235	0.113	0.164	0.200	0.163	0.089	0.087	0.216	0.090	0.127	0.336	0.305	0.336
	Left Tilt	0.067	0.020	0.049	0.092	0.081	0.051	0.075	0.070	0.029	0.046	0.037	0.073	0.000	0.027	0.079	0.081	0.092
	Right Cheek	0.148	0.030	0.093	0.140	0.200	0.060	0.133	0.182	0.108	0.097	0.070	0.113	0.049	0.159	0.770	0.772	0.772
	Right Tilt	0.082	0.019	0.060	0.057	0.100	0.043	0.071	0.062	0.062	0.036	0.045	0.064	0.025	0.095	0.233	0.234	0.234
Body worn	Back Side	0.314	0.156	0.406	0.321	0.276	0.376	0.446	0.275	0.642	0.230	0.258	0.316	0.355	0.322	0.200	0.392	0.642
	Front Side	0.282	0.132	0.255	0.479	0.211	0.169	0.329	0.234	0.417	0.181	0.133	0.219	0.282	0.246	0.220	0.184	0.479
Hotspot	Back Side	0.585	0.285	0.795	0.841	0.676	0.431	0.514	0.355	0.730	0.310	0.423	0.655	0.690	0.370	0.524	0.471	0.841
	Front Side	0.574	0.217	0.675	0.655	0.605	0.339	0.446	0.596	0.556	0.374	0.197	0.317	0.600	0.283	0.344	0.362	0.675
	Left Edge	0.149	0.065	0.207	0.220	0.174	0.178	0.071	0.084	0.340	0.054	0.121	0.093	0.351	0.083	0.530	0.537	0.537
	Right Edge	0.402	0.000	0.111	0.115	0.455	0.066	0.086	0.262	0.312	0.279	0.239	0.368	0.331	0.055	0.013	0.068	0.455
	Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.082	0.082	0.082
	Bottom Edge	1.153	0.583	1.056	1.179	0.623	1.189	1.189	0.412	1.118	0.239	0.227	0.433	1.127	0.731	0.784	1.189	1.189
Product Specific 10-g SAR	Back Side	NA	NA	3.154	2.159	NA	NA	NA	NA	1.937	NA	NA	NA	1.712	NA	NA	NA	3.154
	Front Side	NA	NA	NA	1.923	NA	NA	NA	NA	1.538	NA	NA	NA	NA	NA	NA	NA	1.923
	Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Bottom Edge	NA	NA	3.285	2.900	NA	NA	3.510	NA	2.092	NA	NA	NA	1.399	1.567	NA	NA	3.510

SAR_{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		
		Ant10	Ant8	MIMO	Ant10	Ant8	MIMO	Ant10	Ant8	MIMO	Ant10	Ant8	MIMO
Head	Left Cheek	0.035	0.359	0.246	0.033	0.191	0.226	0.045	0.236	0.256	0.079	0.215	0.301
	Left Tilt	0.023	0.274	0.184	0.022	0.217	0.173	0.035	0.216	0.268	0.099	0.289	0.318
	Right Cheek	0.027	0.185	0.140	0.025	0.145	0.116	0.026	0.150	0.150	0.040	0.175	0.181
	Right Tilt	0.015	0.130	0.110	0.012	0.142	0.088	0.017	0.166	0.145	0.032	0.200	0.190
Body worn	Back Side	0.061	0.221	0.120	0.080	0.233	0.174	0.091	0.187	0.092	0.112	0.110	0.065
	Front Side	0.078	0.120	0.066	0.062	0.149	0.094	0.111	0.164	0.160	0.094	0.241	0.152
Hotspot	Back Side	0.130	0.362	0.234	NA	NA	NA	NA	NA	NA	0.218	0.225	0.140
	Front Side	0.056	0.170	0.158	NA	NA	NA	NA	NA	NA	0.067	0.355	0.260
	Left Edge	0.046	0.066	0.000	NA	NA	NA	NA	NA	NA	0.072	0.085	0.042
	Right Edge	0.070	0.194	0.000	NA	NA	NA	NA	NA	NA	0.265	0.432	0.219
	Top Edge	0.061	0.225	0.000	NA	NA	NA	NA	NA	NA	0.183	0.208	0.199
	Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Product Specific 10-g SAR	Back Side	NA	NA	NA	0.146	0.551	0.457	0.233	0.436	0.416	NA	NA	NA
	Front Side	NA	NA	NA	0.006	0.861	0.641	0.090	0.835	0.894	NA	NA	NA
	Left Edge	NA	NA	NA	0.004	0.163	0.093	0.033	0.071	0.069	NA	NA	NA
	Right Edge	NA	NA	NA	0.002	0.405	0.581	0.125	0.674	0.874	NA	NA	NA
	Top Edge	NA	NA	NA	0.122	1.695	1.413	0.211	1.755	1.461	NA	NA	NA
	Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Test Position		SAR_{10g} (W/kg)	Wi-Fi 2.4G			MAX. SAR_{10g} Wi-Fi 5G			Wi-Fi 2.4G + Wi-Fi 5G			MAX. SAR_{10g} Wi-Fi 2.4G + Wi-Fi 5G
			Ant9	Ant8	MIMO	Ant10	Ant8	MIMO				
			1	2	3	4	5	6	1+Max (4, 5, 6)	2+Max (4, 6)	3+Max (4, 5, 6)	
Head	Left Cheek		0.175	0.215	0.418	0.079	0.359	0.301	0.534	0.516	0.777	0.777
	Left Tilt		0.042	0.135	0.237	0.099	0.289	0.318	0.36	0.453	0.555	0.555
	Right Cheek		0.078	0.090	0.130	0.040	0.185	0.181	0.263	0.271	0.315	0.315
	Right Tilt		0.015	0.044	0.093	0.032	0.200	0.190	0.215	0.234	0.293	0.293
Body	Back Side		0.000	0.000	0.066	0.112	0.233	0.174	0.233	0.174	0.299	0.299
	Front Side		0.080	0.058	0.096	0.111	0.241	0.160	0.321	0.218	0.337	0.337
Hotspot	Back Side		0.049	0.064	0.251	0.218	0.362	0.234	0.411	0.298	0.613	0.613
	Front Side		0.064	0.106	0.438	0.067	0.355	0.260	0.419	0.366	0.793	0.793
	Left Edge		0.000	0.000	0.028	0.072	0.085	0.042	0.085	0.072	0.113	0.113
	Right Edge		0.516	0.055	0.620	0.265	0.432	0.219	0.948	0.32	1.052	1.052
	Top Edge		0.000	0.085	0.240	0.183	0.225	0.199	0.225	0.284	0.465	0.465
	Bottom Edge		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Product Specific 10-g SAR	Back Side		NA	NA	NA	0.233	0.551	0.457	0.551	0.457	0.551	0.551
	Front Side		NA	NA	NA	0.090	0.861	0.894	0.894	0.894	0.894	0.894
	Left Edge		NA	NA	NA	0.033	0.163	0.093	0.163	0.093	0.163	0.163
	Right Edge		NA	NA	NA	0.125	0.674	0.874	0.874	0.874	0.874	0.874
	Top Edge		NA	NA	NA	0.211	1.755	1.461	1.755	1.461	1.755	1.755
	Bottom Edge		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

WWAN + WLAN 2.4G / WLAN 5G/BT

$SAR_{1g/10g}$(W/kg) Test Position		WWAN MAX. $SAR_{1g/10g}$	Wi-Fi 2.4G			Wi-Fi 5G			BT	MAX. SAR10g Wi-Fi 2.4G + Wi-Fi 5G	MAX. $\Sigma SAR_{1g/10g}$			
			Ant9	Ant8	MIMO	Ant10	Ant8	MIMO						
		1	2	3	4	5	6	7	8	9	1+Max (2, 3, 4)	1+ Max (5, 6, 7)	1+9	1+8
Head	Left, Cheek	0.336	0.175	0.215	0.418	0.079	0.359	0.301	0.150	0.777	0.754	0.695	1.113	0.486
	Left, Tilt	0.092	0.042	0.135	0.237	0.099	0.289	0.318	0.022	0.555	0.329	0.410	0.647	0.114
	Right, Cheek	0.772	0.078	0.090	0.130	0.040	0.185	0.181	0.058	0.315	0.902	0.957	1.087	0.830
	Right, Tilt	0.234	0.015	0.044	0.093	0.032	0.200	0.190	0.016	0.293	0.327	0.434	0.527	0.250
Body worn	Back Side	0.642	0.000	0.000	0.066	0.112	0.233	0.174	0.032	0.299	0.708	0.875	0.941	0.674
	Front Side	0.479	0.080	0.058	0.096	0.111	0.241	0.160	0.047	0.337	0.575	0.720	0.816	0.526
Hotspot	Back Side	0.841	0.049	0.064	0.251	0.218	0.362	0.234	0.032	0.613	1.092	1.203	1.454	0.873
	Front Side	0.675	0.064	0.106	0.438	0.067	0.355	0.260	0.047	0.793	1.113	1.030	1.468	0.722
	Left Edge	0.537	0.000	0.000	0.028	0.072	0.085	0.042	NA	0.113	0.565	0.622	0.650	0.537
	Right Edge	0.455	0.516	0.055	0.620	0.265	0.432	0.219	0.094	1.052	1.075	0.887	1.507	0.549
	Top Edge	0.082	0.000	0.085	0.240	0.183	0.225	0.199	0.006	0.465	0.322	0.307	0.547	0.088
	Bottom Edge	1.189	NA	NA	NA	NA	NA	NA	NA	NA	1.189	1.189	1.189	1.189
Product Specific 10-g SAR	Back Side	3.154	NA	NA	NA	0.233	0.551	0.457	NA	0.551	3.154	3.705	3.705	3.154
	Front Side	1.923	NA	NA	NA	0.090	0.861	0.894	NA	0.894	1.923	2.817	2.817	1.923
	Left Edge	NA	NA	NA	NA	0.033	0.163	0.093	NA	0.163	0.000	0.163	0.163	0.000
	Right Edge	NA	NA	NA	NA	0.125	0.674	0.874	NA	0.874	0.000	0.874	0.874	0.000
	Top Edge	NA	NA	NA	NA	0.211	1.755	1.461	NA	1.755	0.000	1.755	1.755	0.000
	Bottom Edge	3.510	NA	NA	NA	NA	NA	NA	NA	NA	3.510	3.510	3.510	3.510

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

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

MAX. ΣSAR_{1g} = 1.507W/kg<1.6W/kg and MAX. ΣSAR_{10g} =3.705W/kg<4 W/kg, so the Simultaneous transimition SAR with volum scan are not required for WWAN and WLAN 2.4G / WLAN 5G/BT Antenna.

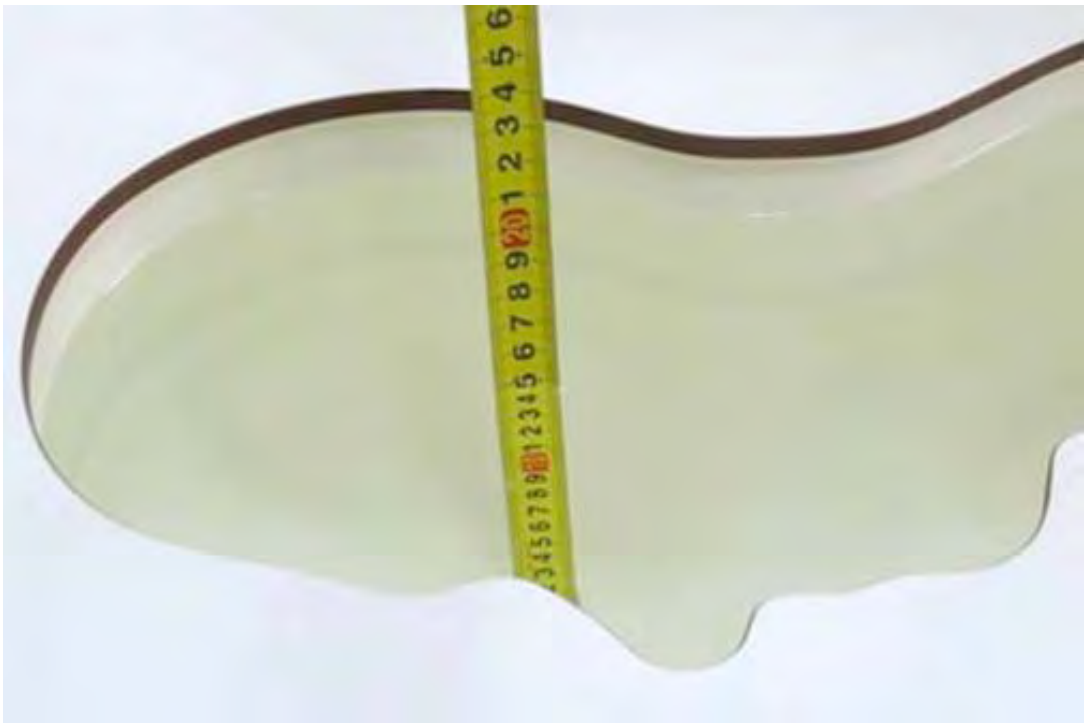
11 Measurement Uncertainty

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.

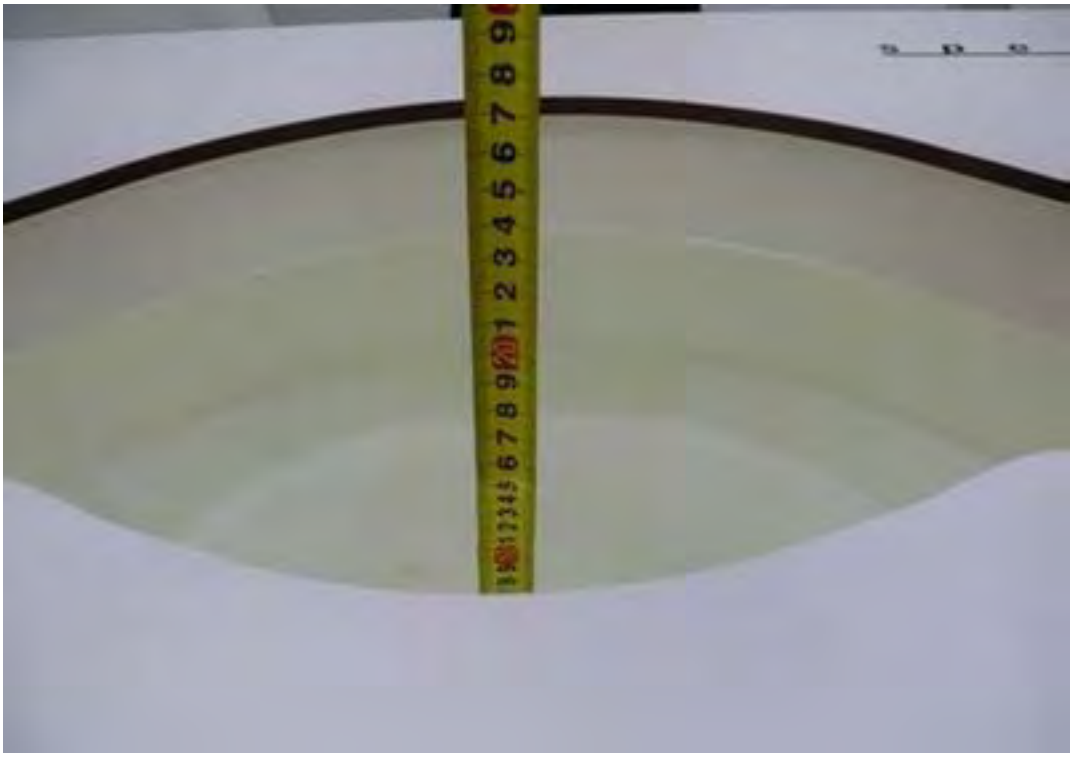
ANNEX A: Test Layout

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 750 MHz TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3

Date: 3/28/2021

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

Medium parameters used: f = 750 MHz; σ = 0.88 S/m; ε_r = 42.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 2.29 W/kg

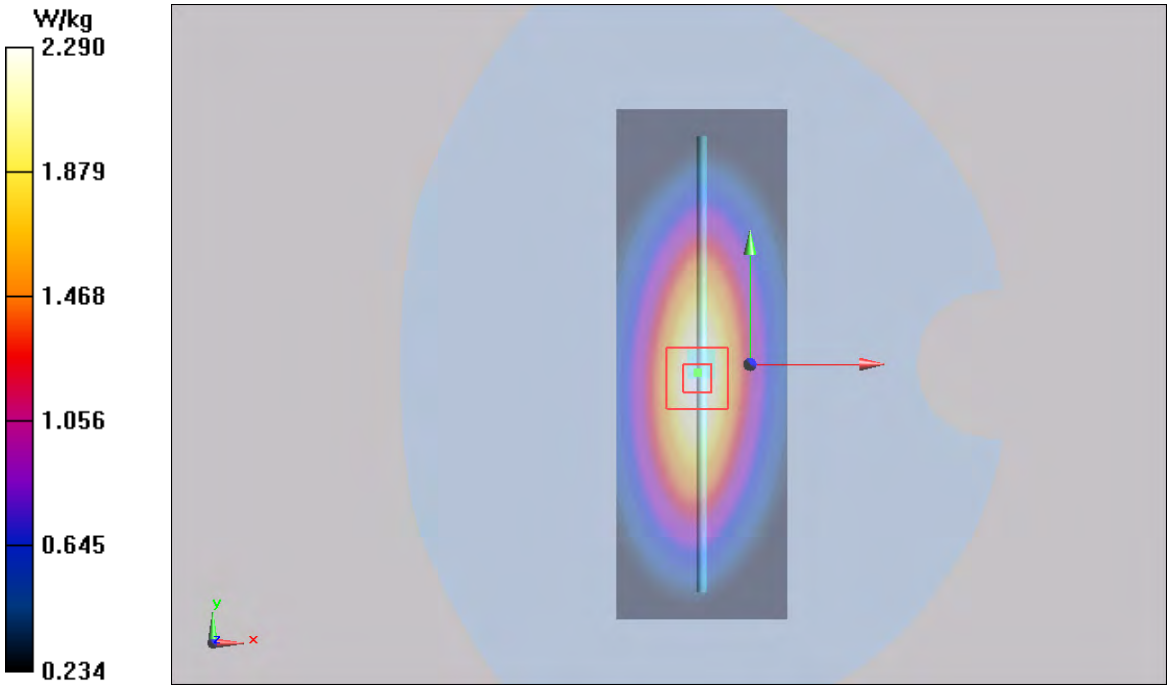
d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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

Peak SAR (extrapolated) = 3.16 W/kg

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

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



Plot 2 System Performance Check at 750 MHz TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3

Date: 3/29/2021

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

Medium parameters used: f = 750 MHz; σ = 0.87 S/m; ε_r = 42.0; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 2.31 W/kg

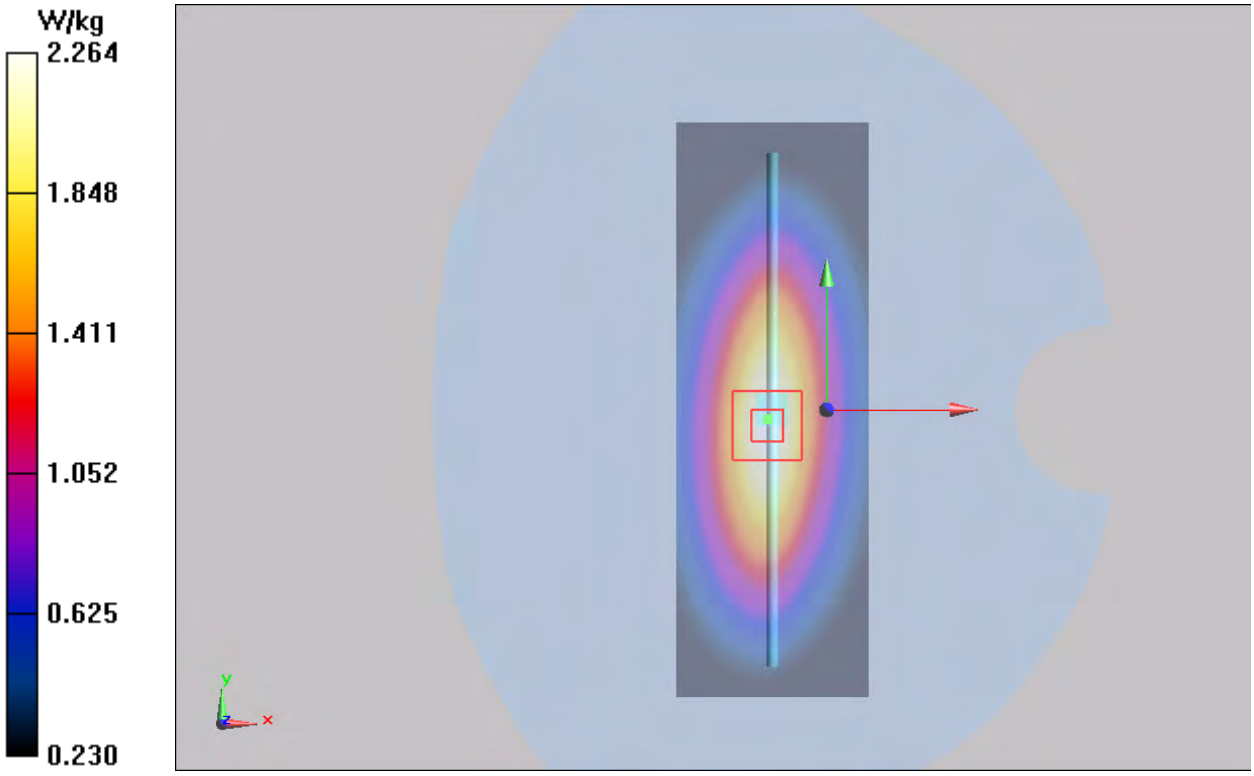
d=15mm,Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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

Peak SAR (extrapolated) = 3.14 W/kg

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

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



Plot 3 System Performance Check at 835 MHz TSL

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

Date: 3/23/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

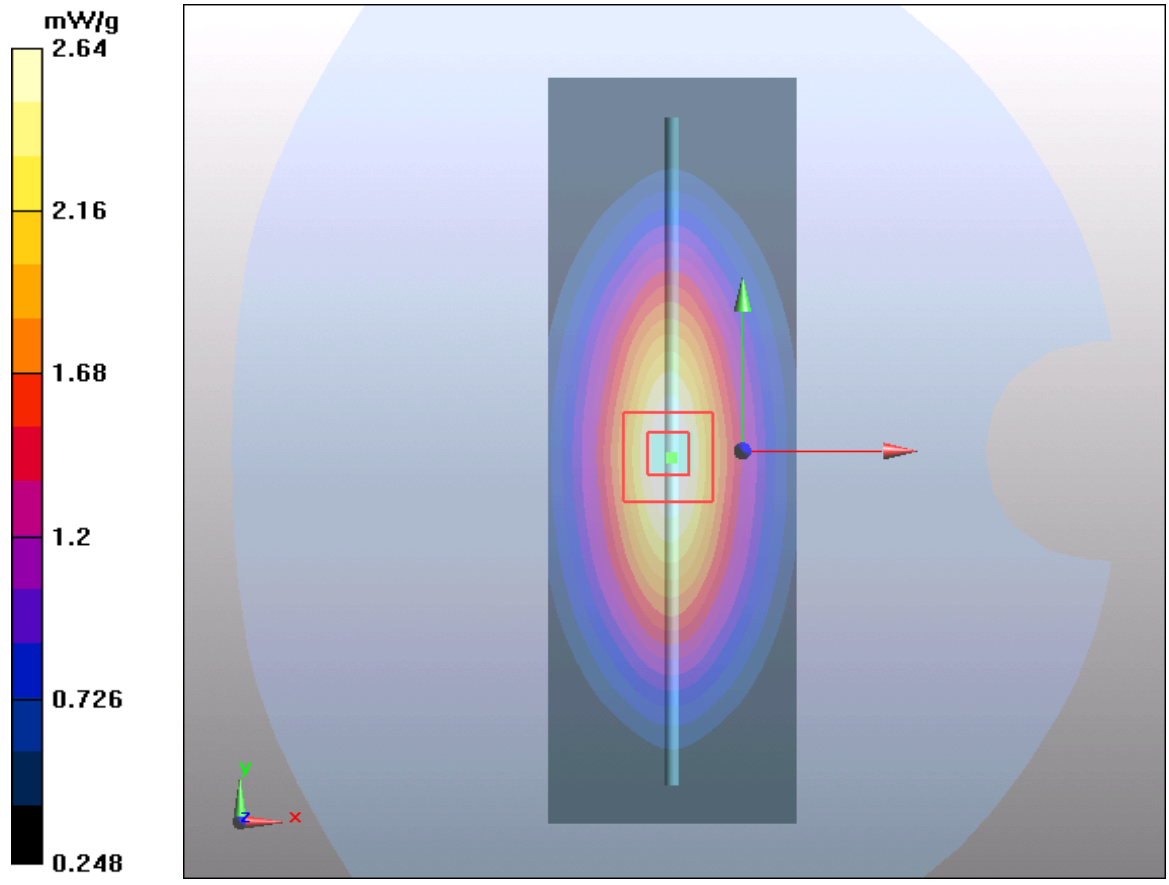
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 4 System Performance Check at 835 MHz TSL

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

Date: 3/24/2021

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

Medium parameters used: f = 835 MHz; σ =0.87 S/m; ε_r = 41.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

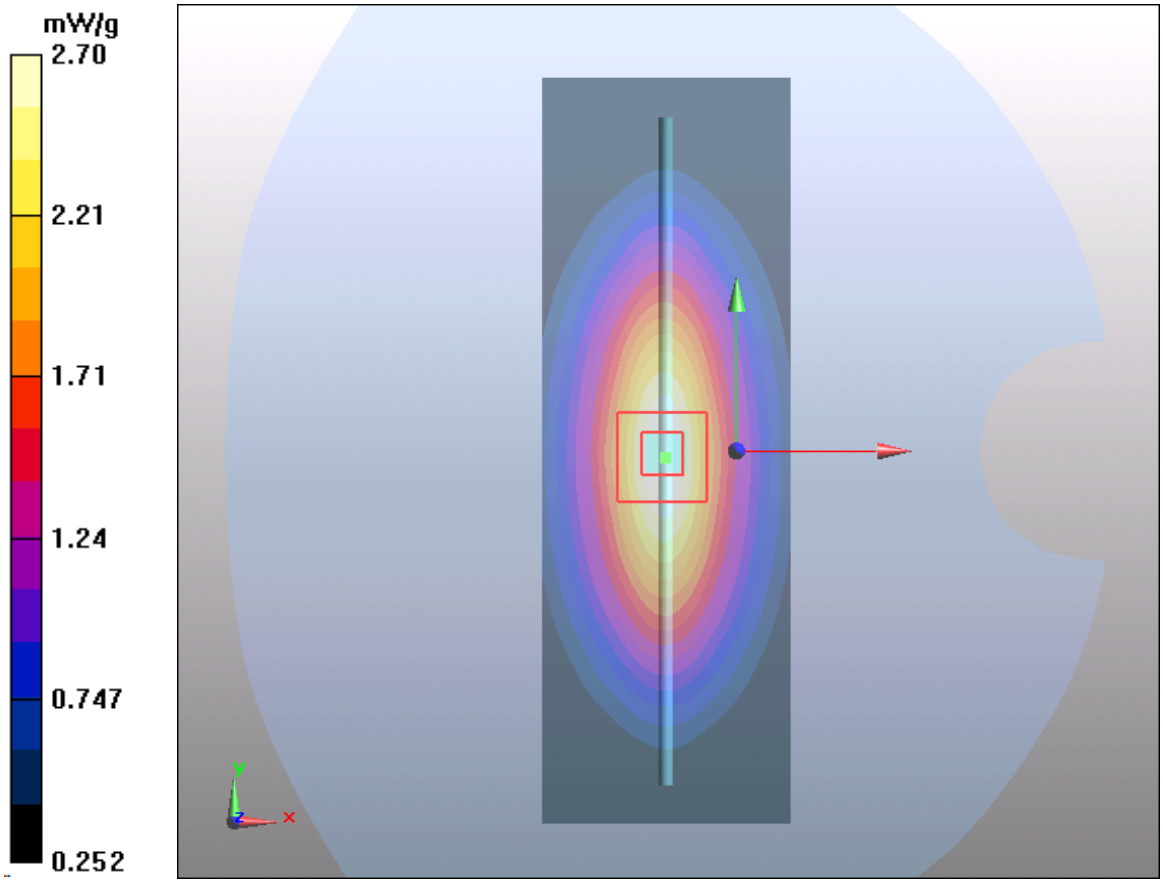
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 5 System Performance Check at 1750 MHz TSL

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

Date: 3/26/2021

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

Medium parameters used: f = 1750 MHz; σ = 1.34 S/m; ε_r = 40.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

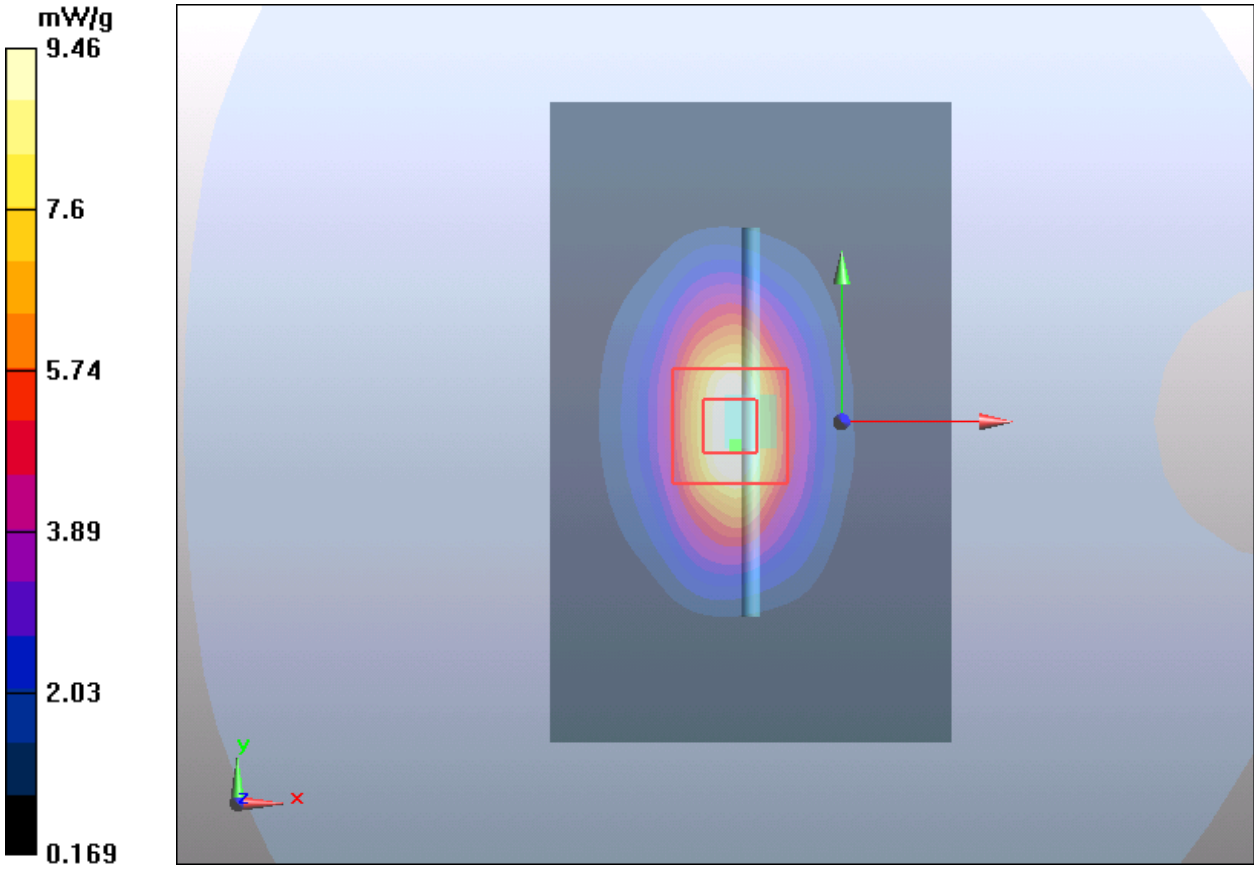
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 6 System Performance Check at 1750 MHz TSL

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

Date: 3/27/2021

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

Medium parameters used: f = 1750 MHz; σ = 1.36 S/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

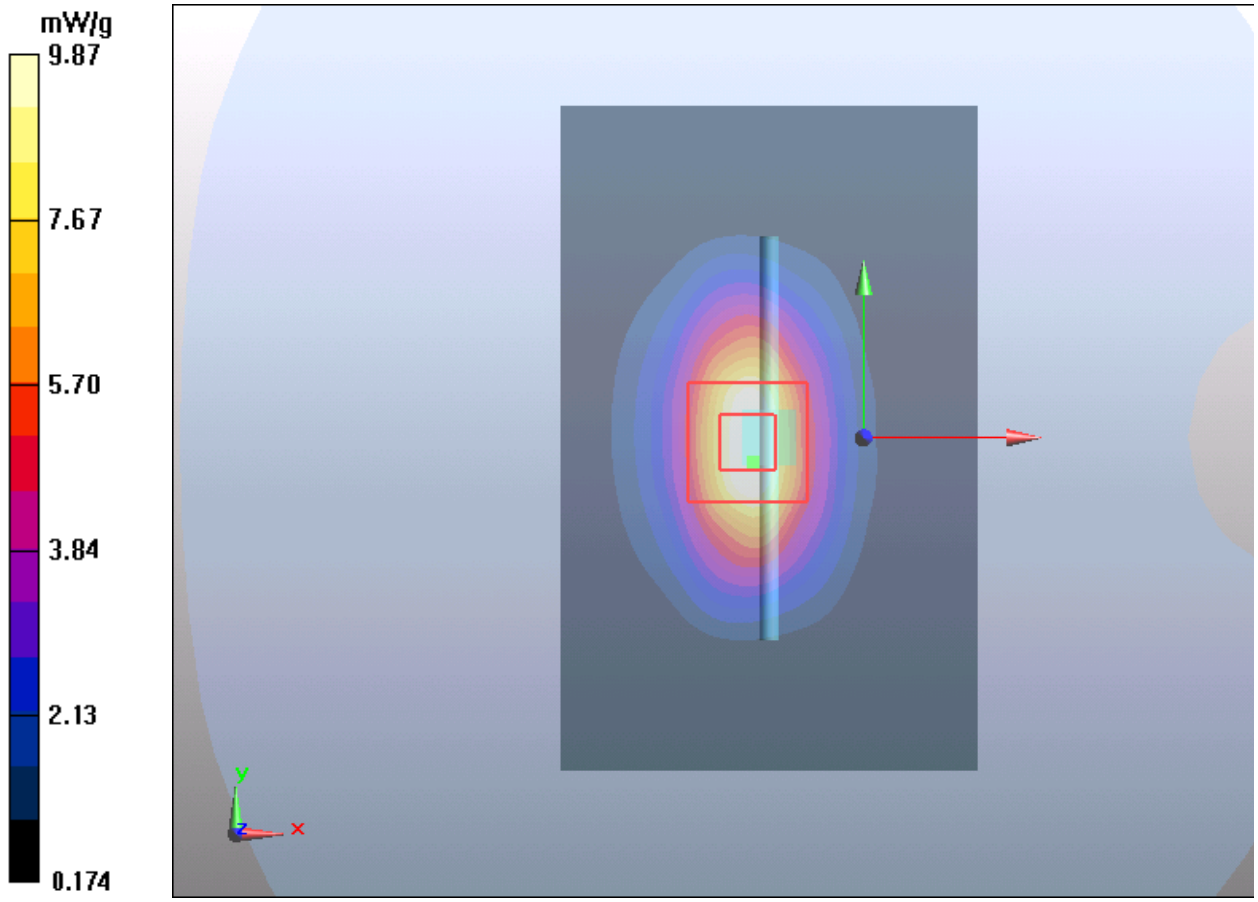
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 7 System Performance Check at 1900 MHz TSL

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

Date: 4/9/2021

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

Medium parameters used: f = 1900 MHz; σ = 1.41 S/m; ε_r = 40.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

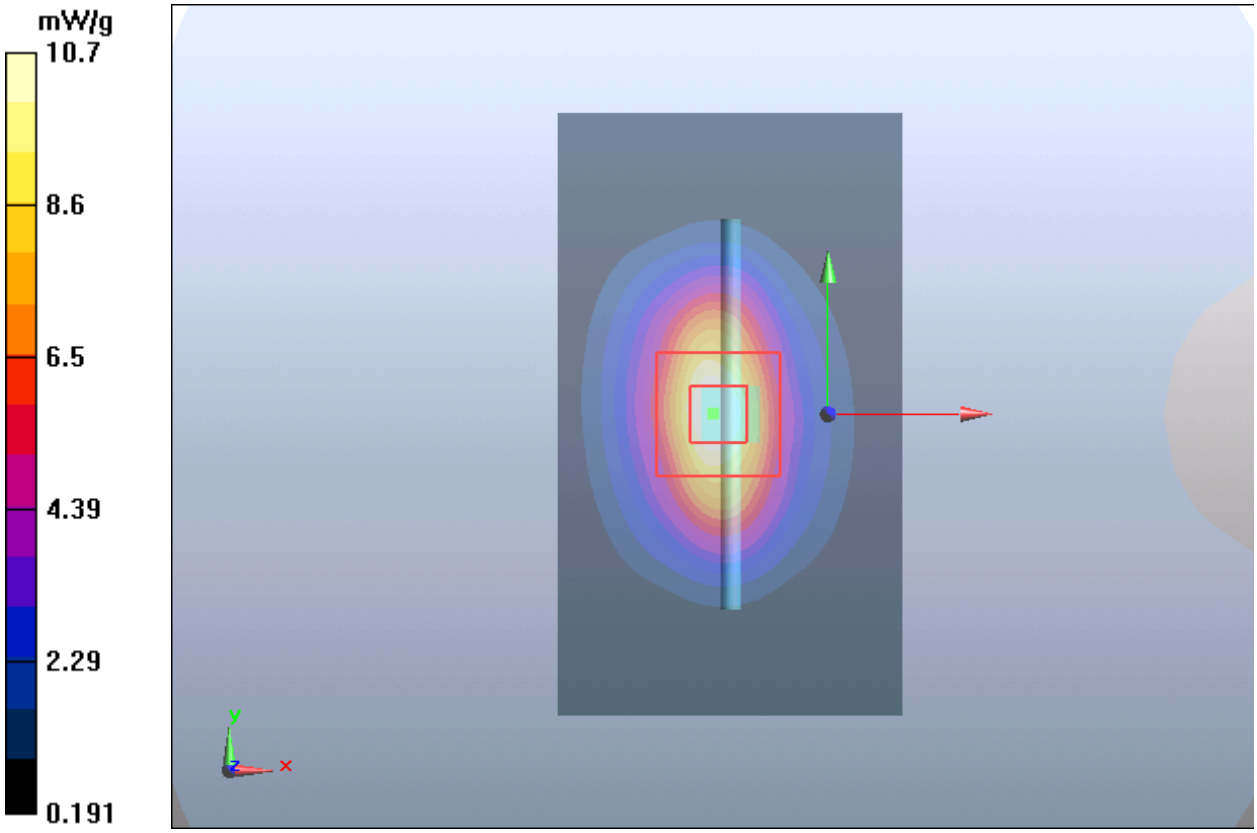
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 8 System Performance Check at 1900 MHz TSL

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

Date: 4/15/2021

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

Medium parameters used: f = 1900 MHz; σ = 1.43 S/m; ε_r = 40.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

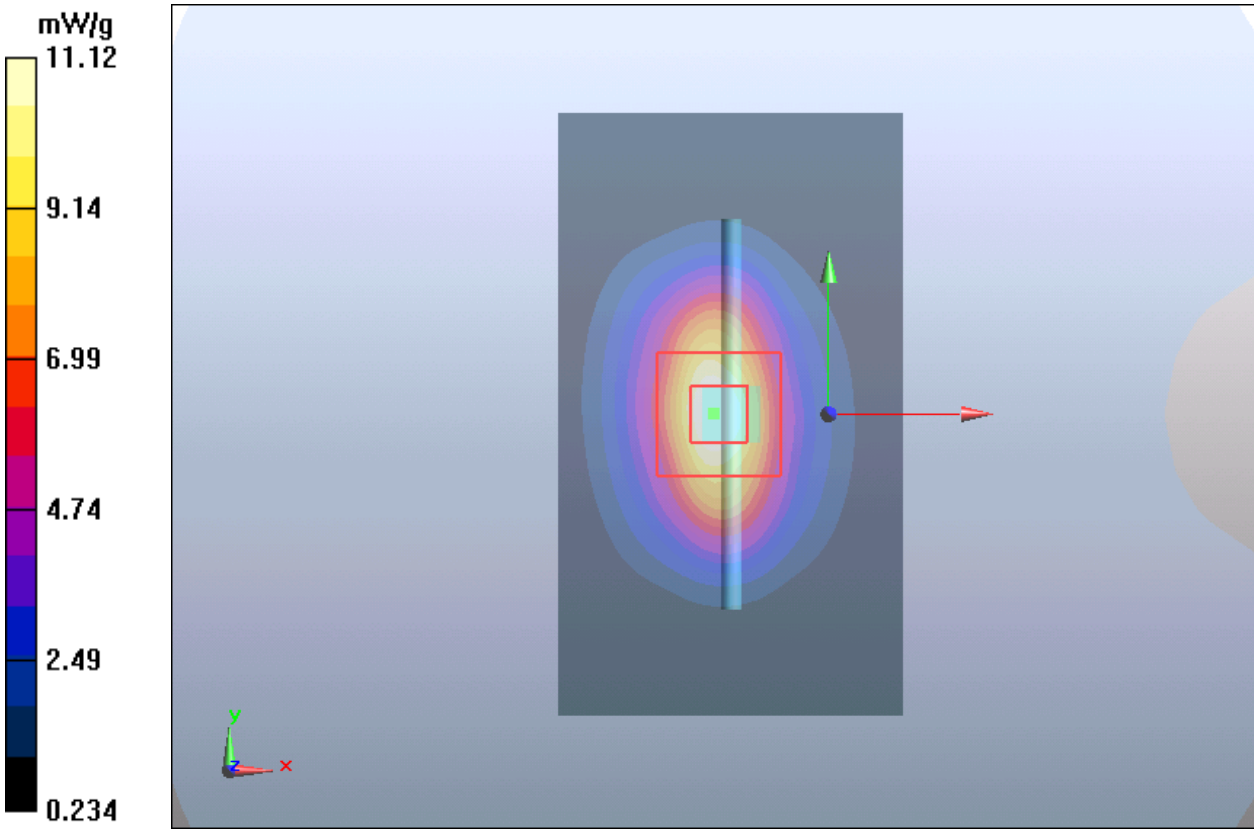
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 9 System Performance Check at 2450 MHz TSL

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

Date: 3/25/2021

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

Medium parameters used: f = 2450 MHz; σ = 1.81 S/m; ε_r = 38.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

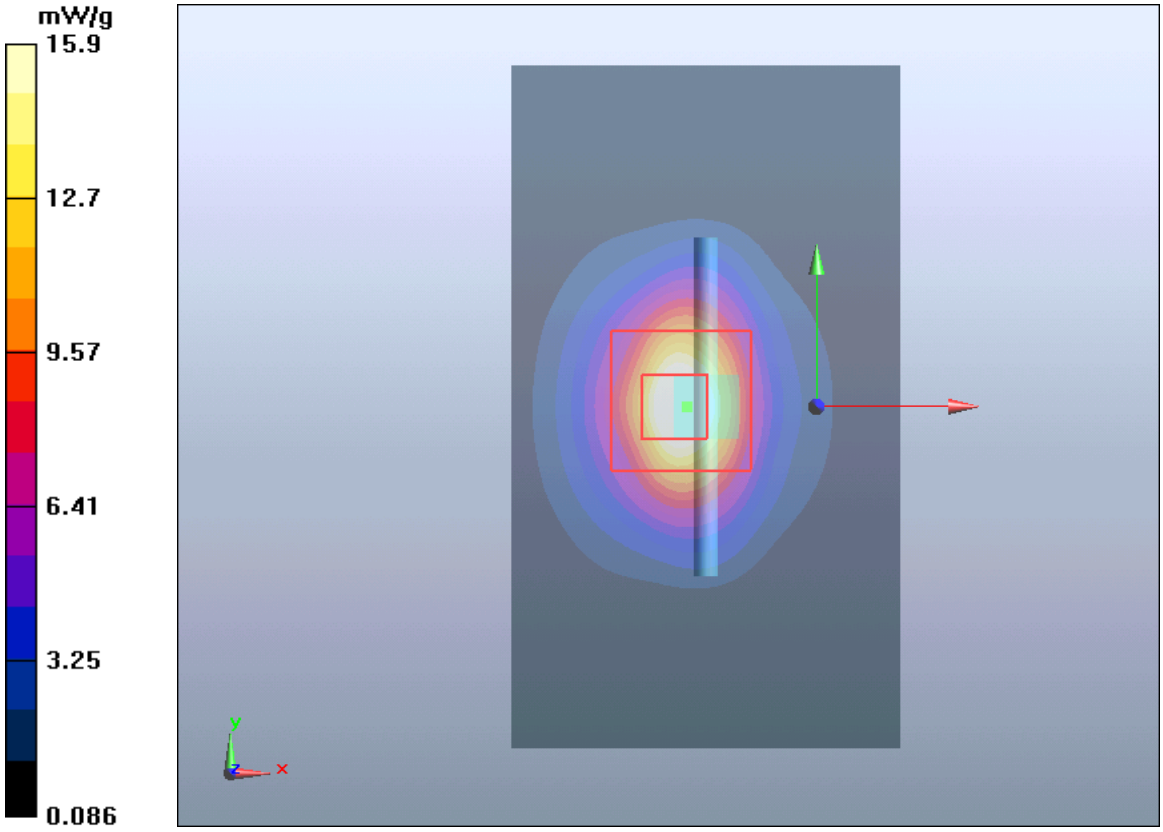
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 4/8/2021

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

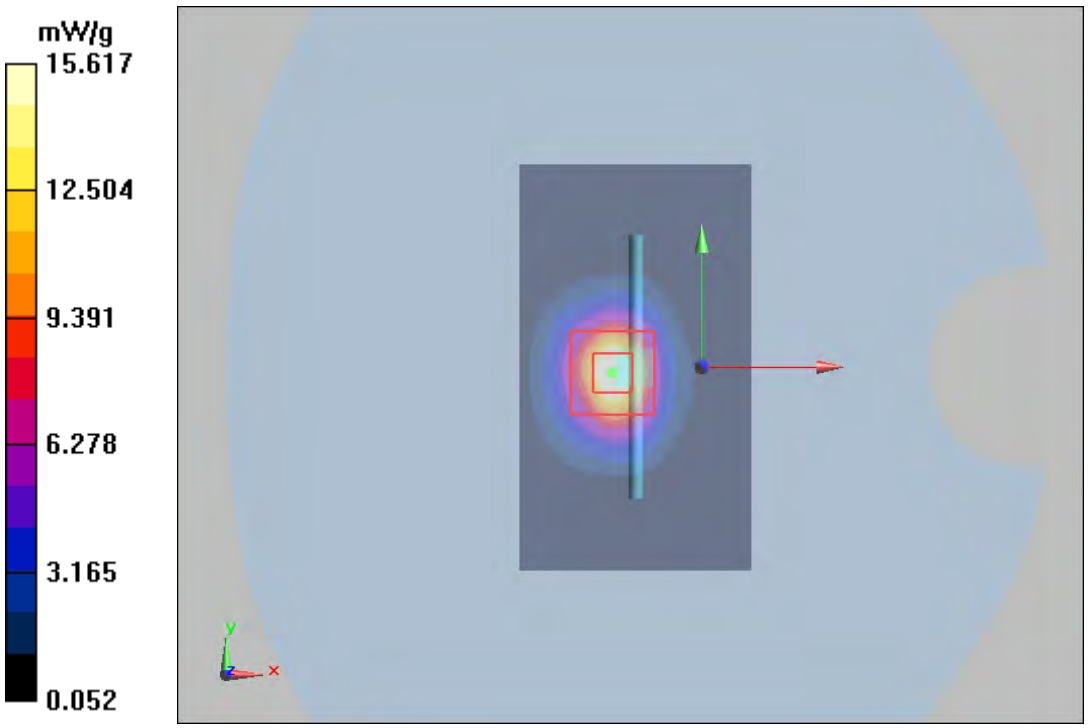
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 31.858 W/kg

SAR(1 g) = 13.91 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: 4/10/2021

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

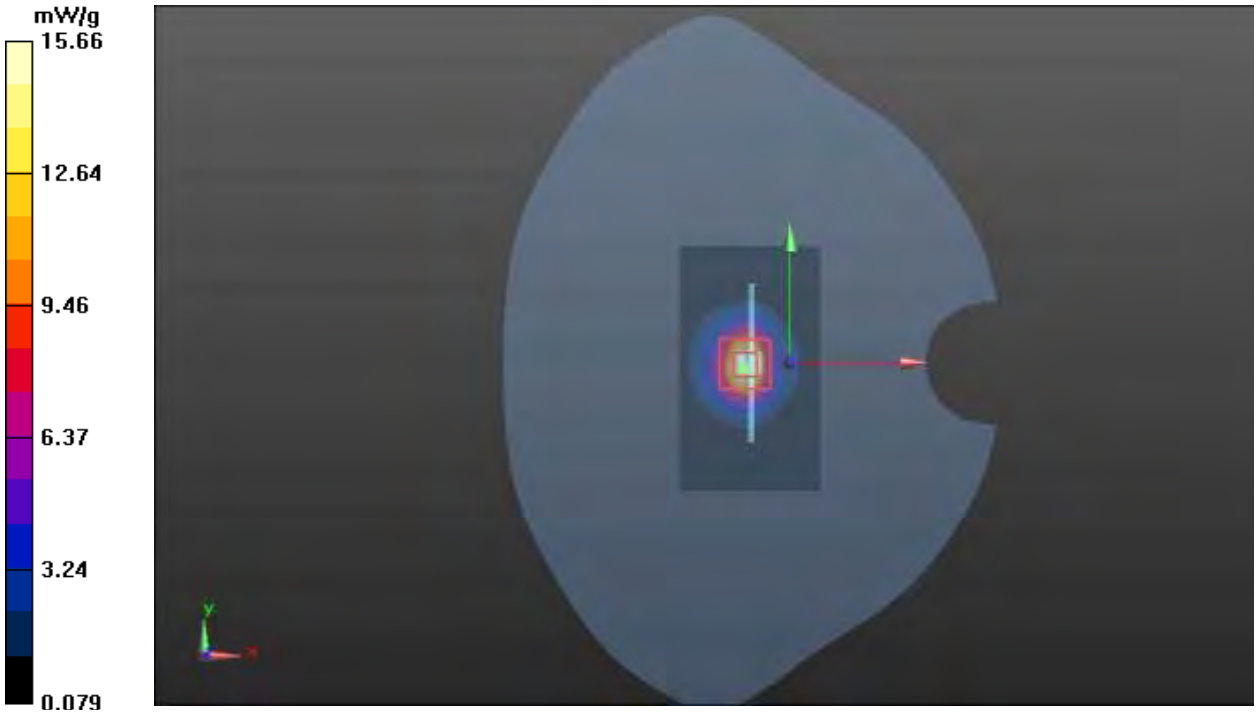
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 4/11/2021

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2600 MHz; σ = 1.99 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

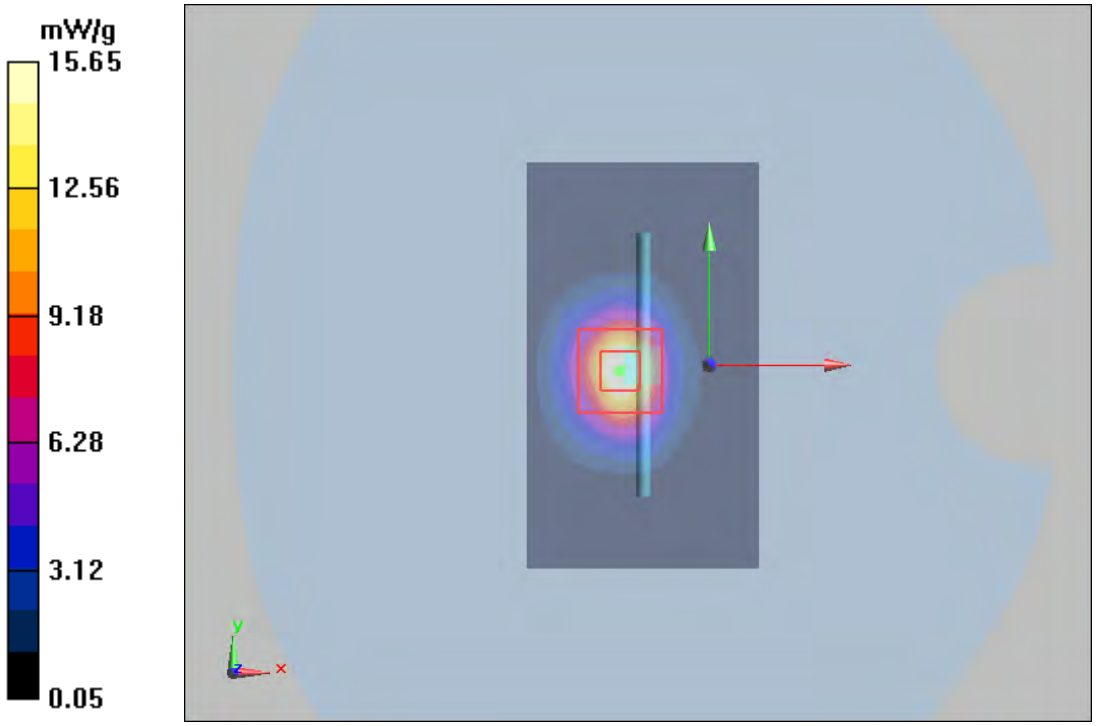
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 4/12/2021

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

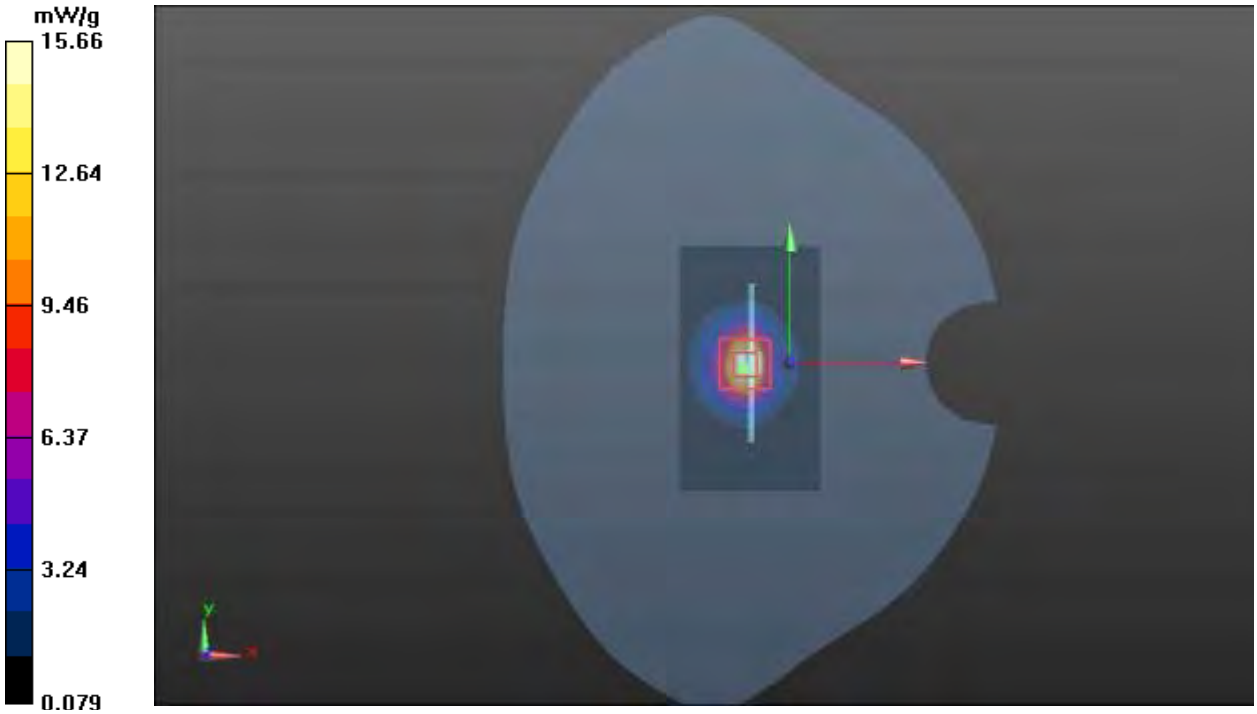
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 31.858 W/kg

SAR(1 g) = 13.92 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: 4/13/2021

Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

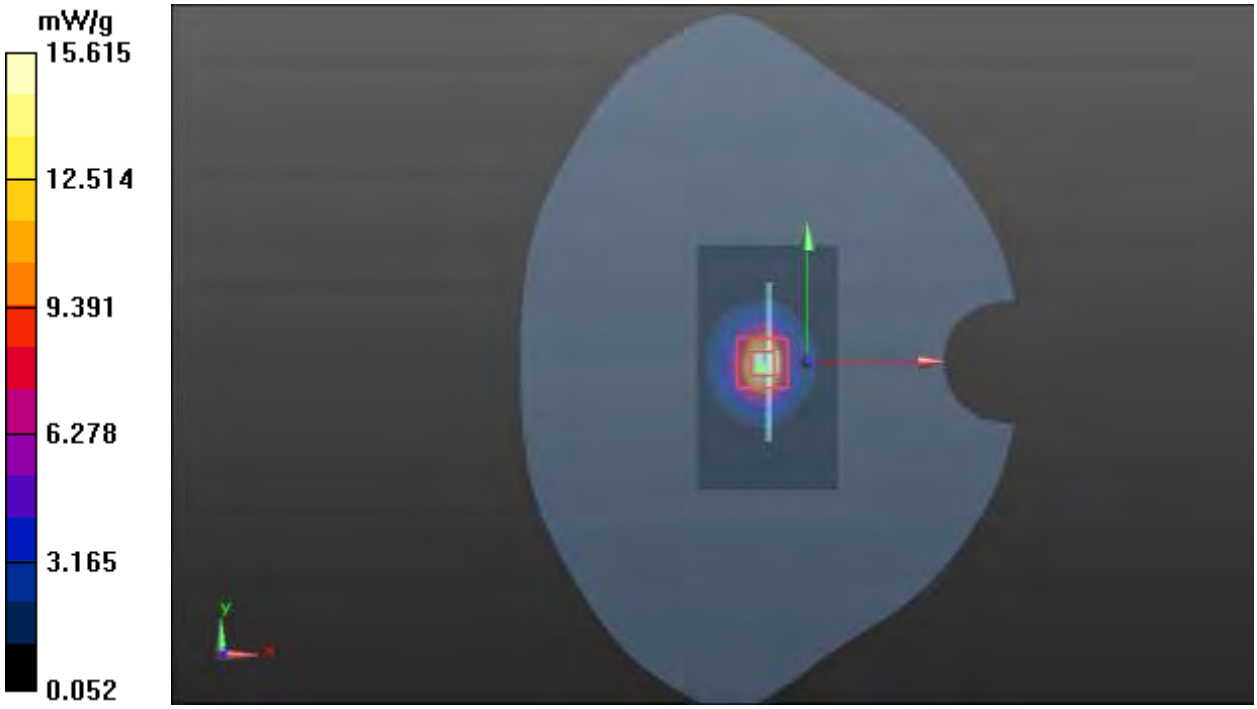
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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: 4/3/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

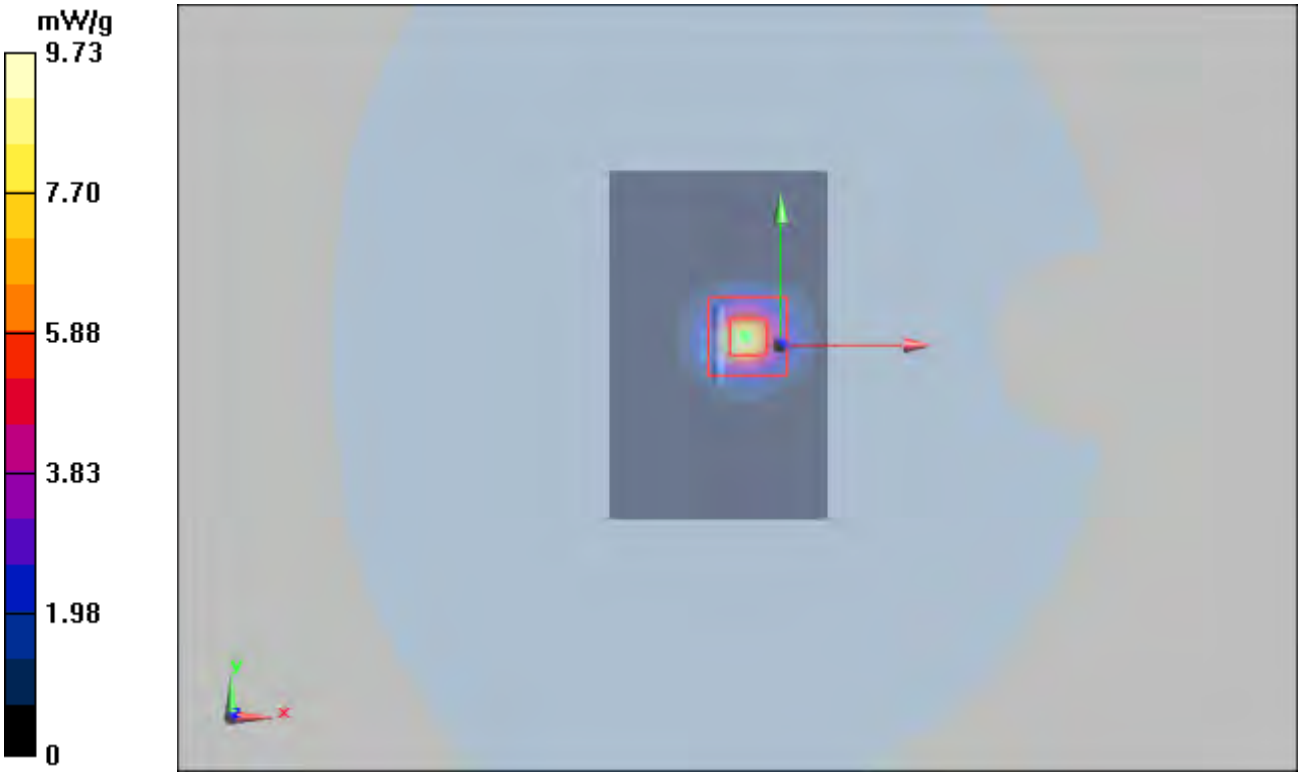
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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: 4/4/2021

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

Medium parameters used: f = 5600 MHz; σ = 5.21 S/m; ε_r = 34.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

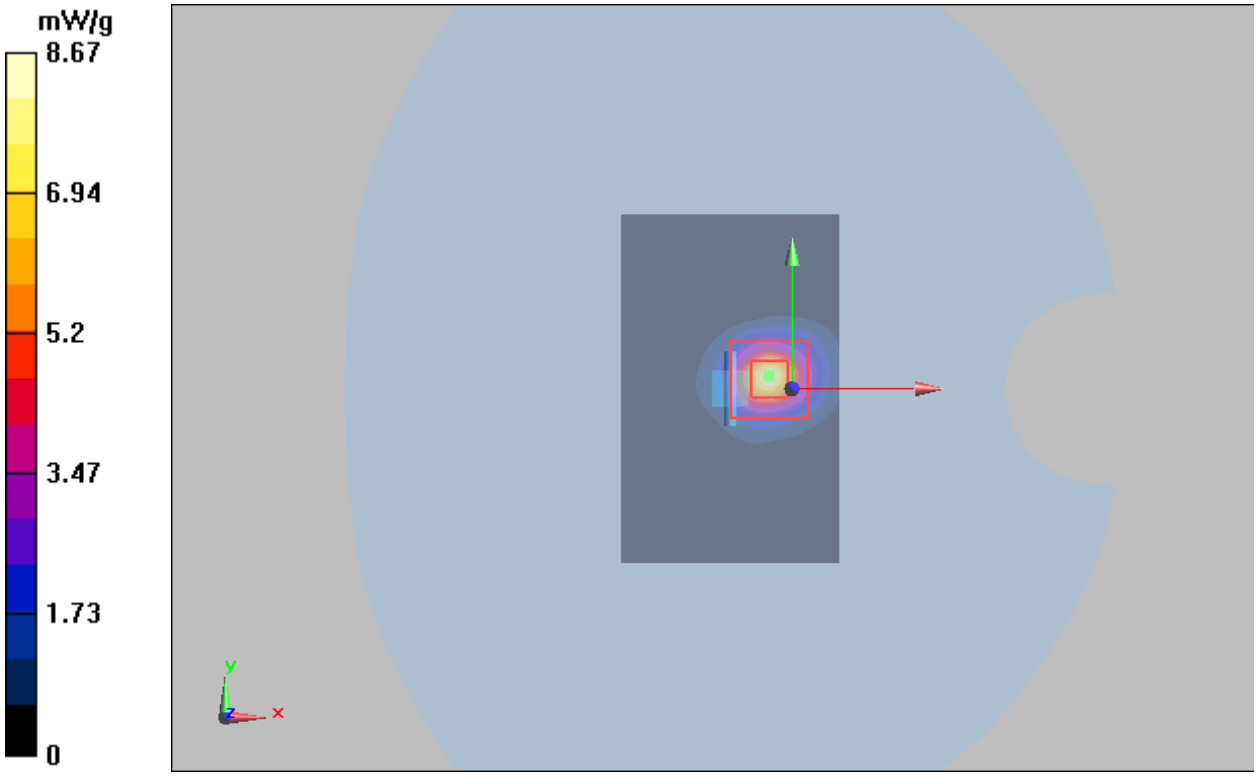
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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: 4/6/2021

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

Medium parameters used: f = 5750 MHz; σ = 5.21 S/m; ε_r = 34.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

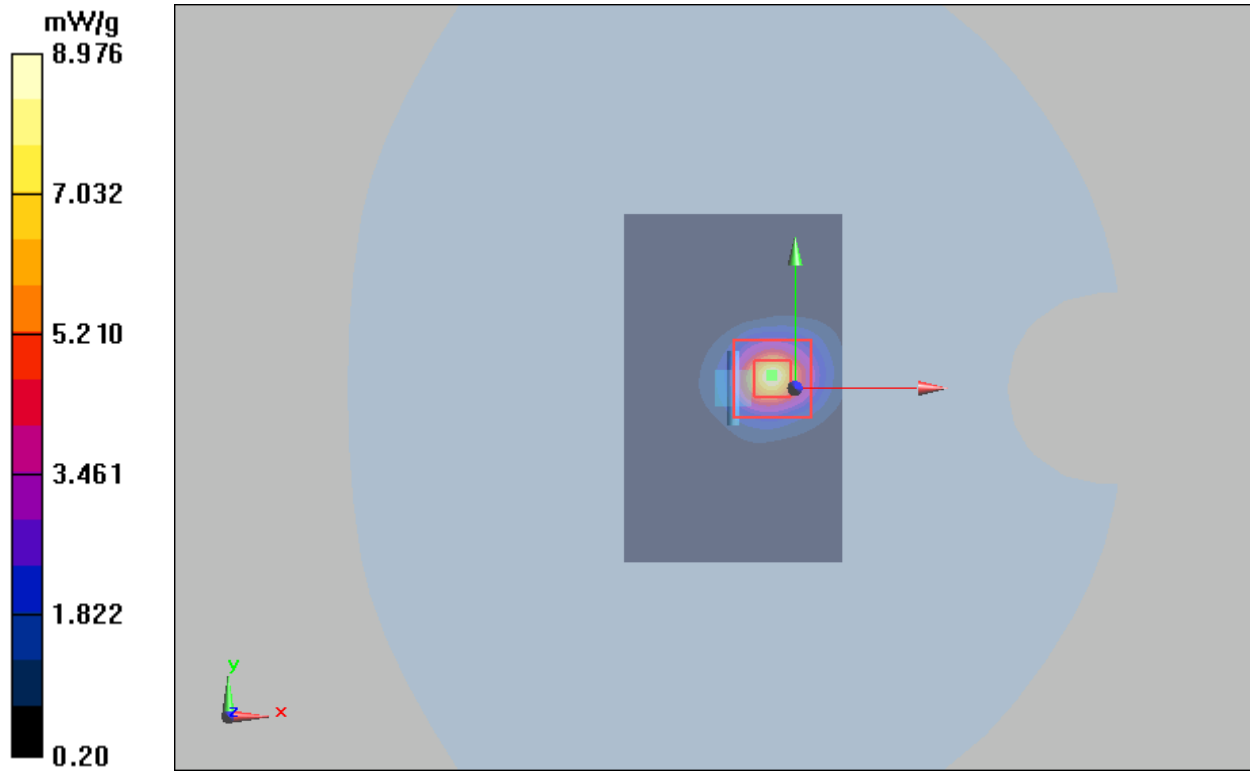
d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

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

Date: 3/23/2021

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

Medium parameters used: f = 837 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.159 W/kg

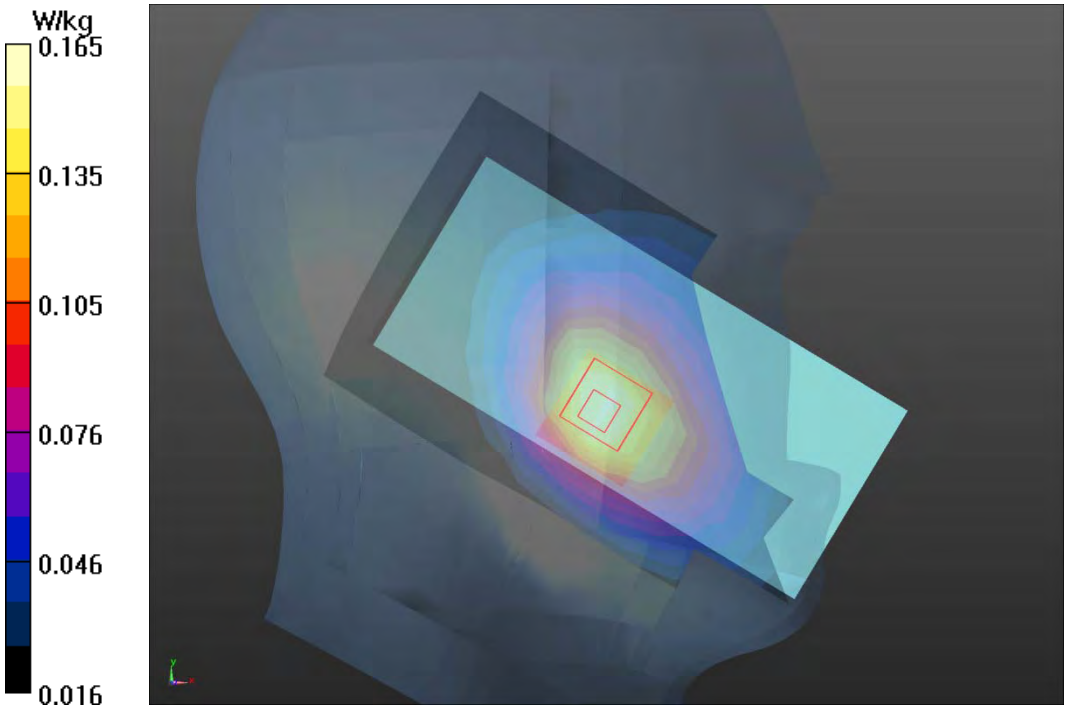
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.461 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.210 W/kg

SAR(1 g) = 0.157 W/kg; SAR(10 g) = 0.113 W/kg

Maximum value of SAR (measured) = 0.165 W/kg



Plot 19 GSM 1900 Left cheek Middle

Date: 4/9/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: 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 SN1317; Calibrated: 2/23/2021

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

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) = 0.030 W/kg

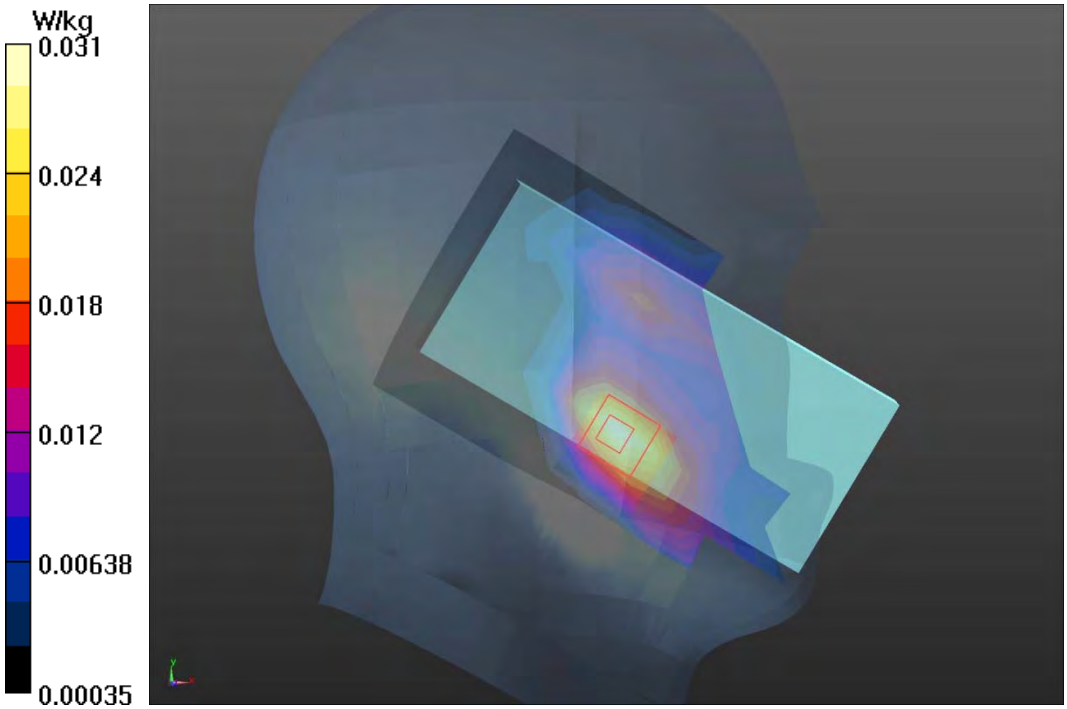
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.400 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.046 W/kg

SAR(1 g) = 0.029 W/kg; SAR(10 g) = 0.017 W/kg

Maximum value of SAR (measured) = 0.031 W/kg



Plot 20 UMTS Band II Left cheek Middle

Date: 4/9/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: 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 SN1317; Calibrated: 2/23/2021

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

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) = 0.129W/kg

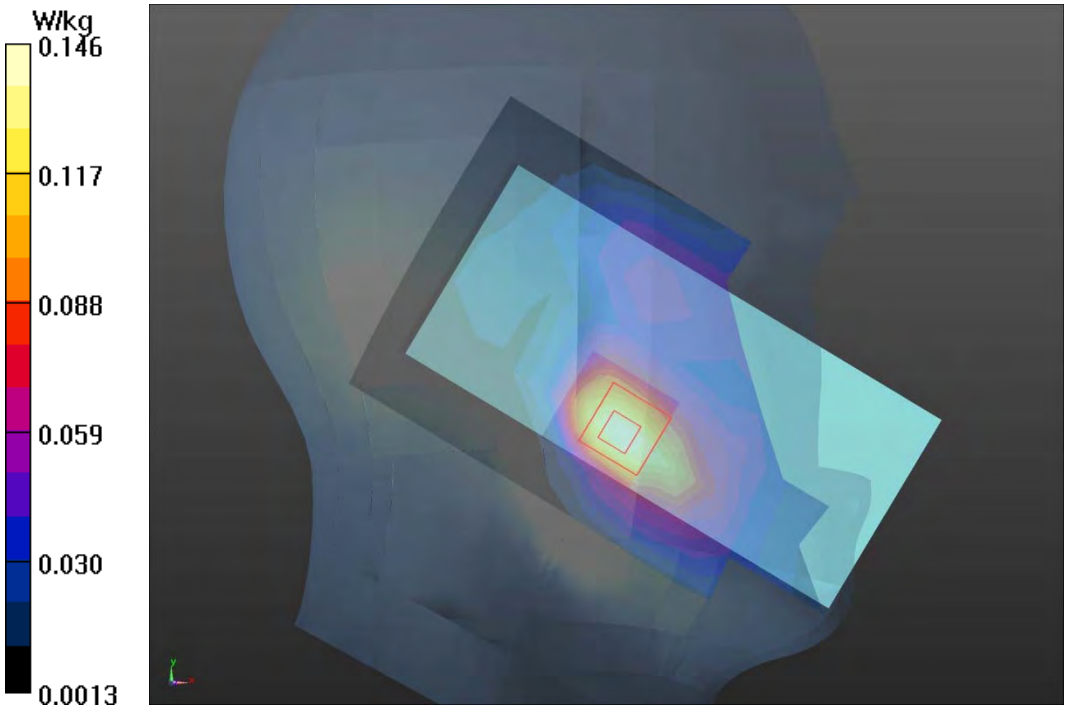
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.947 V/m; Power Drift = 0.067 dB

Peak SAR (extrapolated) = 0.180 W/kg

SAR(1 g) = 0.108 W/kg; SAR(10 g) = 0.063 W/kg

Maximum value of SAR (measured) = 0.146 W/kg



Plot 21 UMTS Band IV Left cheek Middle

Date: 3/28/2021

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

Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: 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 SN1317; Calibrated: 2/23/2021

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

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) = 0.162 W/kg

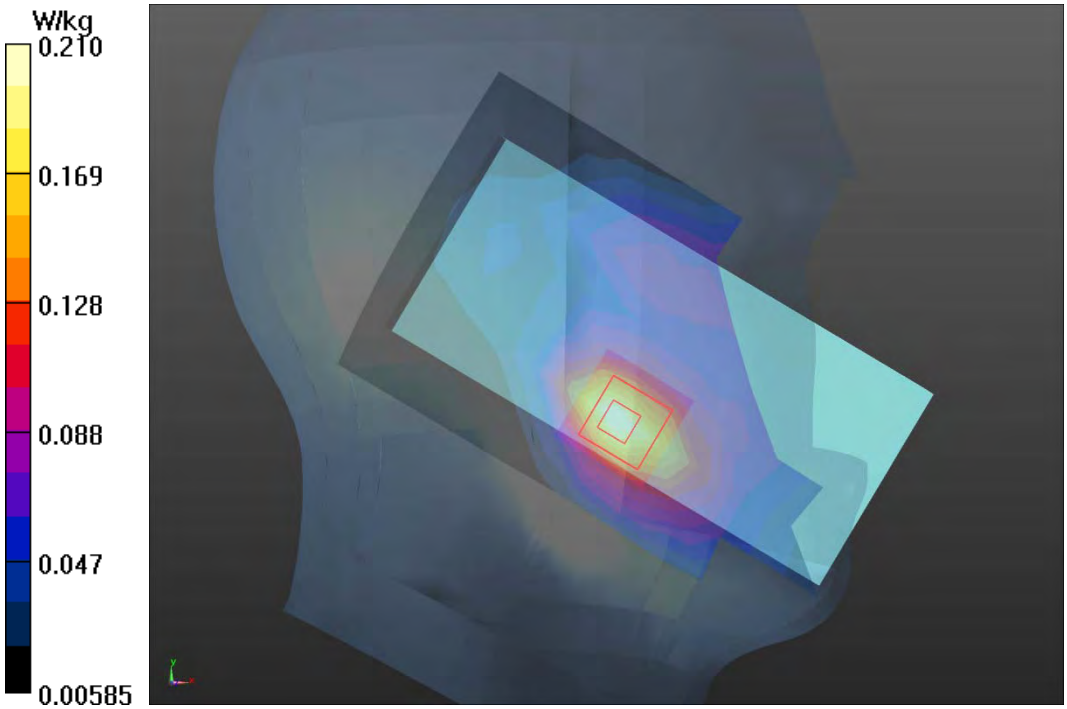
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.674 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.252 W/kg

SAR(1 g) = 0.157 W/kg; SAR(10 g) = 0.095 W/kg

Maximum value of SAR (measured) = 0.210 W/kg



Plot 22 UMTS Band V Left cheek Middle

Date: 3/23/2021

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

Medium parameters used: f = 836.6 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.237 W/kg

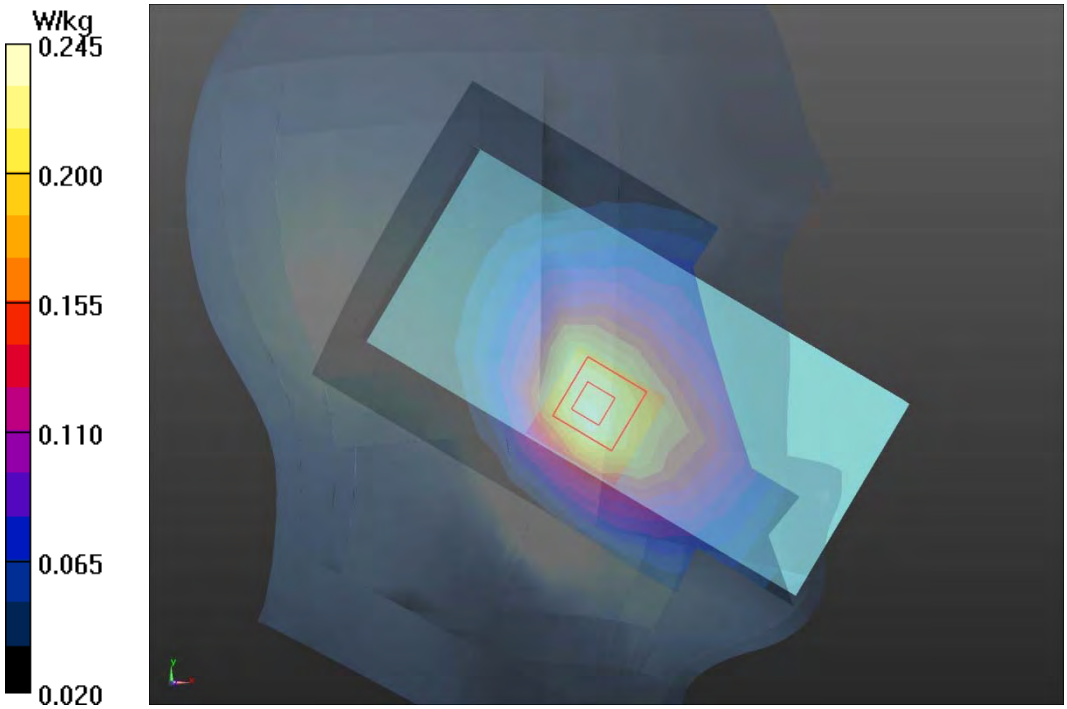
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.647 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.273 W/kg

SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.145 W/kg

Maximum value of SAR (measured) = 0.245 W/kg



Plot 23 LTE Band 2 1RB Left cheek Middle

Date: 4/15/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: 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 SN1317; Calibrated: 2/23/2021

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

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) = 0.096 W/kg

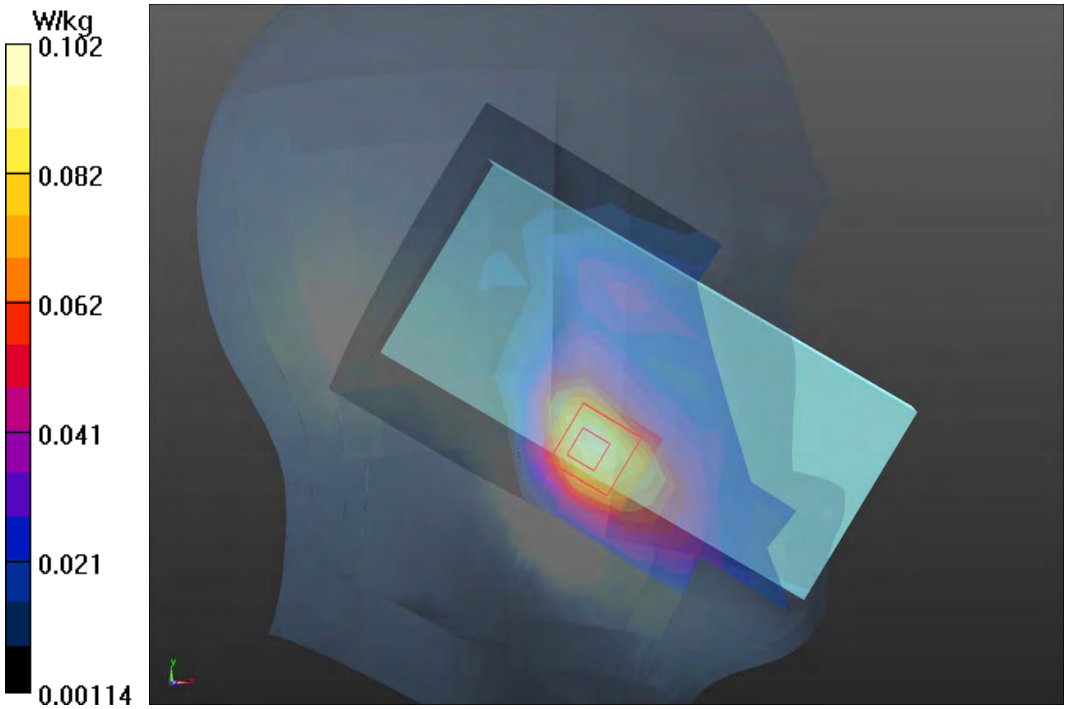
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.313 V/m; Power Drift = 0.173 dB

Peak SAR (extrapolated) = 0.143 W/kg

SAR(1 g) = 0.095 W/kg; SAR(10 g) = 0.059 W/kg

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



Plot 24 LTE Band 4 1RB Left cheek Middle

Date: 3/29/2021

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

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.313 S/m; ε_r = 39.384; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.148 W/kg

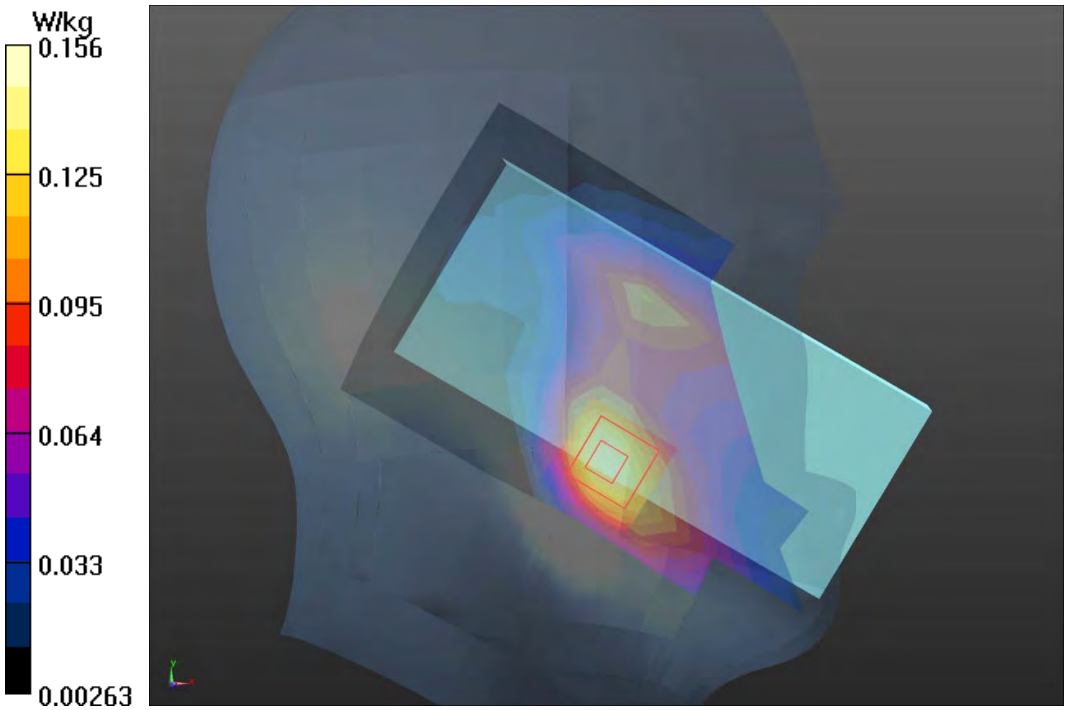
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.925 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.209 W/kg

SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.093 W/kg

Maximum value of SAR (measured) = 0.156 W/kg



Plot 25 LTE Band 5 1RB Left cheek Middle

Date: 3/24/2021

Communication System: UID 0, LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.953 S/m; ε_r = 39.767; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.224 W/kg

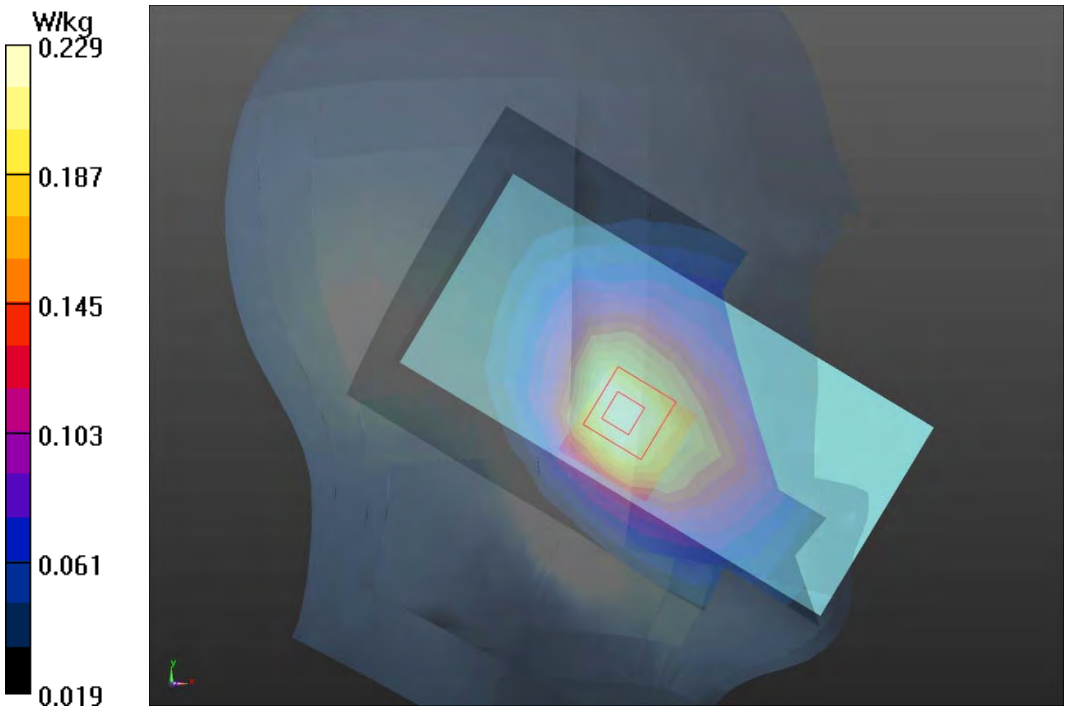
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.988 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.257 W/kg

SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.136 W/kg

Maximum value of SAR (measured) = 0.229 W/kg



Plot 26 LTE Band 7 1RB Left cheek Low

Date: 4/8/2021

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

Medium parameters used: f = 2510 MHz; σ = 1.91 S/m; ε_r = 37.398; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

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

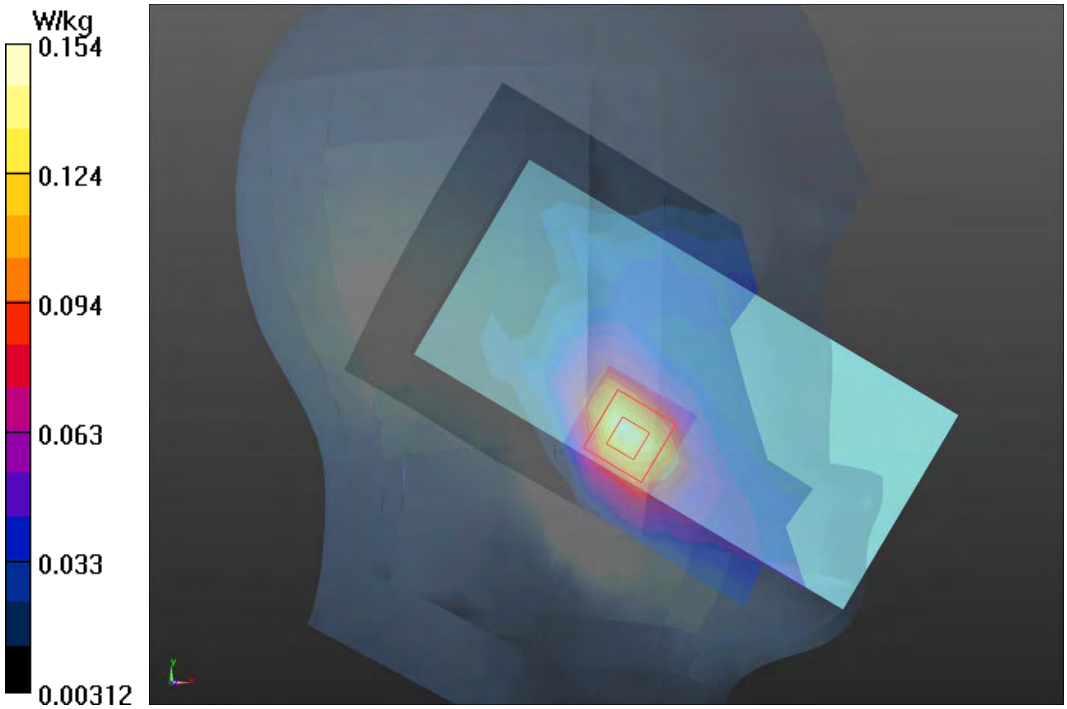
Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.913 V/m; Power Drift = -0.173 dB

Peak SAR (extrapolated) = 0.268 W/kg

SAR(1 g) = 0.140 W/kg; SAR(10 g) = 0.074 W/kg

Maximum value of SAR (measured) = 0.154 W/kg



Plot 27 LTE Band 12 1RB Left Cheek Low

Date: 3/26/2021

Communication System: UID 0, LTE (0); Frequency: 704 MHz;Duty Cycle: 1:1

Medium parameters used: f = 704 MHz; σ = 0.867 S/m; ε_r = 40.747; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.094 W/kg

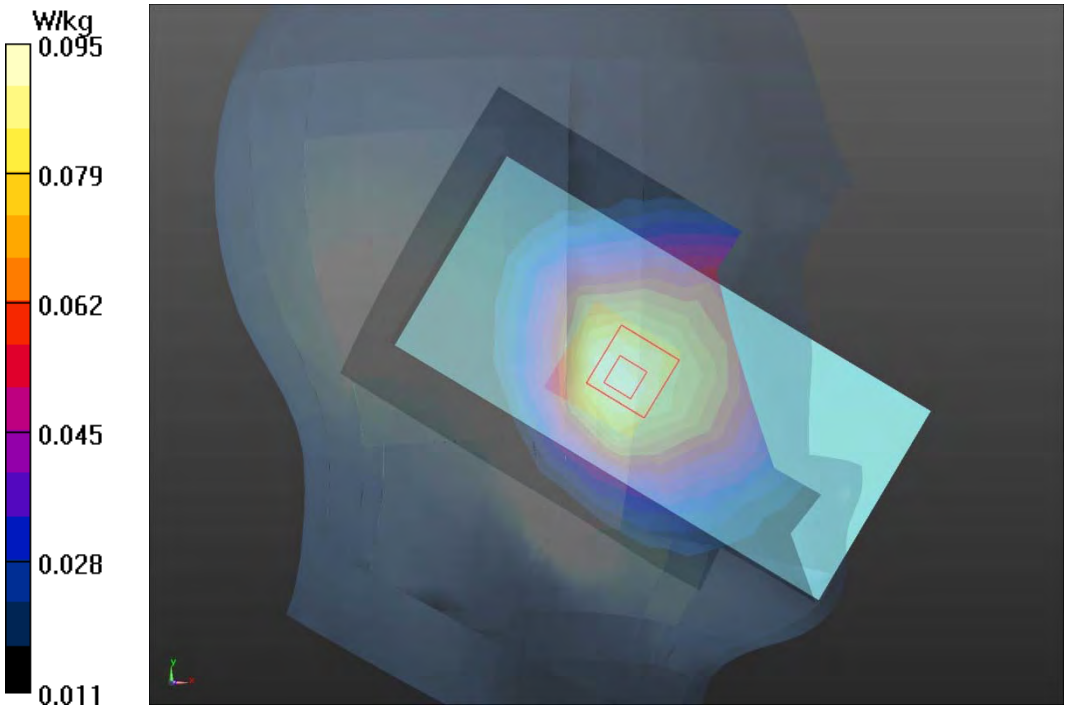
Left Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.197 V/m; Power Drift = 0.145 dB

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.087 W/kg; SAR(10 g) = 0.065 W/kg

Maximum value of SAR (measured) = 0.095 W/kg



Plot 28 LTE Band 17 1RB Left cheek Middle

Date: 3/27/2021

Communication System: UID 0, LTE (0); Frequency: 710 MHz;Duty Cycle: 1:1

Medium parameters used: f = 710 MHz; σ = 0.871 S/m; ε_r = 40.712; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.092 W/kg

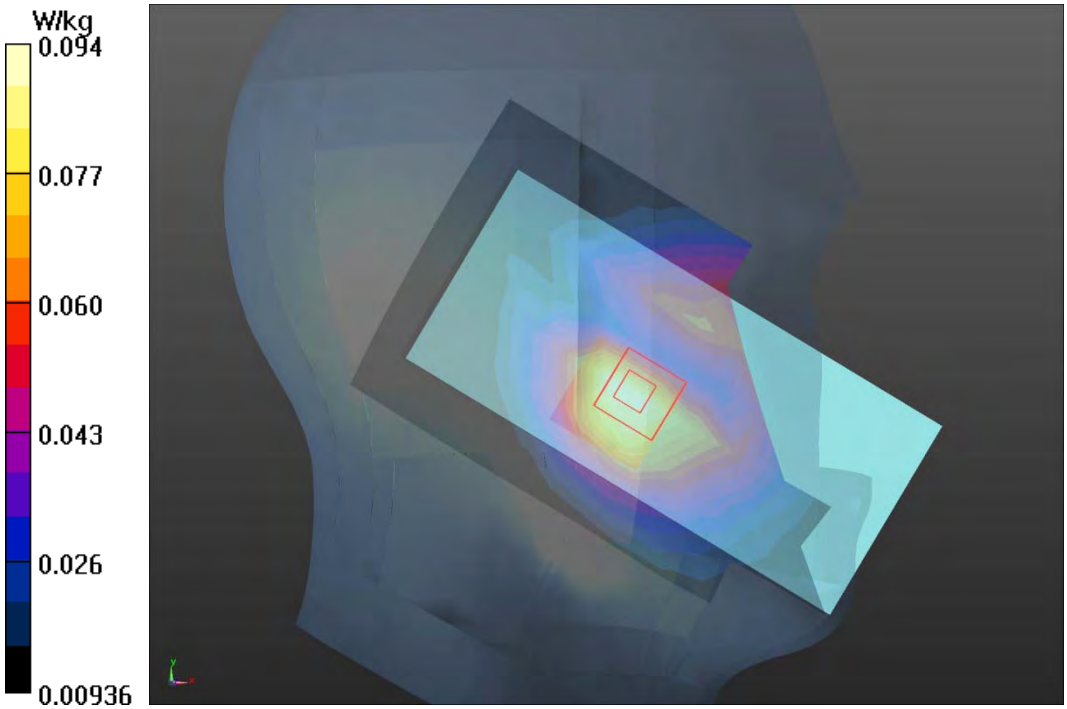
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.151 V/m; Power Drift = 0.109 dB

Peak SAR (extrapolated) = 0.102 W/kg

SAR(1 g) = 0.079 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.094 W/kg



Plot 29 LTE Band 26 1RB Left Cheek High

Date: 3/24/2021

Communication System: UID 0, LTE (0); Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.957 S/m; ε_r = 39.746; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.223 W/kg

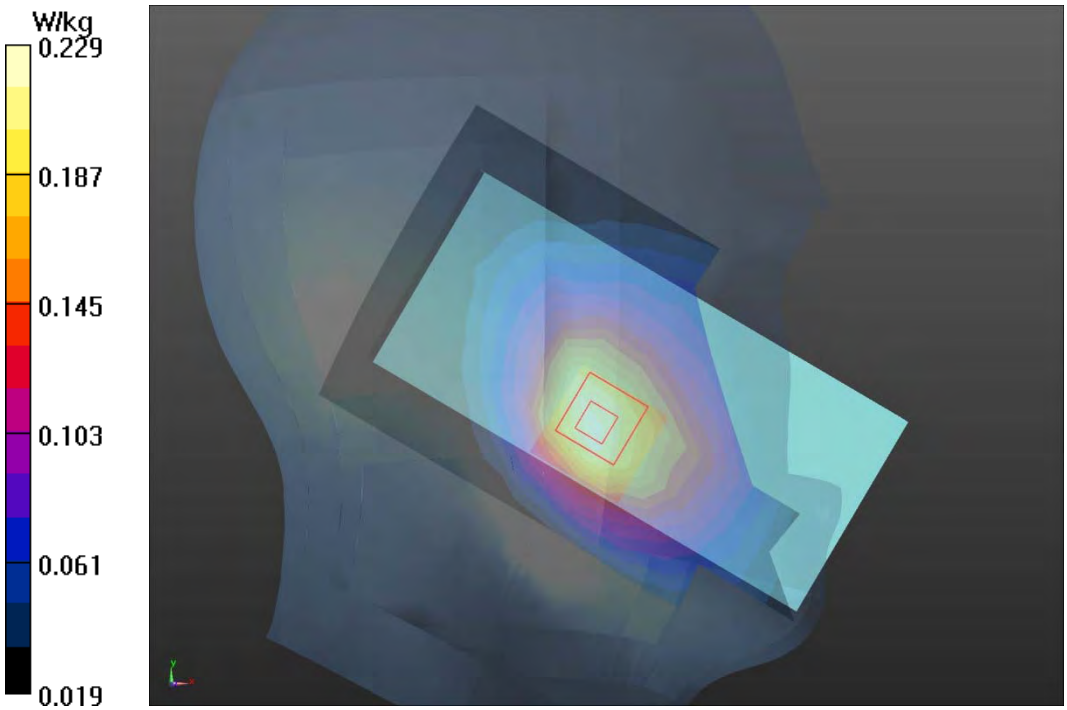
Left Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.234 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.252 W/kg

SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.137 W/kg

Maximum value of SAR (measured) = 0.229 W/kg



Plot 30 LTE Band 38 1RB Left Cheek Low

Date: 4/10/2021

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

Medium parameters used: f = 2580 MHz; σ = 1.995 S/m; ε_r = 37.164; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

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

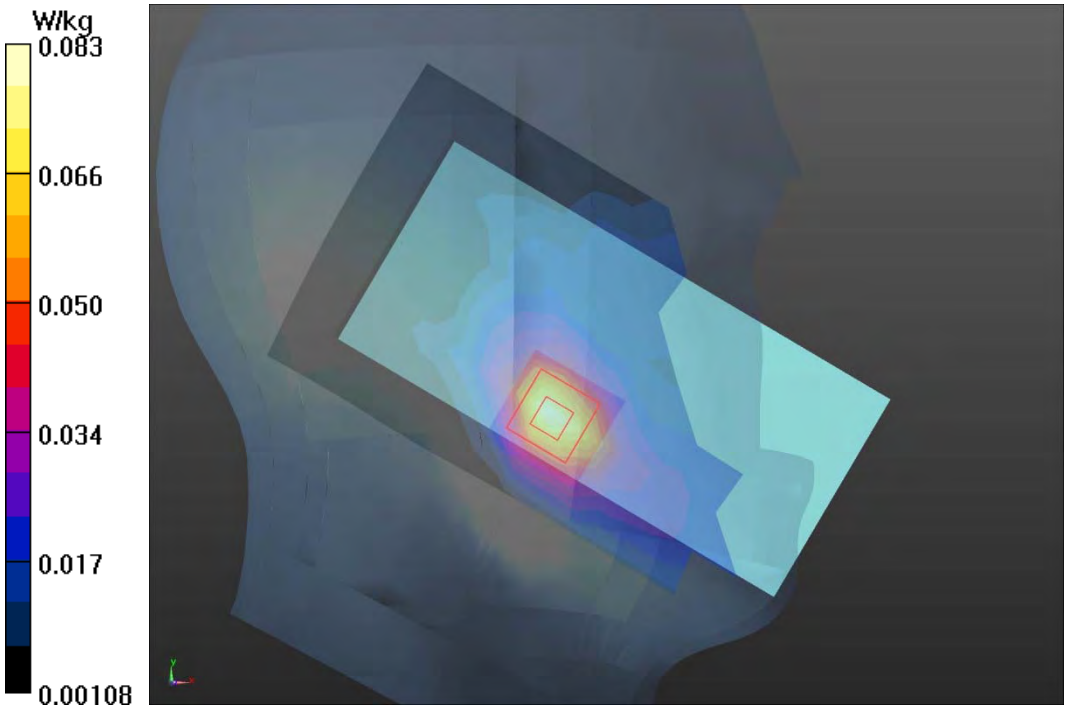
Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.607 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.253 W/kg

SAR(1 g) = 0.074 W/kg; SAR(10 g) = 0.039 W/kg

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



Plot 31 LTE Band 41 1RB Right Cheek High

Date: 4/11/2021

Communication System: UID 0, LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2680 MHz; σ = 2.106 S/m; ε_r = 36.793; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.129 W/kg

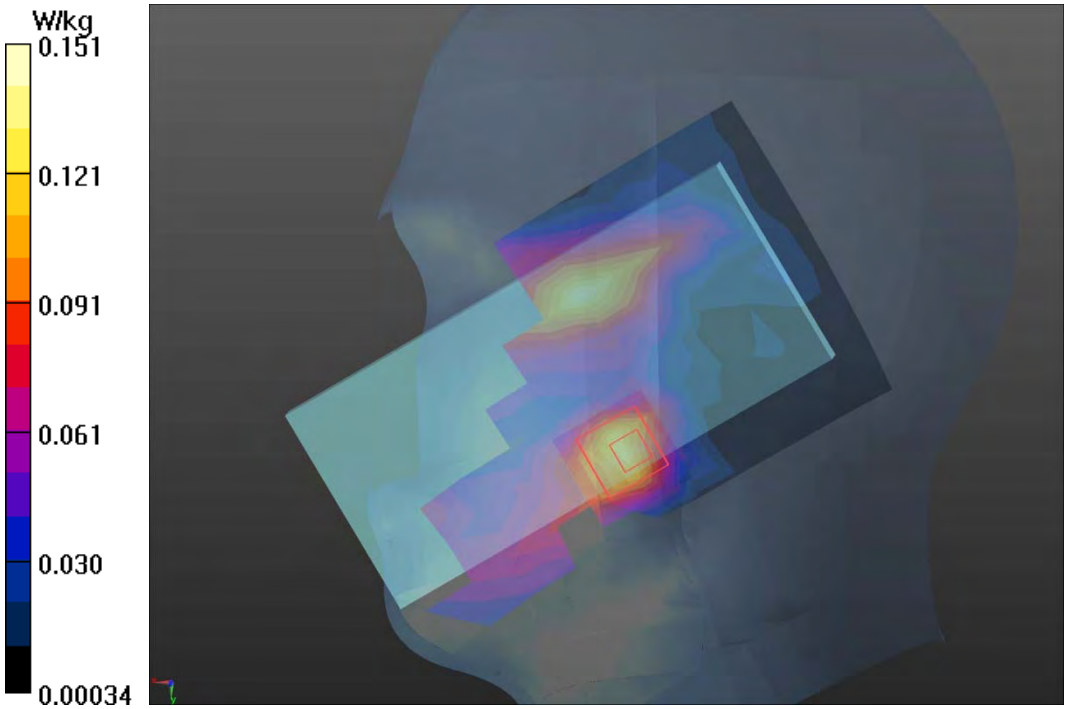
Right Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.790 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.286 W/kg

SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.073 W/kg

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



Plot 32 NR n41 1RB Right Cheek Middle(Ant 5)

Date: 4/12/2021

Communication System: UID 0, 5G NR (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2592.99 MHz; σ = 2.009 S/m; ε_r = 37.118; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.702 W/kg

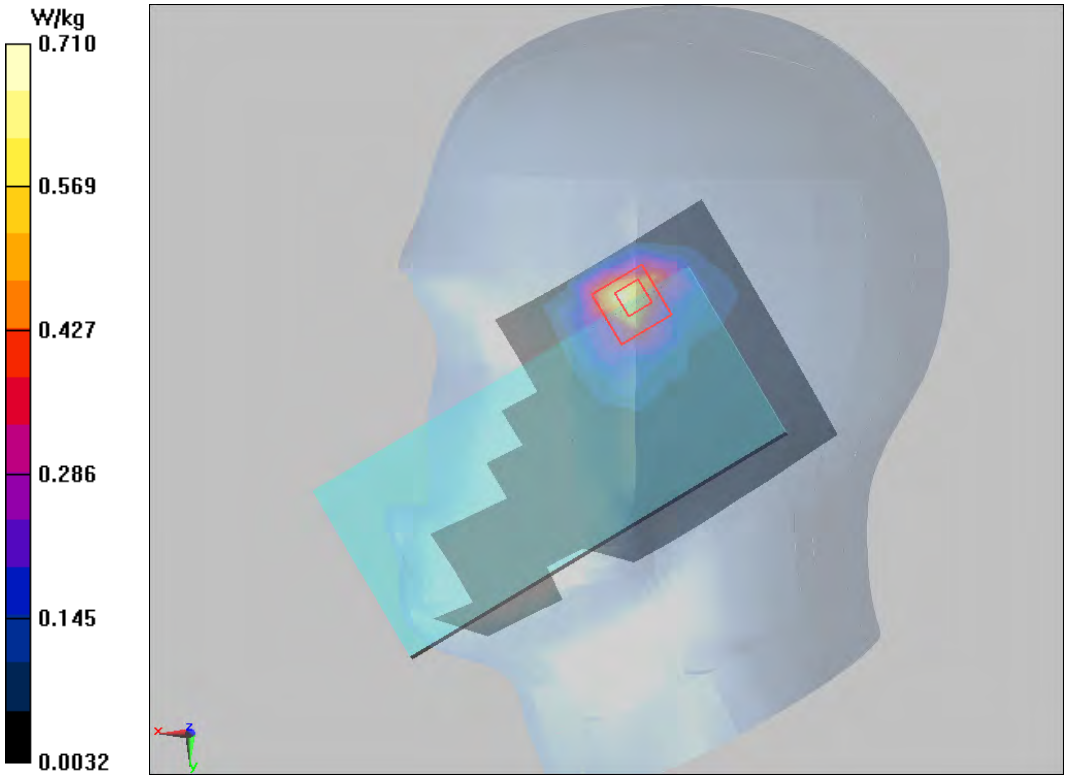
Right Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.871 V/m; Power Drift = 0.098 dB

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 0.674 W/kg; SAR(10 g) = 0.282 W/kg

Maximum value of SAR (measured) = 0.710 W/kg



Plot 33 802.11n HT20 Left cheek Middle(MIMO)

Date: 3/25/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.831 S/m; ε_r = 37.663; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.320 W/kg

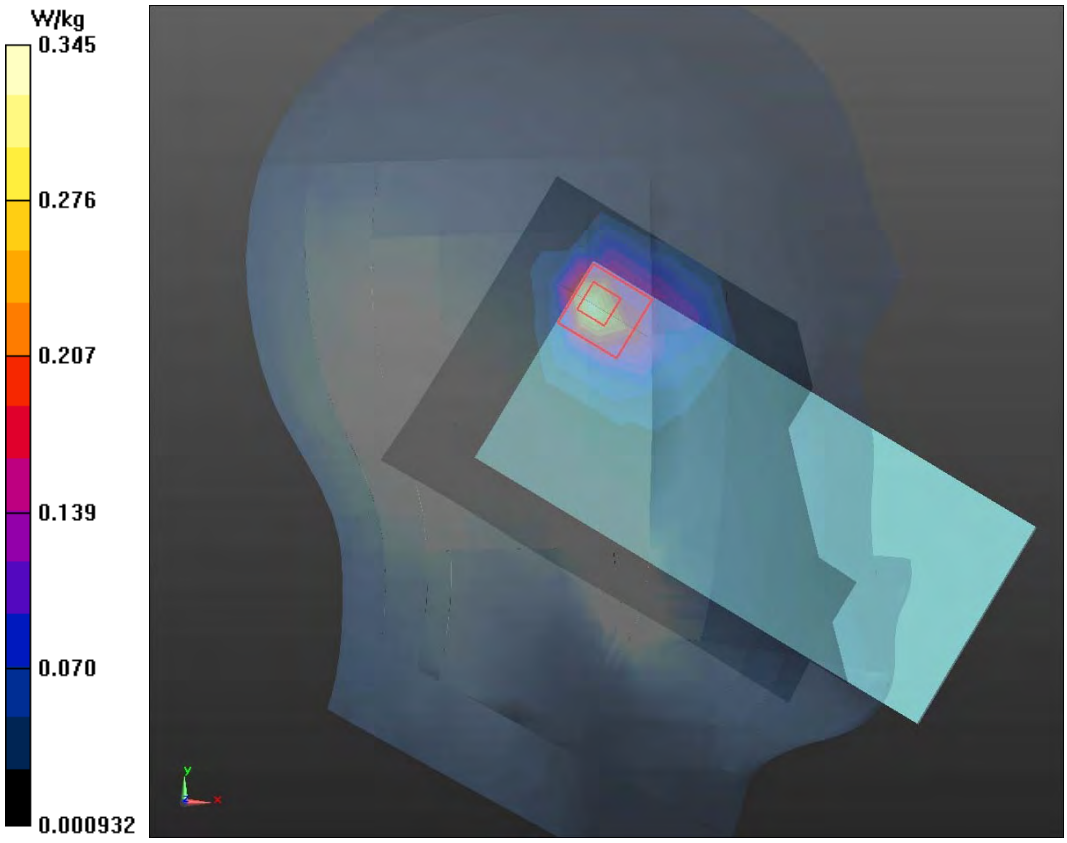
Left Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.784 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.768 W/kg

SAR(1 g) = 0.322 W/kg; SAR(10 g) = 0.137 W/kg

Maximum value of SAR (measured) = 0.345 W/kg



Plot 34 802.11n HT20 U-NII-1 Left Cheek Low(Ant8)

Date: 4/3/2021

Communication System: UID 0, 802.11nHT20 (0); Frequency: 5180 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5180 MHz; σ = 4.75 S/m; ε_r = 36.766; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Left Cheek Low/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.292 W/kg

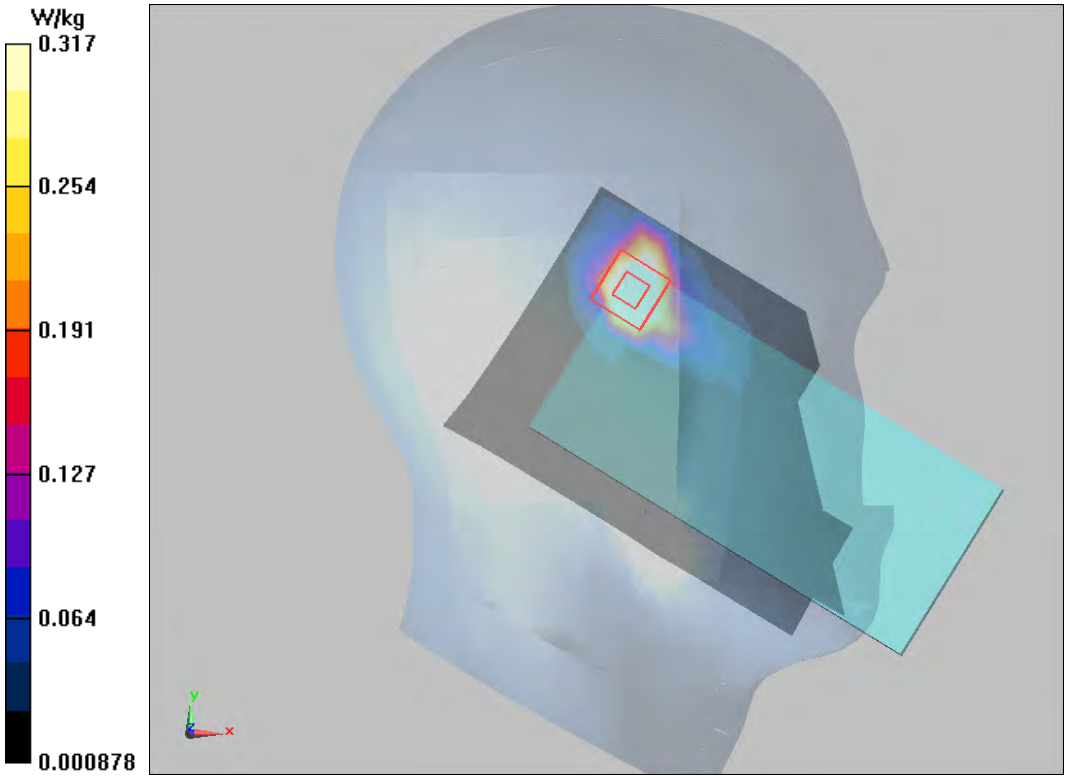
Left Cheek Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.193 V/m; Power Drift = -0.069 dB

Peak SAR (extrapolated) = 0.774 W/kg

SAR(1 g) = 0.279 W/kg; SAR(10 g) = 0.095 W/kg

Maximum value of SAR (measured) = 0.317 W/kg



Plot 35 802.11n HT20 U-NII-2A Left Cheek Low (MIMO)

Date: 4/3/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5280 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5280 MHz; σ = 4.804 S/m; ε_r = 36.71; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Left Cheek Low/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.224 W/kg

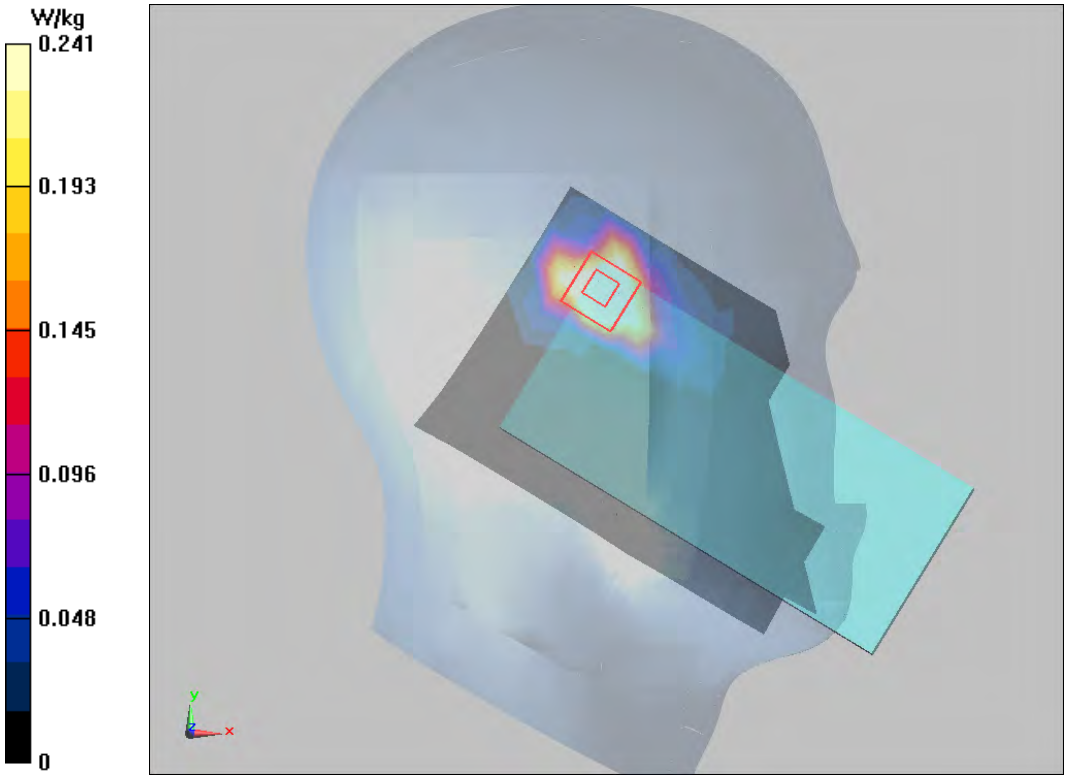
Left Cheek Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.260 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 0.594 W/kg

SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.074 W/kg

Maximum value of SAR (measured) = 0.241 W/kg



Plot 36 802.11n HT20 U-NII-2C Left Tilt Middle (MIMO)

Date: 4/4/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5660 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5660 MHz; σ = 5.32 S/m; ε_r = 35.668; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Left Tilt Middle/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.274 W/kg

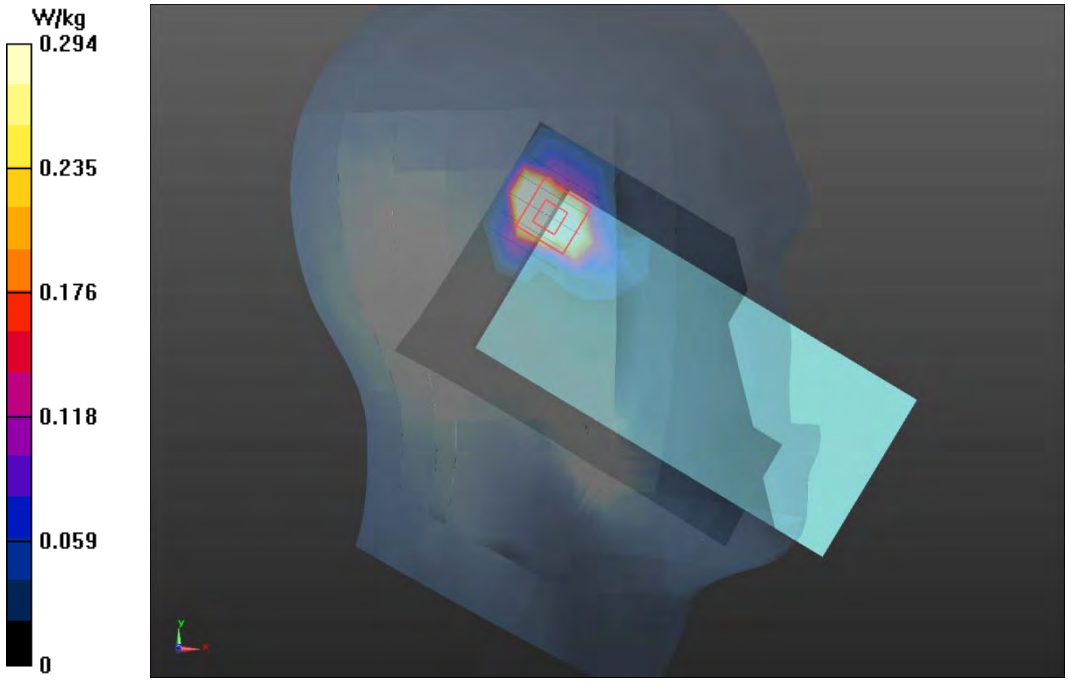
Left Tilt Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.099 dB

Peak SAR (extrapolated) = 0.795 W/kg

SAR(1 g) = 0.250 W/kg; SAR(10 g) = 0.080 W/kg

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



Plot 37 802.11n HT20 U-NII-3 Left Tilt Low (MIMO)

Date: 4/6/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5745 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5745 MHz; σ = 5.48 S/m; ε_r = 35.27; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Left Tilt Low/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.349 W/kg

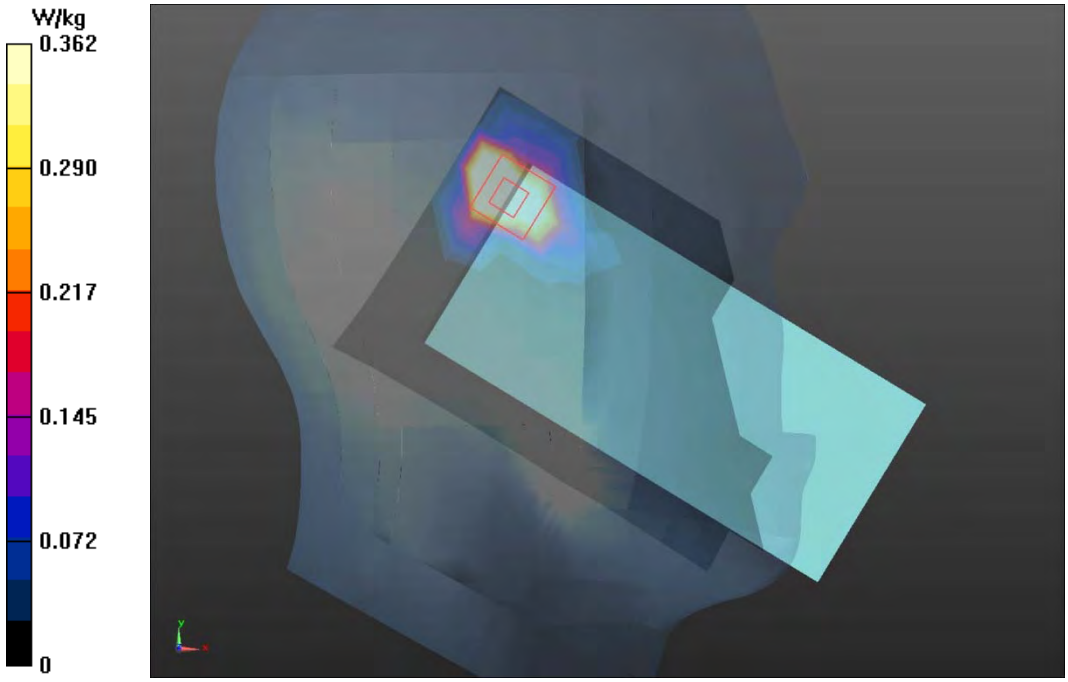
Left Tilt Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.4110 V/m; Power Drift = 0.135 dB

Peak SAR (extrapolated) = 0.945 W/kg

SAR(1 g) = 0.302 W/kg; SAR(10 g) = 0.095 W/kg

Maximum value of SAR (measured) = 0.362 W/kg



Plot 38 Bluetooth Left Cheek Middle

Date: 3/25/2021

Communication System: UID 0, BT (0); Frequency: 2441 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2441 MHz; σ = 1.834 S/m; ε_r = 37.585; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.091 W/kg

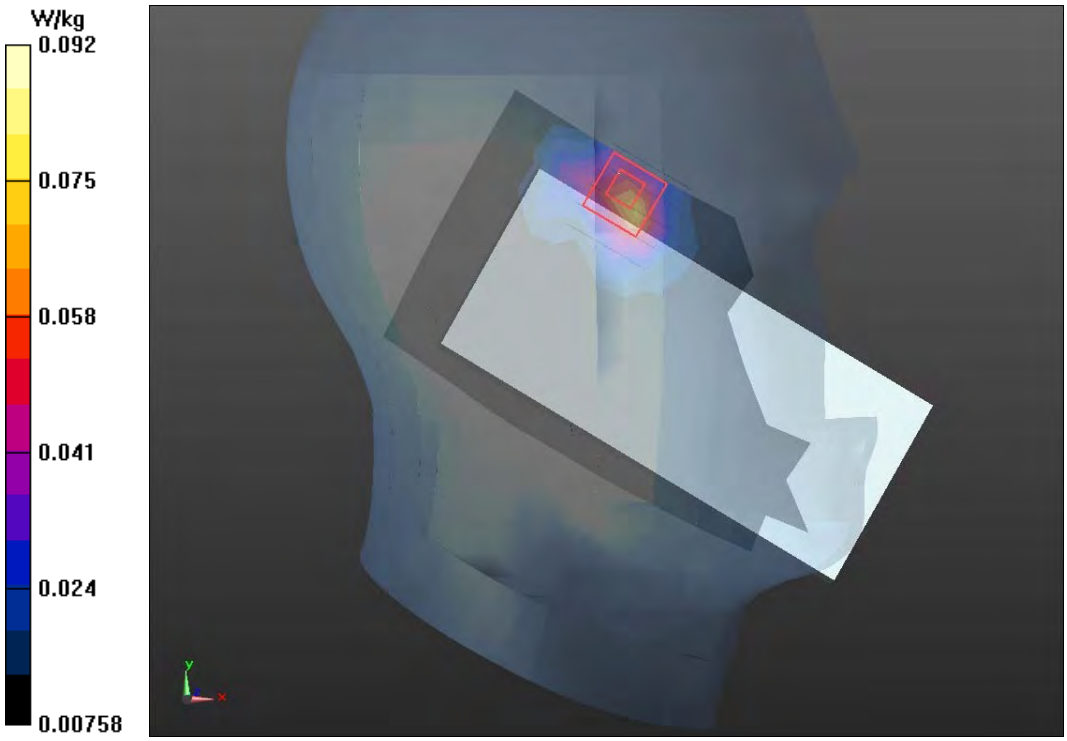
Left Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.364 V/m; Power Drift = -0.105 dB

Peak SAR (extrapolated) = 0.340 W/kg

SAR(1 g) = 0.090 W/kg; SAR(10 g) = 0.039 W/kg

Maximum value of SAR (measured) = 0.092 W/kg



Plot 39 GSM 850 Back Side Middle (Distance 15mm)

Date: 3/23/2021

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

Medium parameters used: f = 837 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.356 W/kg

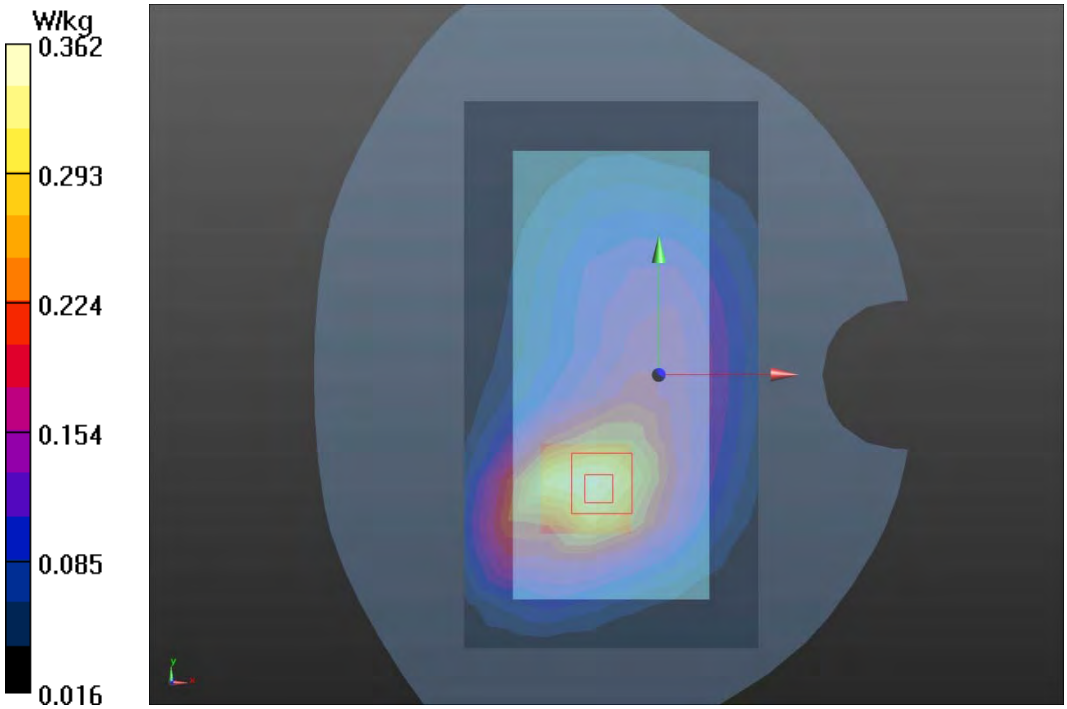
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.84 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.422 W/kg

SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.180 W/kg

Maximum value of SAR (measured) = 0.362 W/kg



Plot 40 GSM 1900 Back Side Middle (Distance 15mm)

Date: 4/9/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.165 W/kg

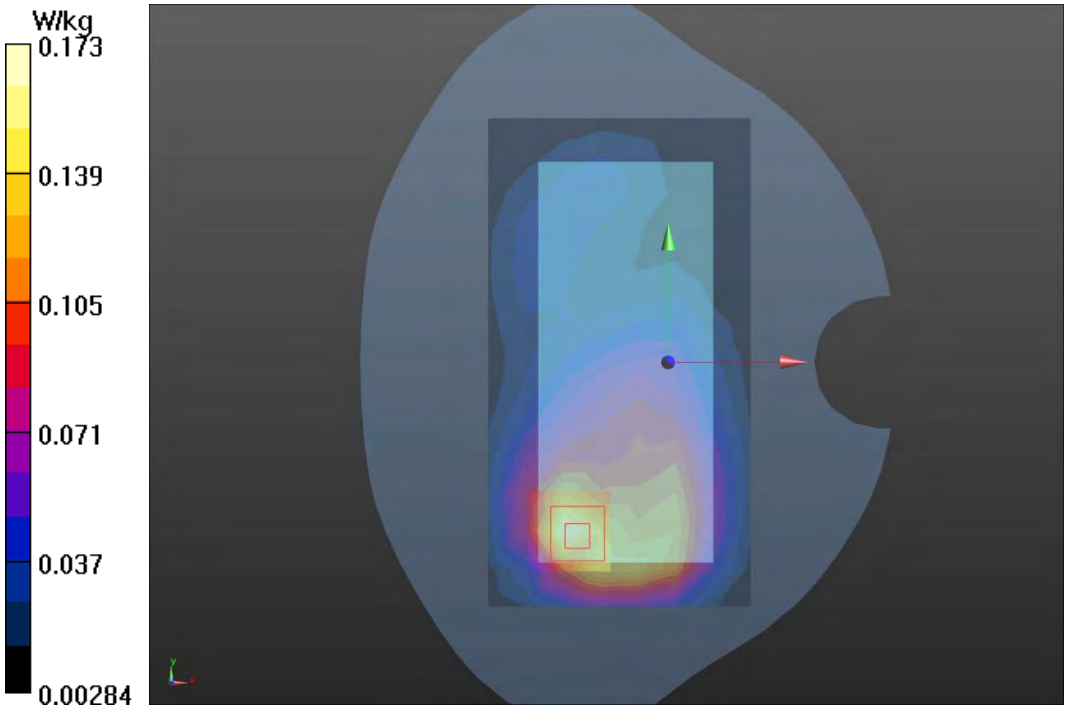
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.790 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.204 W/kg

SAR(1 g) = 0.120 W/kg; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.173 W/kg



Plot 41 UMTS Band II Back Side Middle (Distance 15mm)

Date: 4/9/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.495 W/kg

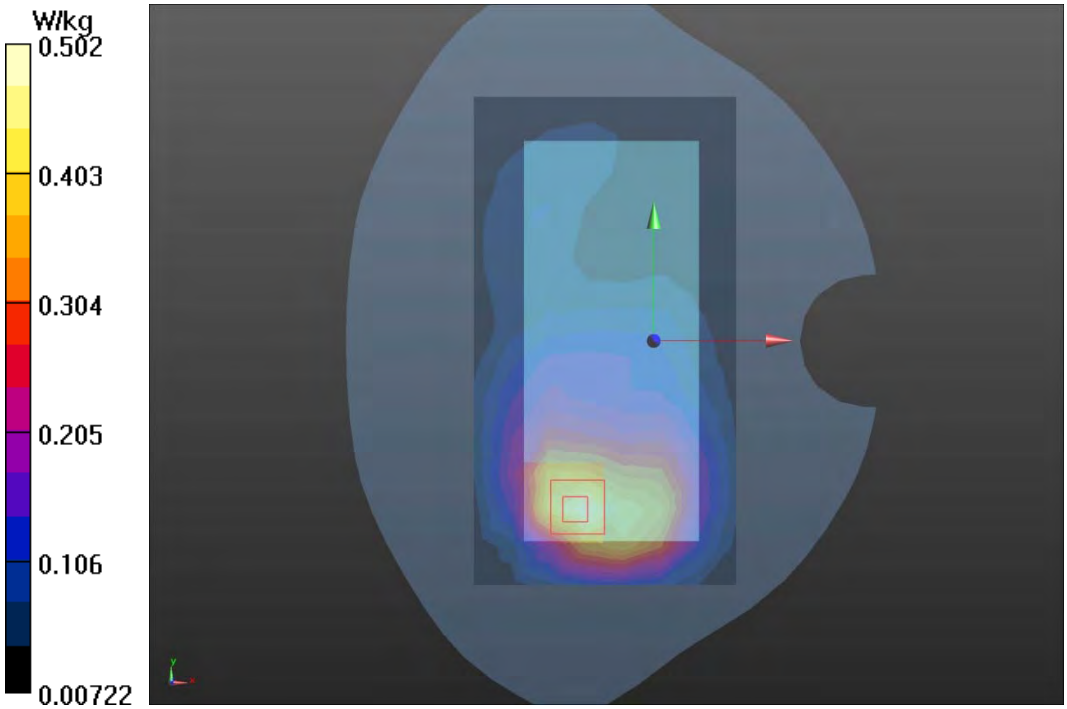
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.192 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.597 W/kg

SAR(1 g) = 0.357 W/kg; SAR(10 g) = 0.216 W/kg

Maximum value of SAR (measured) = 0.502 W/kg



Plot 42 UMTS Band IV Front Side Middle (Distance 15mm)

Date: 3/28/2021

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

Medium parameters used: f = 1732.6 MHz; σ = 1.312 S/m; ε_r = 39.365; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.586 W/kg

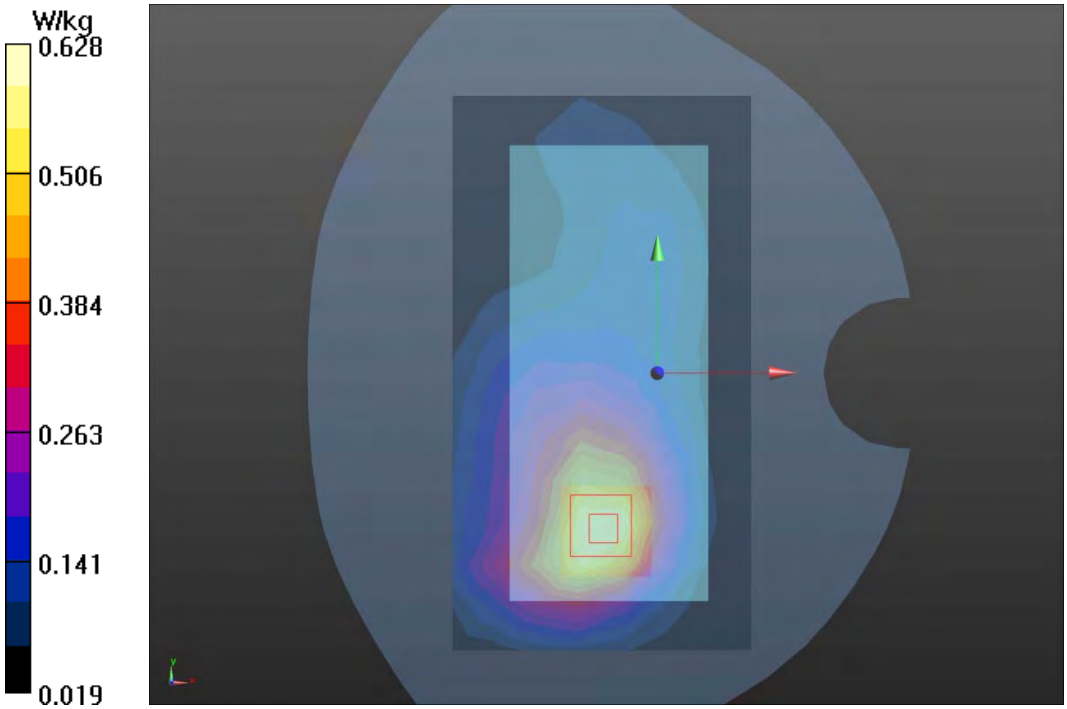
Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.61 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.731 W/kg

SAR(1 g) = 0.454 W/kg; SAR(10 g) = 0.286 W/kg

Maximum value of SAR (measured) = 0.628 W/kg



Plot 43 UMTS Band V Back Side Middle(Distance 15mm)

Date: 3/23/2021

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

Medium parameters used: f = 836.6 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.265 W/kg

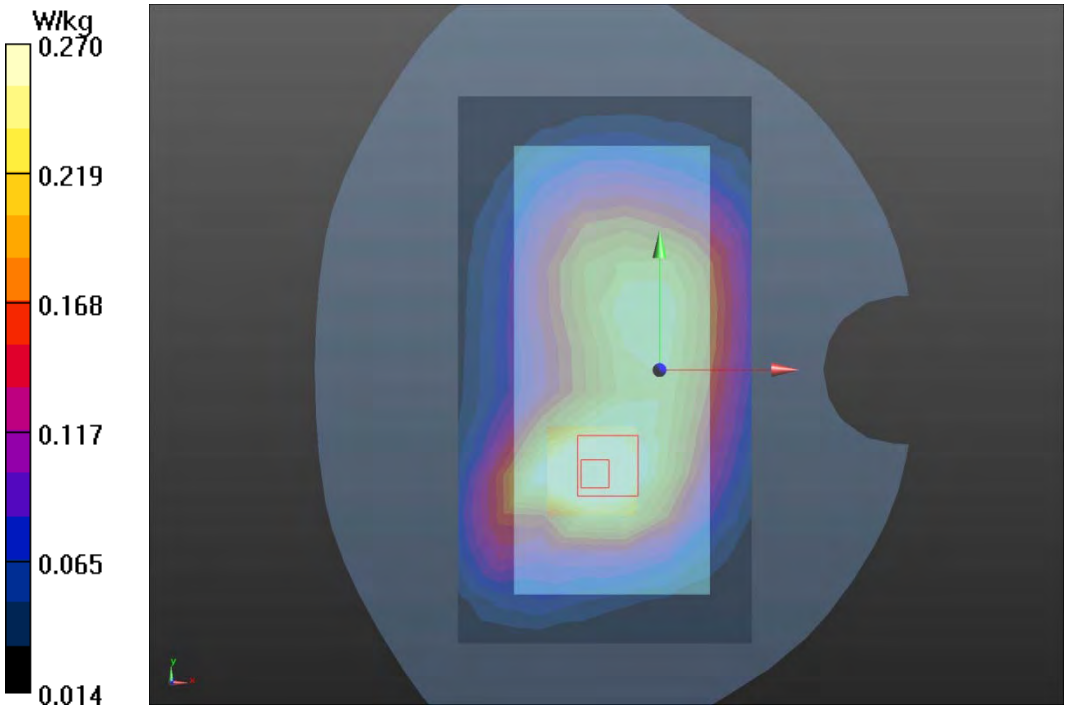
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.48 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 0.338 W/kg

SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.164 W/kg

Maximum value of SAR (measured) = 0.270 W/kg



Plot 44 LTE Band 2 1RB Back Side Middle (Distance 15mm)

Date: 4/15/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.335 W/kg

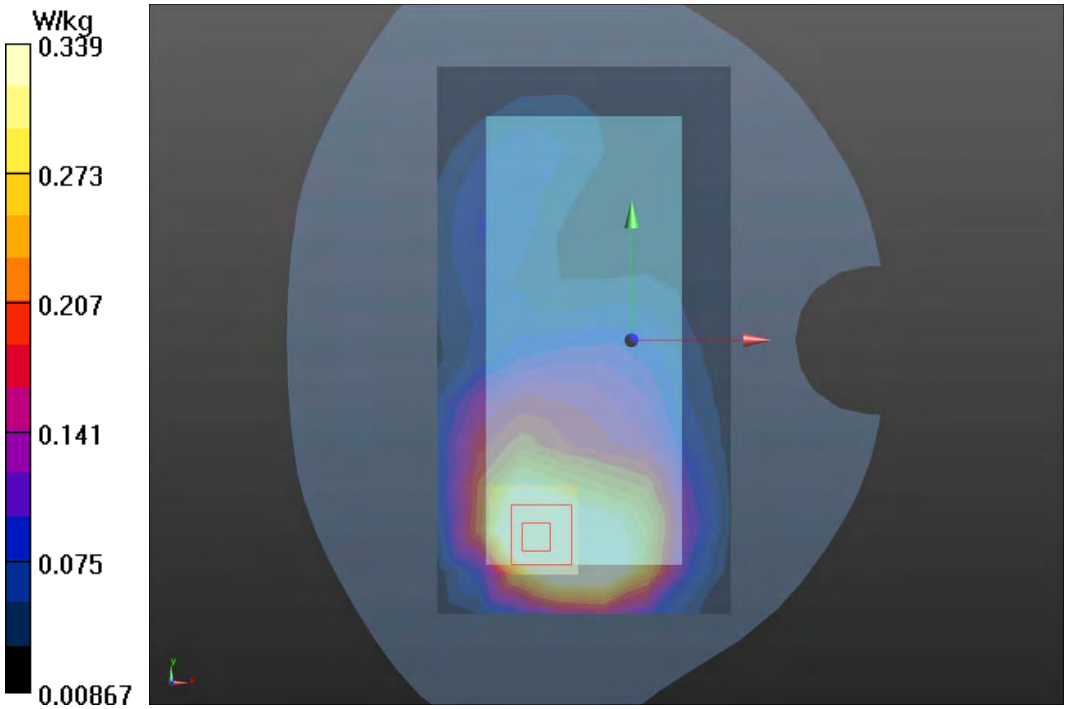
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.963 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.529 W/kg

SAR(1 g) = 0.316 W/kg; SAR(10 g) = 0.190 W/kg

Maximum value of SAR (measured) = 0.339 W/kg



Plot 45 LTE Band 4 1RB Back Side Middle (Distance 15mm)

Date: 3/29/2021

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

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.313 S/m; ε_r = 39.384; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.428 W/kg

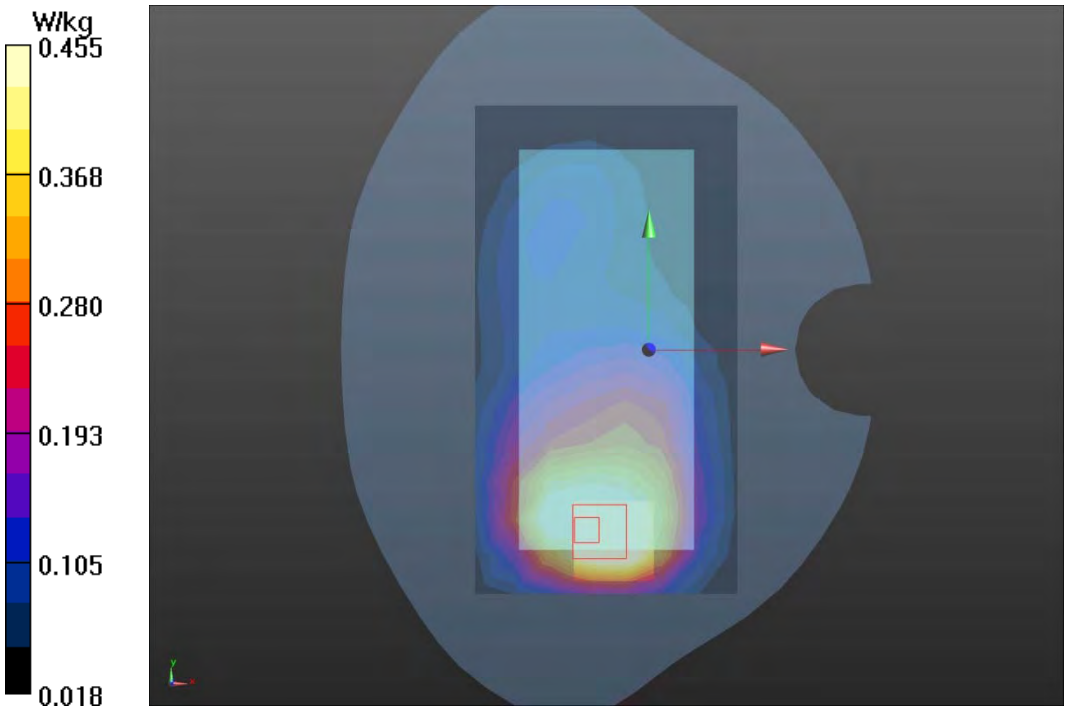
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.256 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.628 W/kg

SAR(1 g) = 0.389 W/kg; SAR(10 g) = 0.248 W/kg

Maximum value of SAR (measured) = 0.455 W/kg



Plot 46 LTE Band 5 1RB Back Side Middle (Distance 15mm)

Date: 3/24/2021

Communication System: UID 0, LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.953 S/m; ε_r = 39.767; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

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

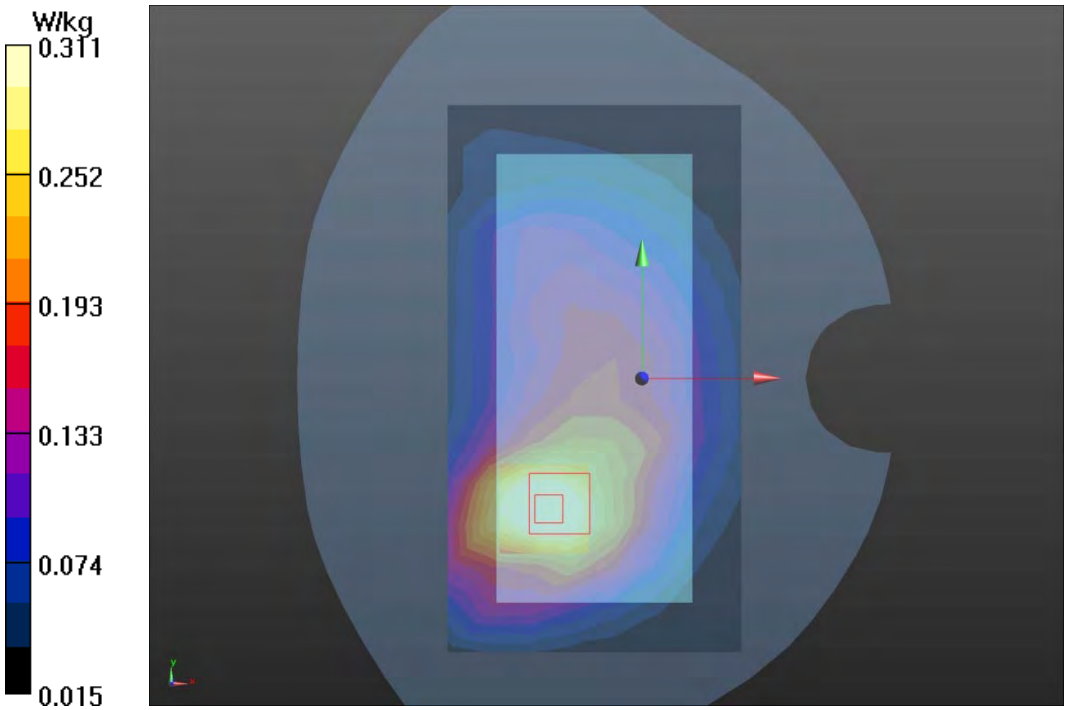
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.18 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.685 W/kg

SAR(1 g) = 0.260 W/kg; SAR(10 g) = 0.176 W/kg

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



Plot 47 LTE Band 7 1RB Back Side Low (Distance 15mm)

Date: 4/8/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.570 W/kg

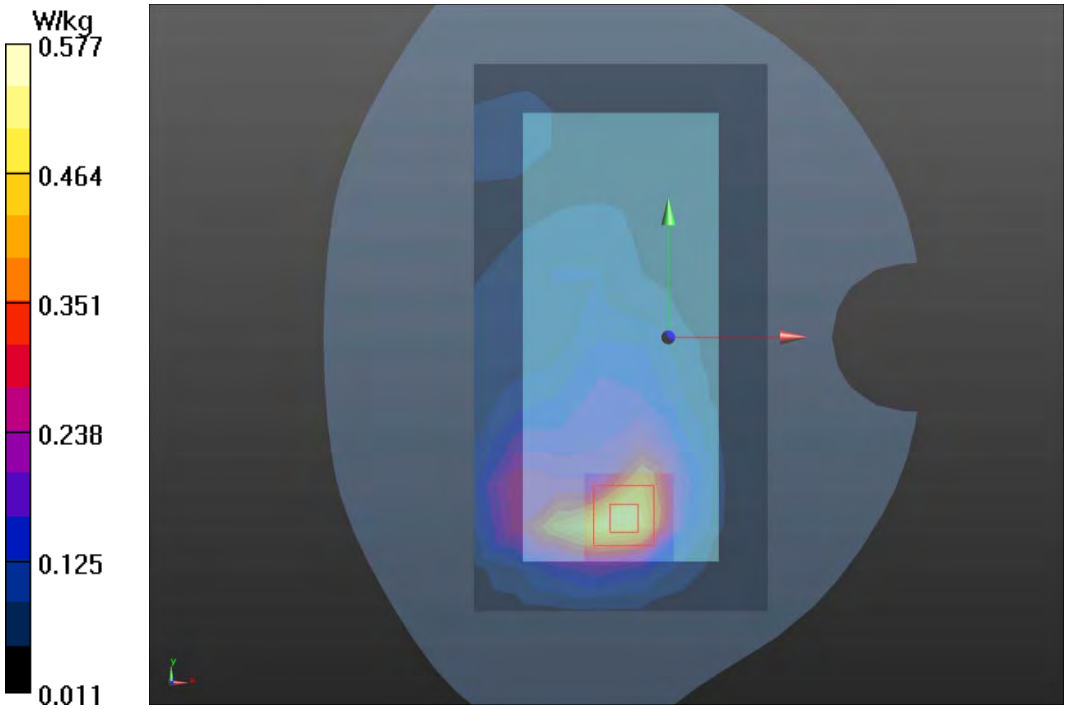
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.07 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.553 W/kg; SAR(10 g) = 0.296 W/kg

Maximum value of SAR (measured) = 0.577 W/kg



Plot 48 LTE Band 12 1RB Back Side Low (Distance 15mm)

Date: 3/26/2021

Communication System: UID 0, LTE (0); Frequency: 704 MHz;Duty Cycle: 1:1

Medium parameters used: f = 704 MHz; σ = 0.867 S/m; ε_r = 40.747; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

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

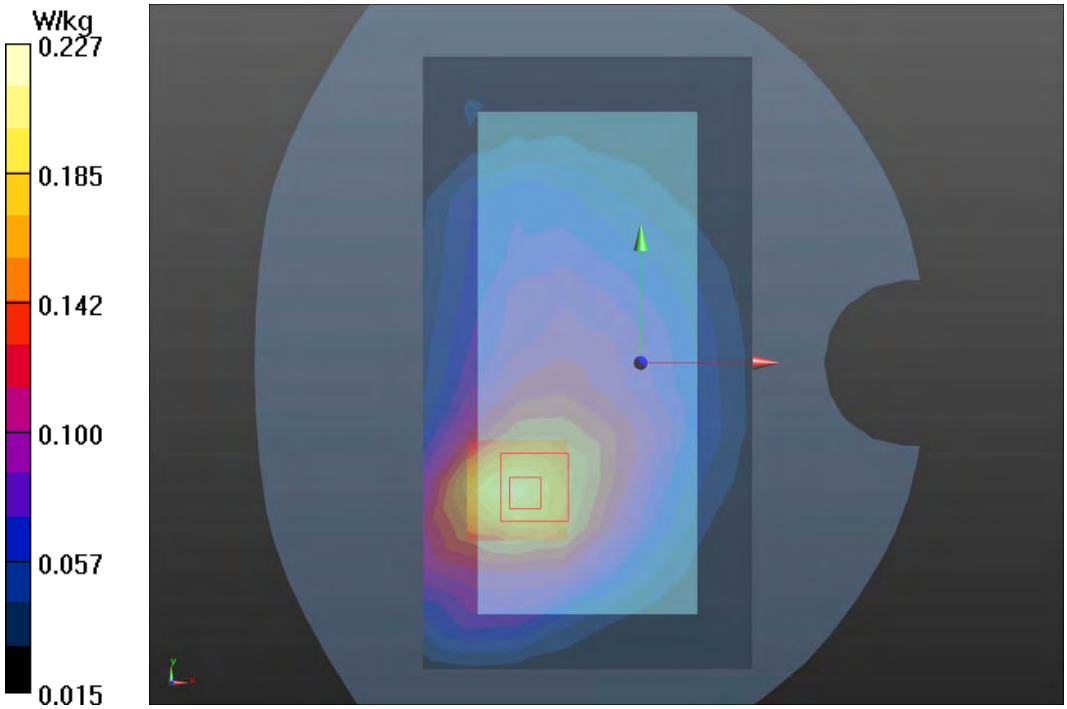
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.70 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.309 W/kg

SAR(1 g) = 0.208 W/kg; SAR(10 g) = 0.145 W/kg

Maximum value of SAR (measured) = 0.227 W/kg



Plot 49 LTE Band 17 1RB Back Side Middle (Distance 15mm)

Date: 3/27/2021

Communication System: UID 0, LTE (0); Frequency: 710 MHz;Duty Cycle: 1:1

Medium parameters used: f = 710 MHz; σ = 0.871 S/m; ε_r = 40.712; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.296 W/kg

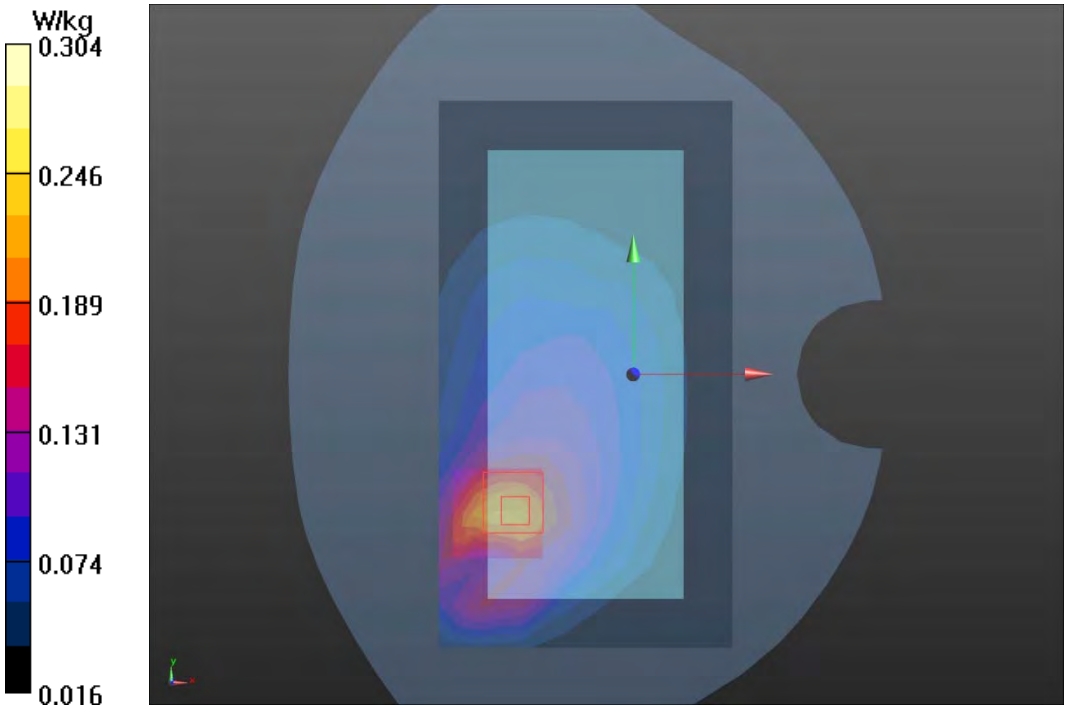
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.30 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.163 W/kg

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



Plot 50 LTE Band 26 1RB Back Side High (Distance 15mm)

Date: 3/24/2021

Communication System: UID 0, LTE (0); Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.957 S/m; ε_r = 39.746; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.344 W/kg

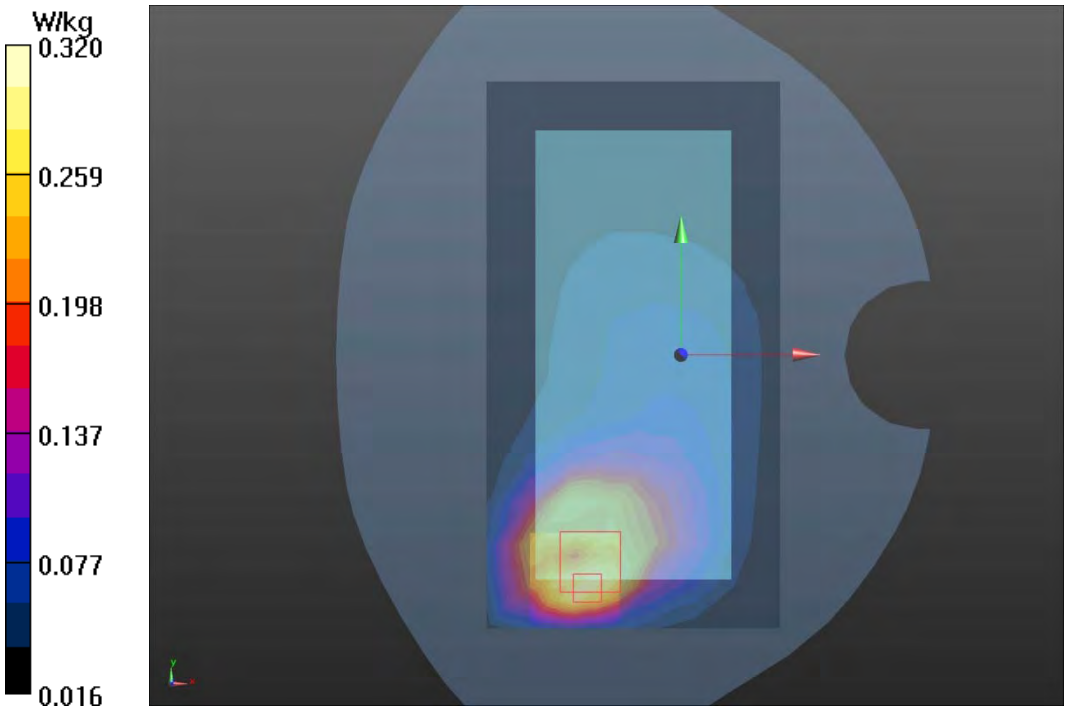
Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.61 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 0.413 W/kg

SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.366 W/kg



Plot 51 LTE Band 38 1RB Back Side Low (Distance 15mm)

Date: 4/10/2021

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

Medium parameters used: f = 2580 MHz; σ = 1.995 S/m; ε_r = 37.164; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.324 W/kg

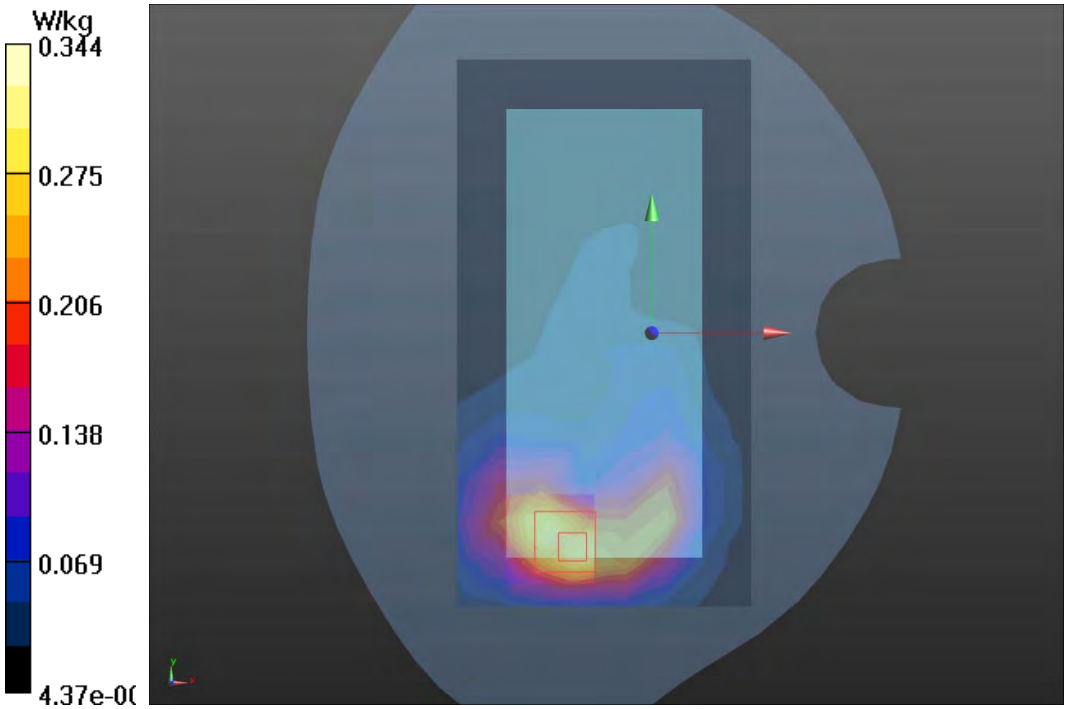
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.535 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.603 W/kg

SAR(1 g) = 0.295 W/kg; SAR(10 g) = 0.158 W/kg

Maximum value of SAR (measured) = 0.344 W/kg



Plot 52 LTE Band 41 1RB Back Side High (Distance 15mm)

Date: 4/10/2021

Communication System: UID 0, LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2680 MHz; σ = 2.106 S/m; ε_r = 36.793; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.326 W/kg

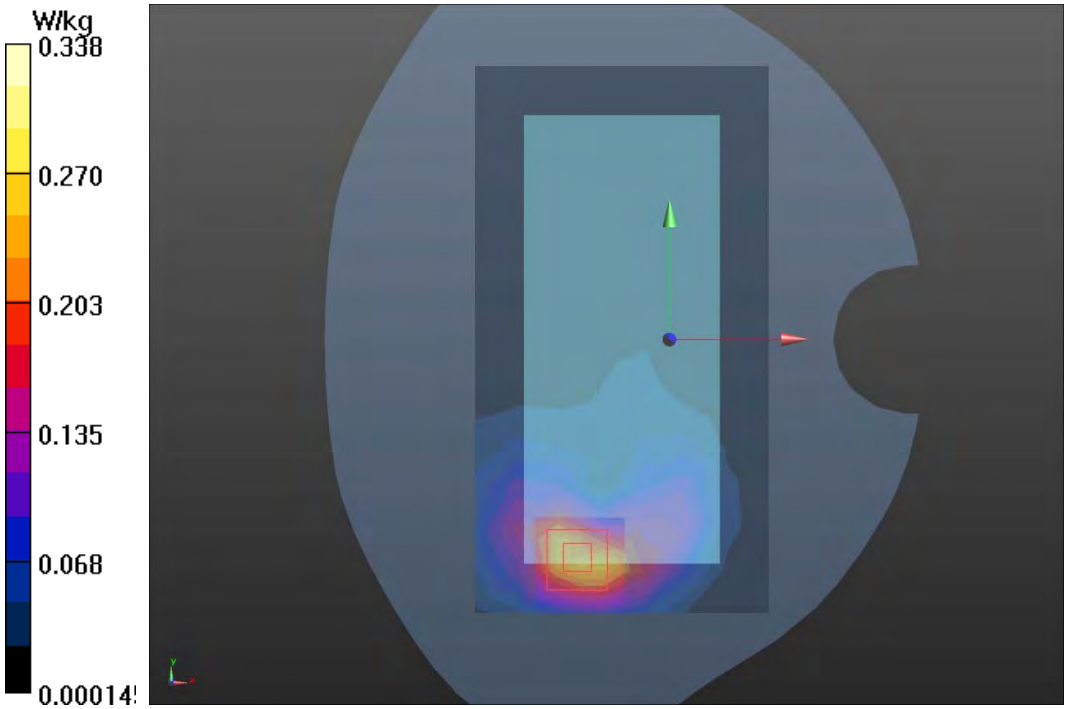
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.307 V/m; Power Drift = 0.119 dB

Peak SAR (extrapolated) = 0.365 W/kg

SAR(1 g) = 0.293 W/kg; SAR(10 g) = 0.146 W/kg

Maximum value of SAR (measured) = 0.338 W/kg



Plot 53 NR n41 1RB Front Side Middle (Distance 15mm,Ant2)

Date: 4/11/2021

Communication System: UID 0, 5G NR (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2592.99 MHz; σ = 2.009 S/m; ε_r = 37.118; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.271 W/kg

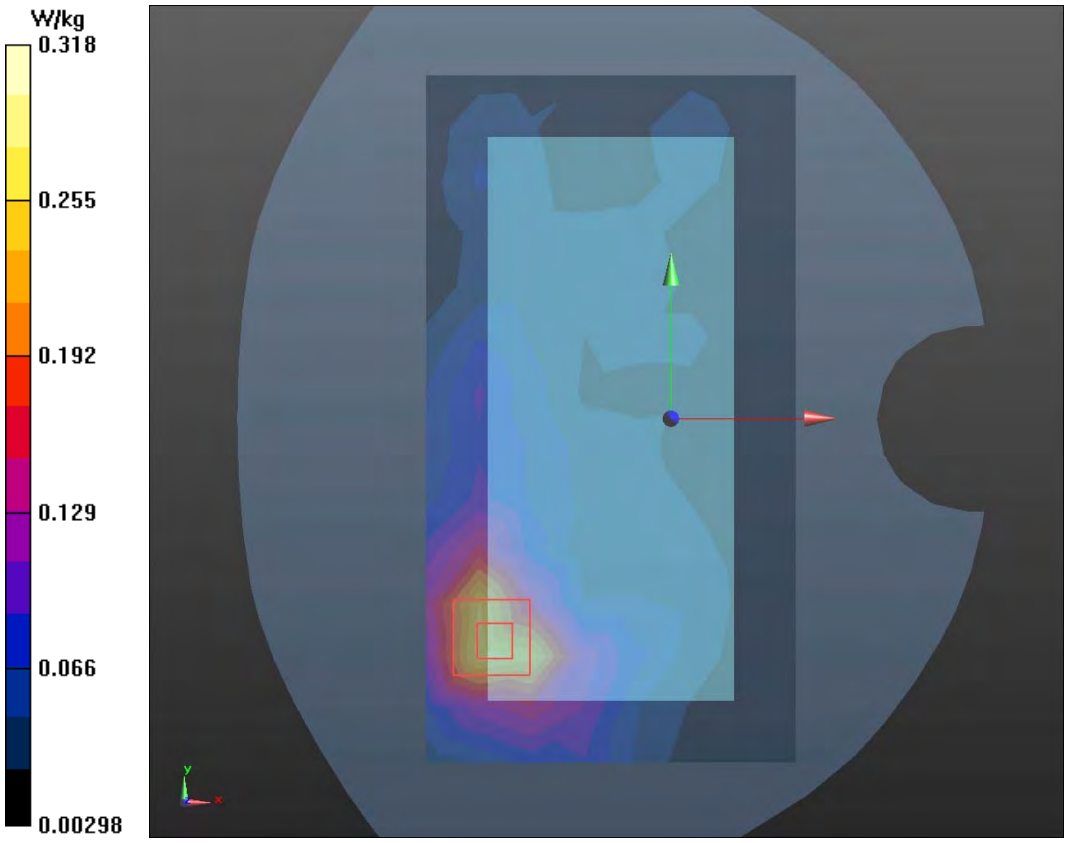
Front Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.655 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.397 W/kg

SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.099 W/kg

Maximum value of SAR (measured) = 0.318 W/kg



Plot 54 802.11b Front Side Middle (Distance 15mm,MIMO)

Date: 3/25/2021

Communication System: UID 0, 802.11n HT40 (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.831 S/m; ε_r = 37.663; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.0665 W/kg

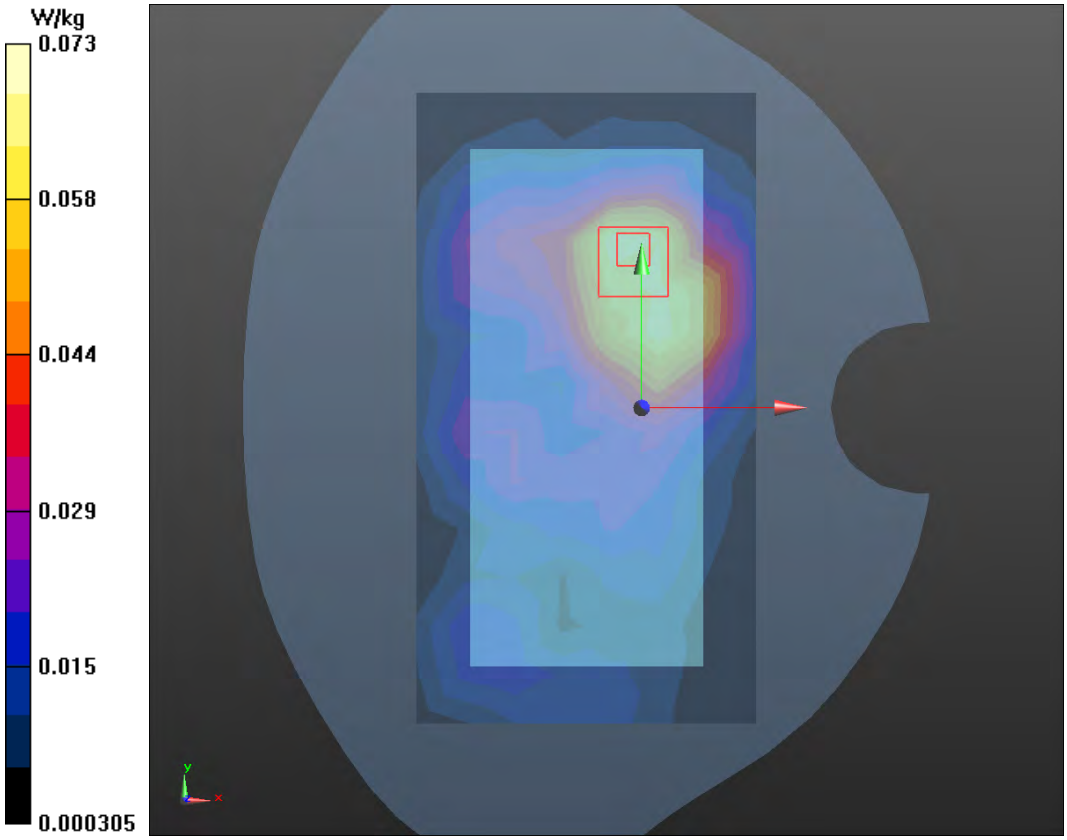
Front Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.097 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.135 W/kg

SAR(1 g) = 0.068 W/kg; SAR(10 g) = 0.036 W/kg

Maximum value of SAR (measured) = 0.073 W/kg



Plot 55 802.11a U-NII-1 Back Side Middle (Distance 15mm,Ant 8)

Date: 4/3/2021

Communication System: UID 0, 802.11a (0); Frequency: 5180 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5180 MHz; σ = 4.75 S/m; ε_r = 36.766; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side Middle/Area Scan(12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.204 W/kg

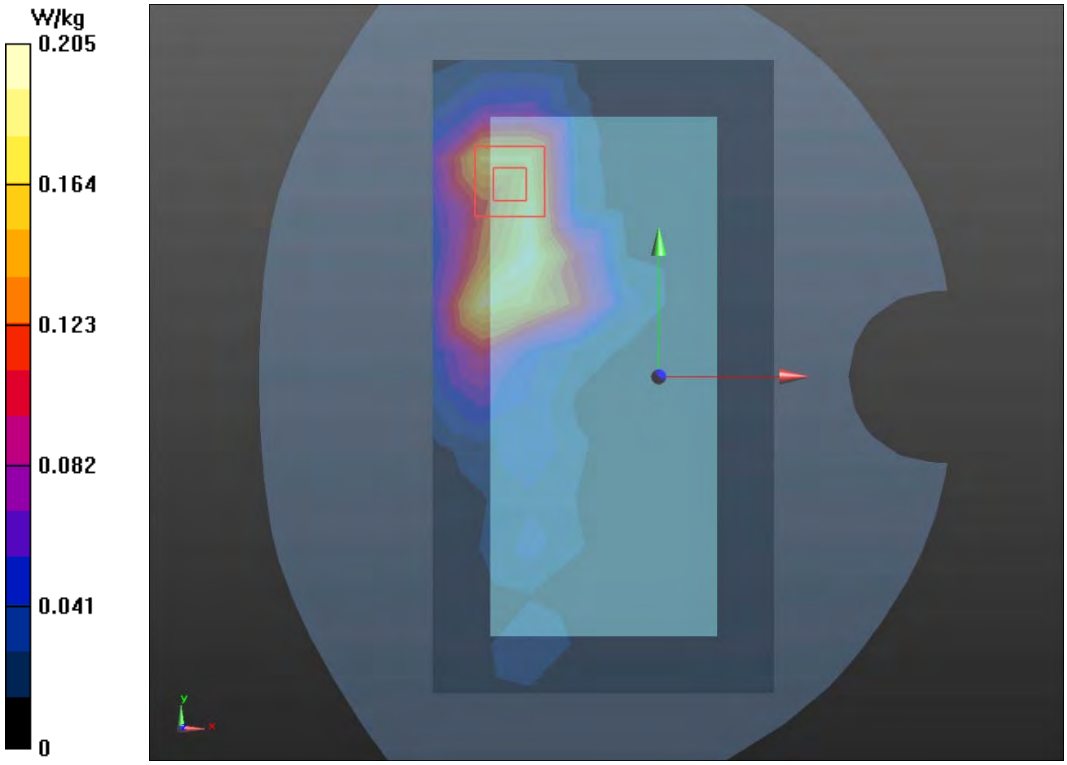
Back Side Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.062 dB

Peak SAR (extrapolated) = 0.427 W/kg

SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.083 W/kg

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



Plot 56 802.11a U-NII-2A Back Side High (Distance 15mm,Ant 8)

Date: 4/3/2021

Communication System: UID 0, 802.11a (0); Frequency: 5320 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5320 MHz; σ = 4.95 S/m; ε_r = 36.328; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side High/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.343 W/kg

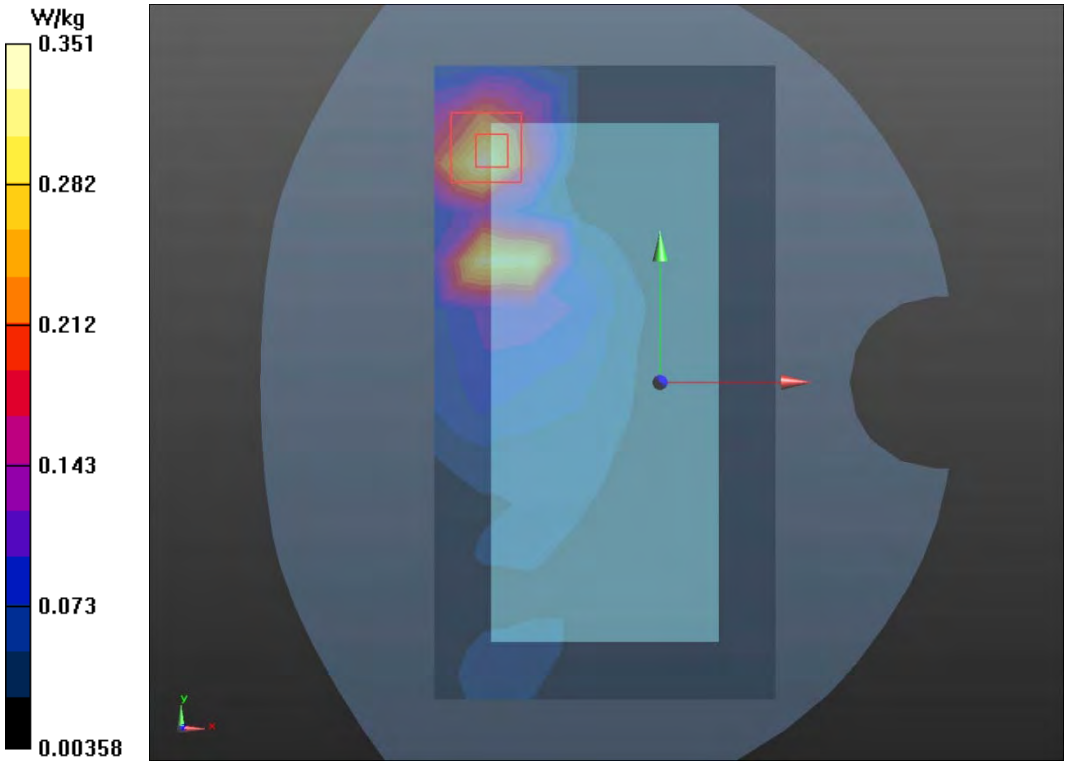
Back Side High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.440 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.681 W/kg

SAR(1 g) = 0.180 W/kg; SAR(10 g) = 0.077 W/kg

Maximum value of SAR (measured) = 0.351 W/kg



Plot 57 802.11a U-NII-2C Back Side Middle (Distance 15mm,Ant 8)

Date: 4/4/2021

Communication System: UID 0, 802.11a (0); Frequency: 5580 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5580 MHz; σ = 5.258 S/m; ε_r = 35.664; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side Middle/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

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

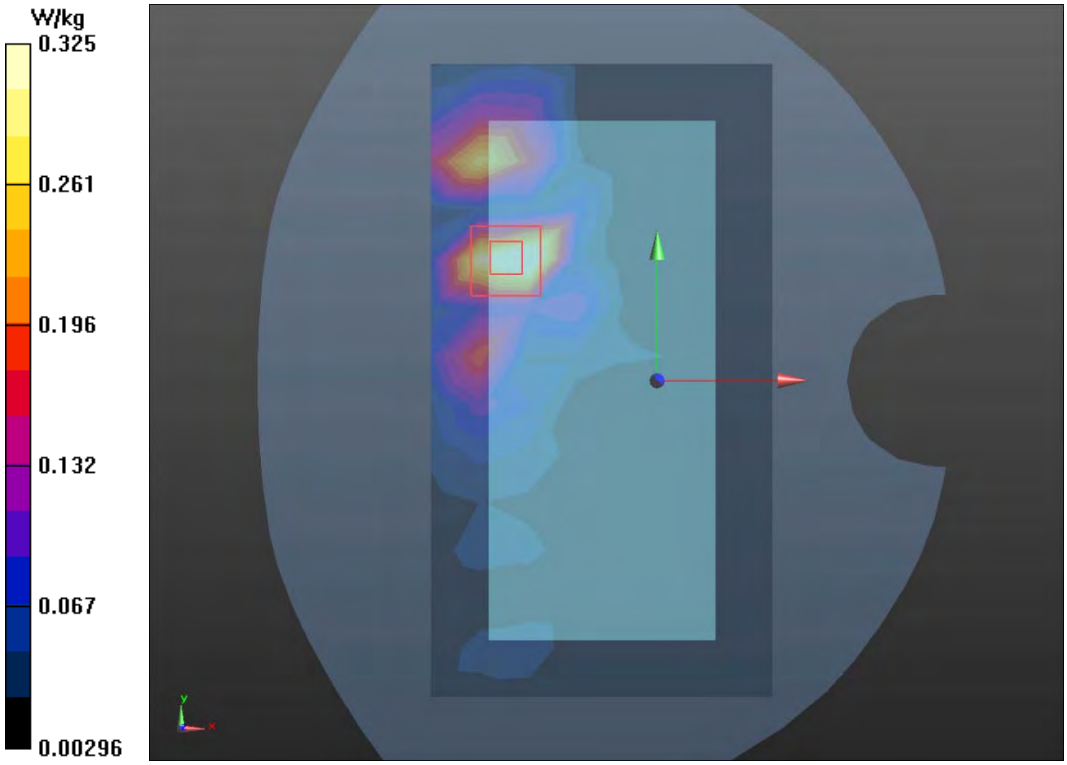
Back Side Middle/Zoom Scan(7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.741 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.683 W/kg

SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.057 W/kg

Maximum value of SAR (measured) = 0.325 W/kg



Plot 58 802.11a U-NII-3 Front Side Low (Distance 15mm,Ant 8)

Date: 4/6/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5745 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5745 MHz; σ = 5.48 S/m; ε_r = 35.27; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Front Side Low/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.382 W/kg

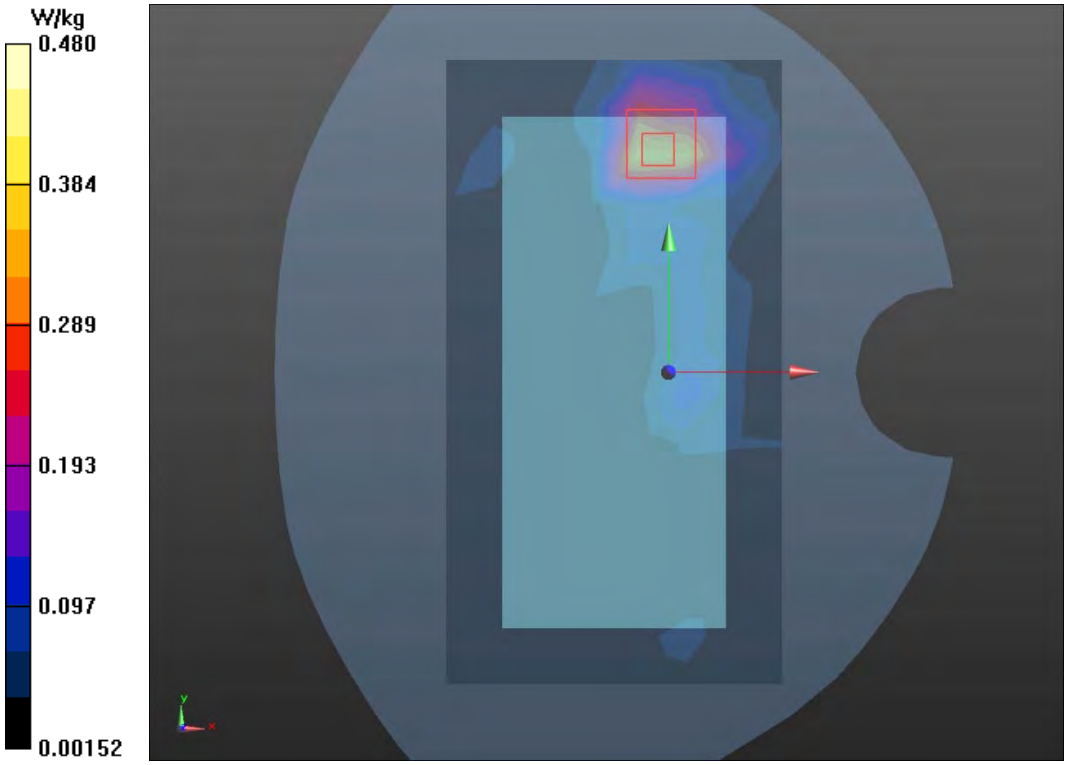
Front Side Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.3040 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.087 W/kg

Maximum value of SAR (measured) = 0.480 W/kg



Plot 59 GSM 850 Bottom Edge Low (Distance 10mm)

Date: 3/23/2021

Communication System: UID 0, GPRS(2TX); Frequency: 824.2 MHz;Duty Cycle: 1:4.15

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.945 S/m; ε_r = 39.833; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 1.11 W/kg

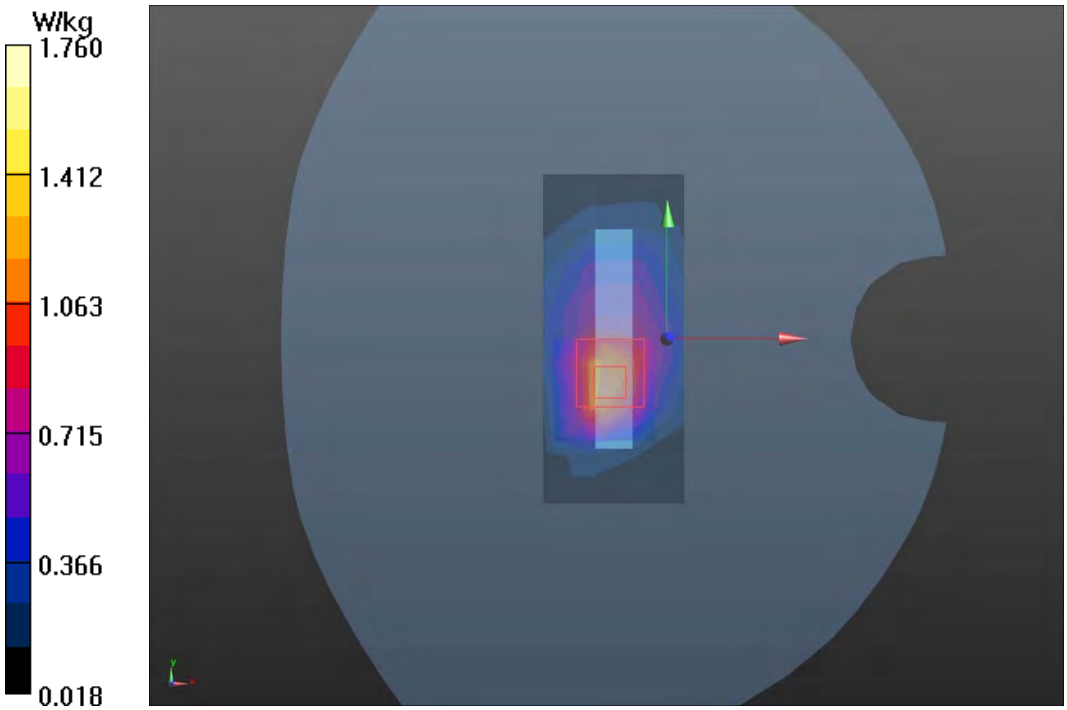
Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.20 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 2.54 W/kg

SAR(1 g) = 0.993 W/kg; SAR(10 g) = 0.506 W/kg

Maximum value of SAR (measured) = 1.760 W/kg



Plot 60 GSM 1900 Bottom Edge Middle (Distance 10mm)

Date: 4/9/2021

Communication System: UID 0, GPRS 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.15

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 0.542 W/kg

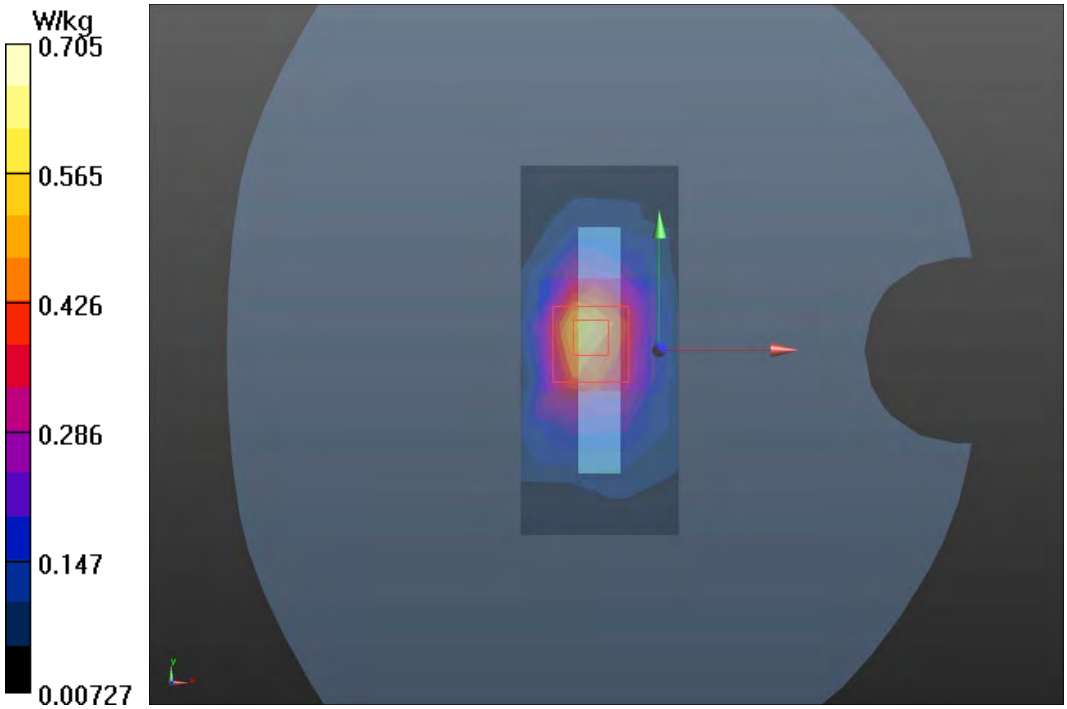
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.20 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.856 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.219 W/kg

Maximum value of SAR (measured) = 0.705 W/kg



Plot 61 UMTS Band II Bottom Edge Low (Distance 10mm)

Date: 4/9/2021

Communication System: UID 0, WCDMA (0); Frequency: 1852.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.4 S/m; ε_r = 39.04; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Bottom Edge Low/Area Scan (4x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.28 W/kg

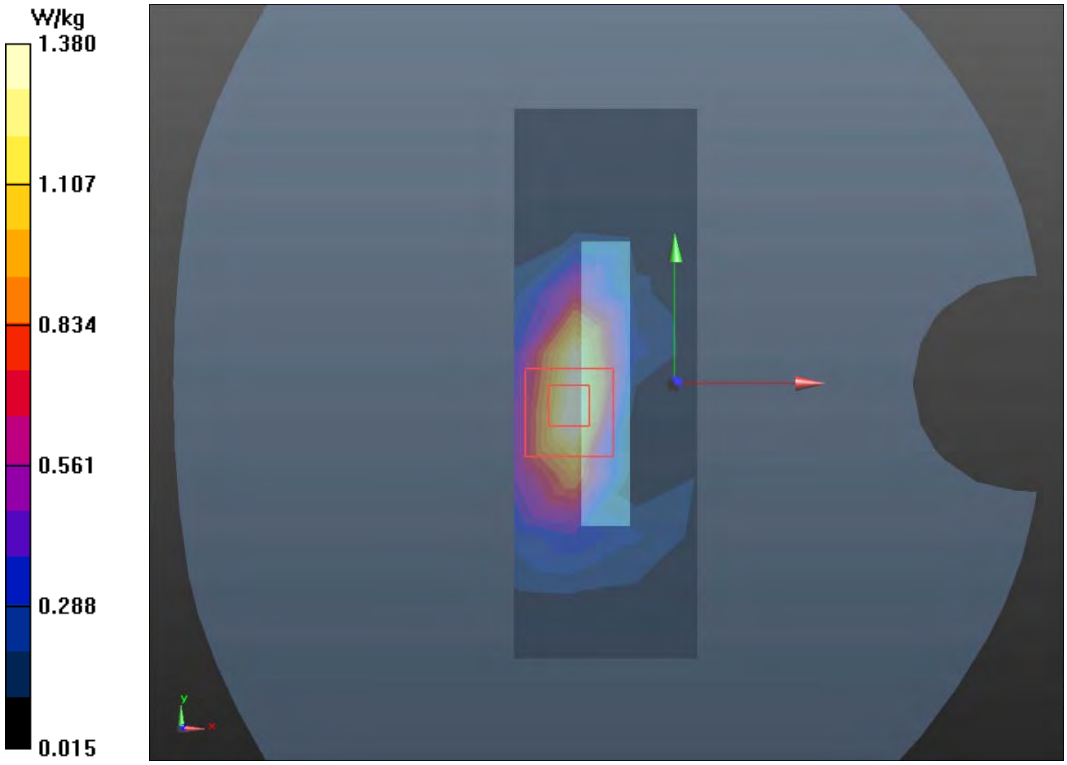
Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.85 V/m; Power Drift = 0.099 dB

Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 0.965 W/kg; SAR(10 g) = 0.514 W/kg

Maximum value of SAR (measured) = 1.38 W/kg



Plot 62 UMTS Band IV Bottom Edge Low (Distance 10mm)

Date: 3/28/2021

Communication System: UID 0, WCDMA (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.298 S/m; ε_r = 39.443; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Bottom Edge Low/Area Scan (4x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.51 W/kg

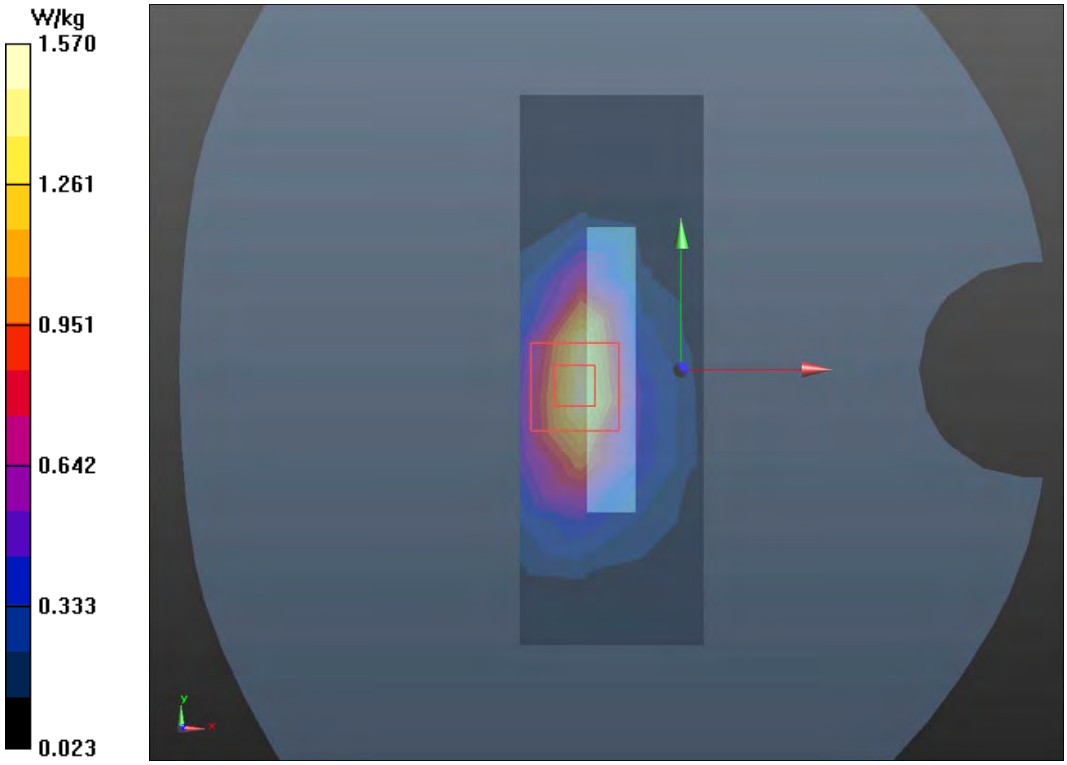
Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 27.48 V/m; Power Drift = 0.052 dB

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 0.992 W/kg; SAR(10 g) = 0.534 W/kg

Maximum value of SAR (measured) = 1.57 W/kg



Plot 63 UMTS Band V Back Side Middle ((Distance 10mm)

Date: 3/23/2021

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

Medium parameters used: f = 836.6 MHz; σ = 0.953 S/m; ε_r = 39.762; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.606 W/kg

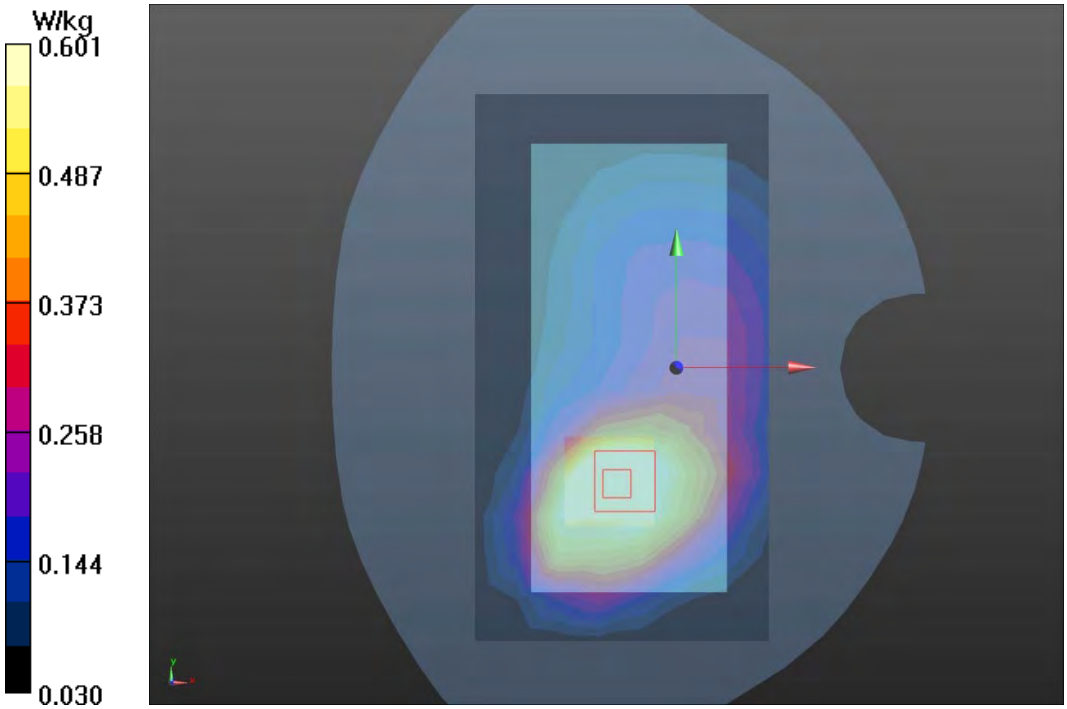
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.72 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.918 W/kg

SAR(1 g) = 0.578 W/kg; SAR(10 g) = 0.370 W/kg

Maximum value of SAR (measured) = 0.601 W/kg



Plot 64 LTE Band 2 1RB Bottom Edge Middle (Distance 10mm)

Date: 4/15/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 1.100 W/kg

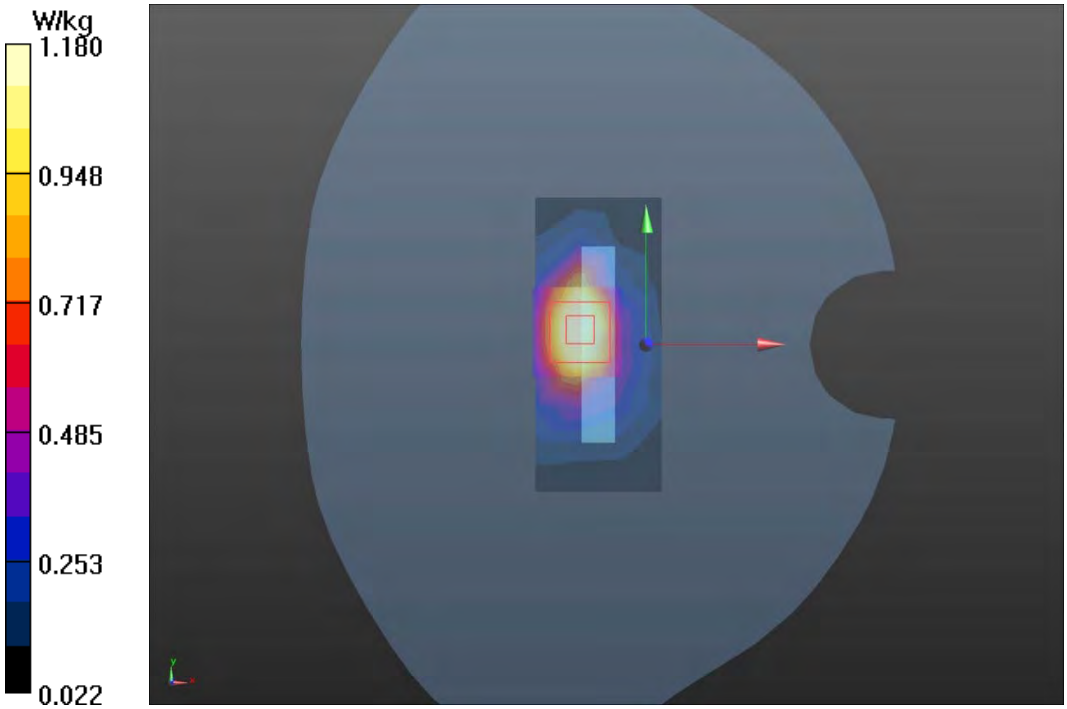
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.50 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 1.870 W/kg

SAR(1 g) = 1.000 W/kg; SAR(10 g) = 0.526 W/kg

Maximum value of SAR (measured) = 1.180 W/kg



Plot 65 LTE Band 4 1RB Bottom Edge High (Distance 10mm)

Date: 3/29/2021

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

Medium parameters used: f = 1745 MHz; σ = 1.323 S/m; ε_r = 39.378; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Bottom Edge High/Area Scan (4x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.56 W/kg

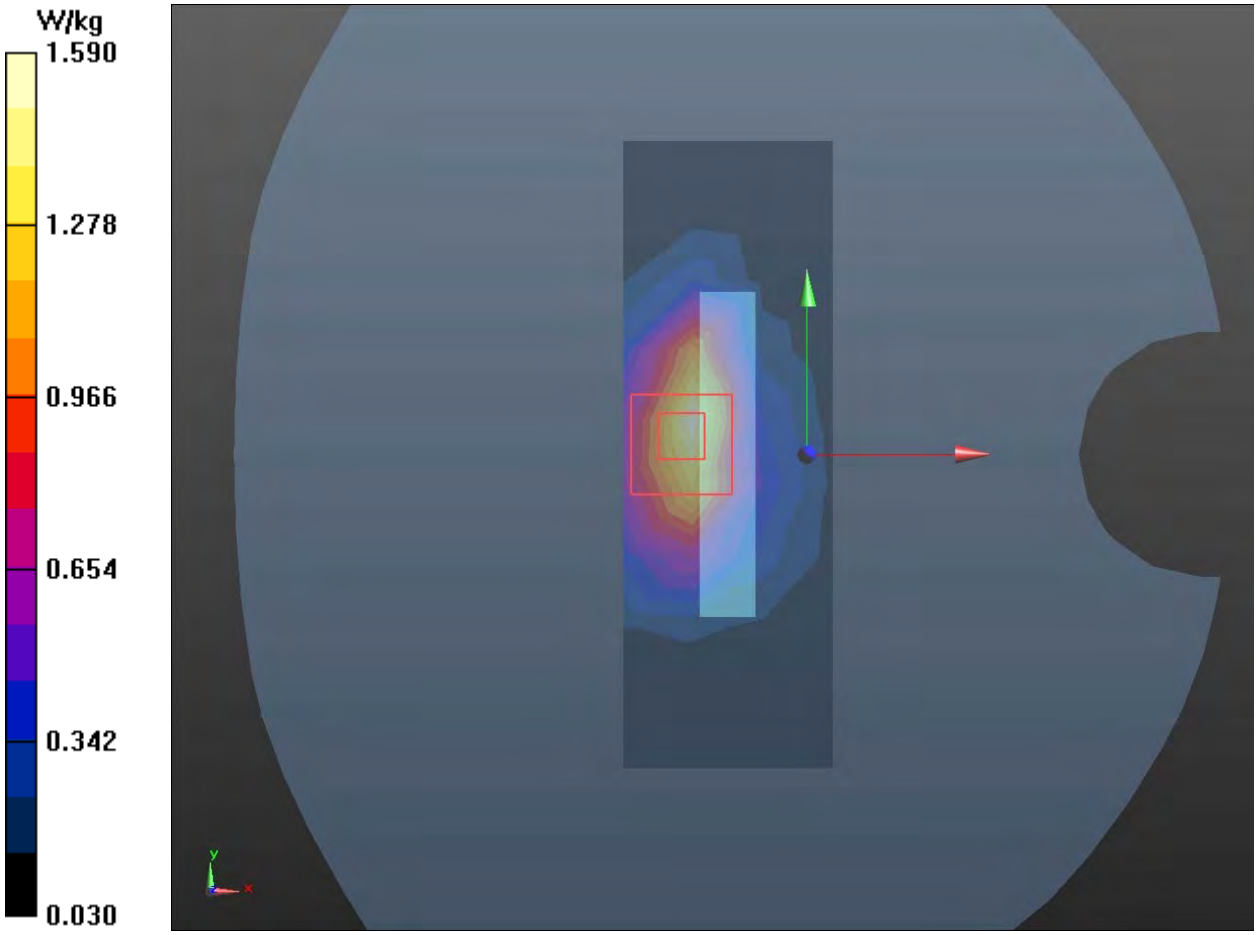
Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.86 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.575 W/kg

Maximum value of SAR (measured) = 1.59 W/kg



Plot 66 LTE Band 5 1RB Front Side Middle (Distance 10mm)

Date: 3/24/2021

Communication System: UID 0, LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.953 S/m; ε_r = 39.767; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.588 W/kg

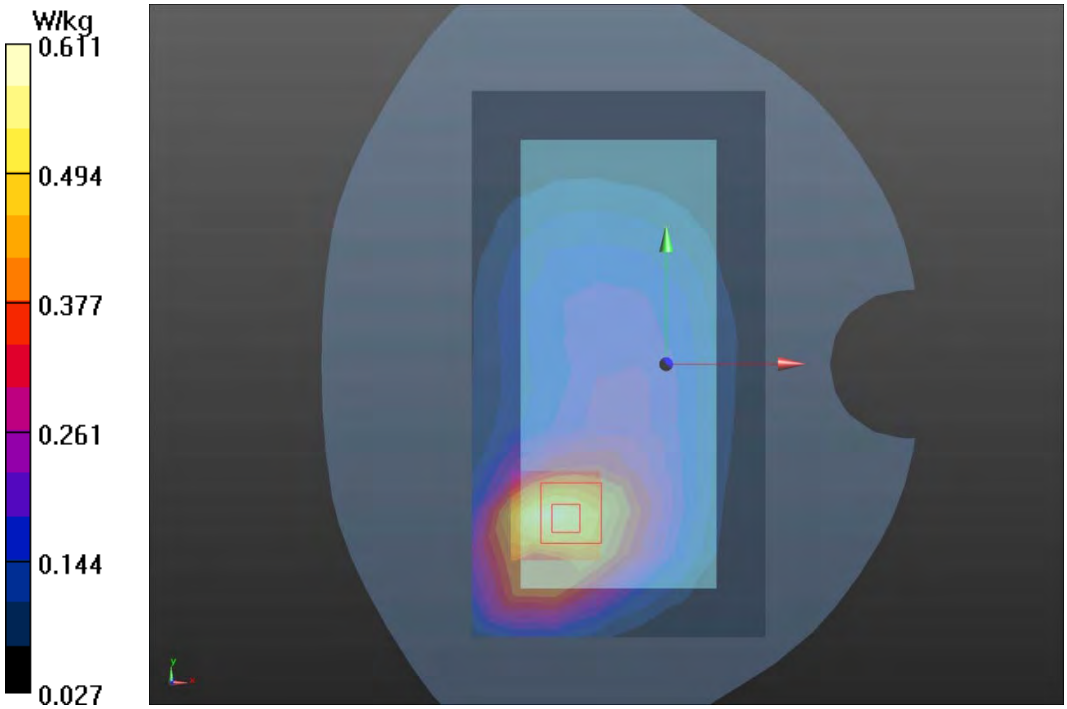
Front Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.80 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 1.190 W/kg

SAR(1 g) = 0.564 W/kg; SAR(10 g) = 0.362 W/kg

Maximum value of SAR (measured) = 0.611 W/kg



Plot 67 LTE Band 7 1RB Bottom Edge High (Distance 10mm)

Date: 4/8/2021

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

Medium parameters used: f = 2560 MHz; σ = 1.971 S/m; ε_r = 37.231; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 1.44 W/kg

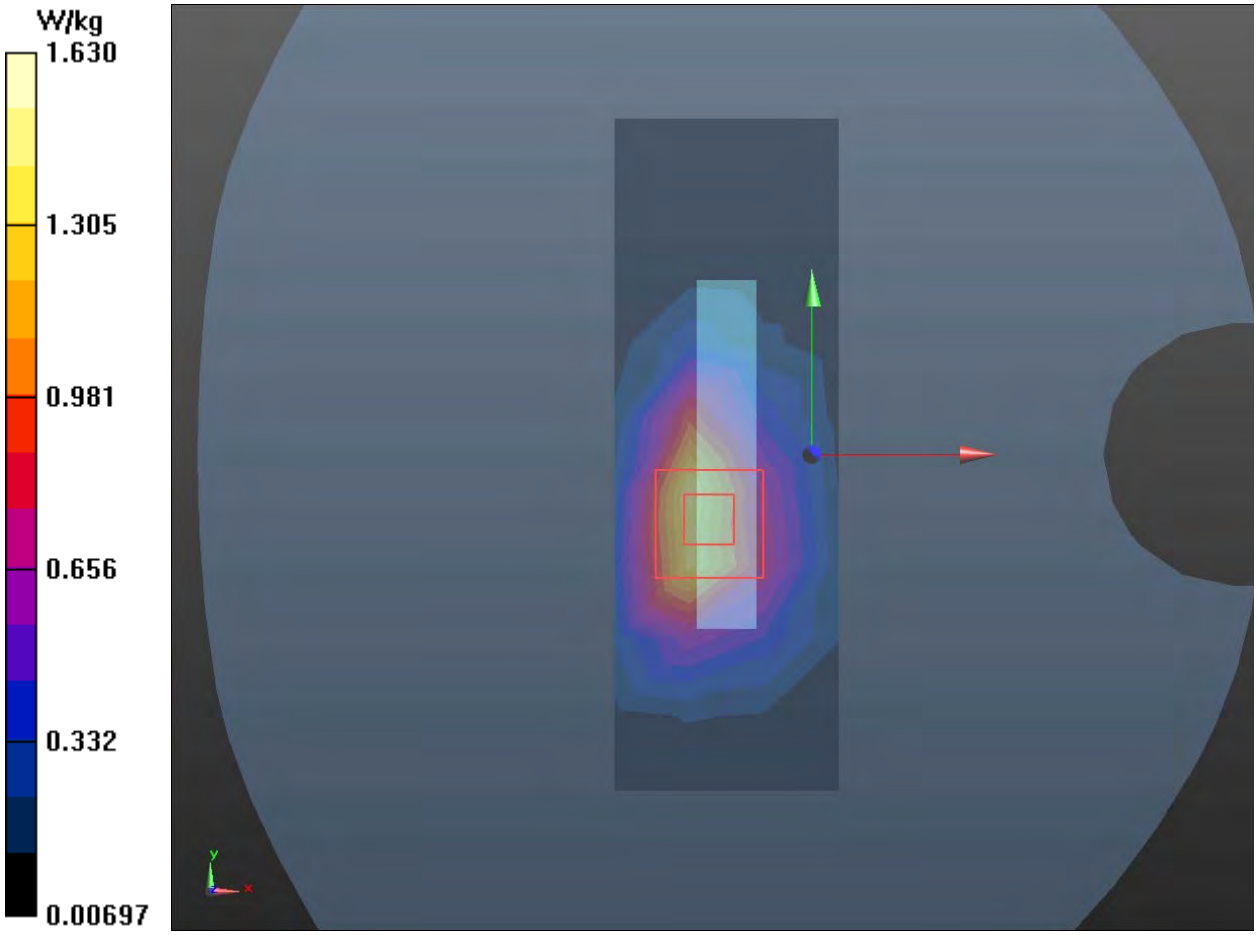
Bottom Edge High/Zoom Scan(7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.26 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 2.01 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.495 W/kg

Maximum value of SAR (measured) = 1.63 W/kg



Plot 68 LTE Band 12 1RB Front Side Low (Distance 10mm)

Date: 3/26/2021

Communication System: UID 0, LTE (0); Frequency: 704 MHz;Duty Cycle: 1:1

Medium parameters used: f = 704 MHz; σ = 0.867 S/m; ε_r = 40.747; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Front Side Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.346 W/kg

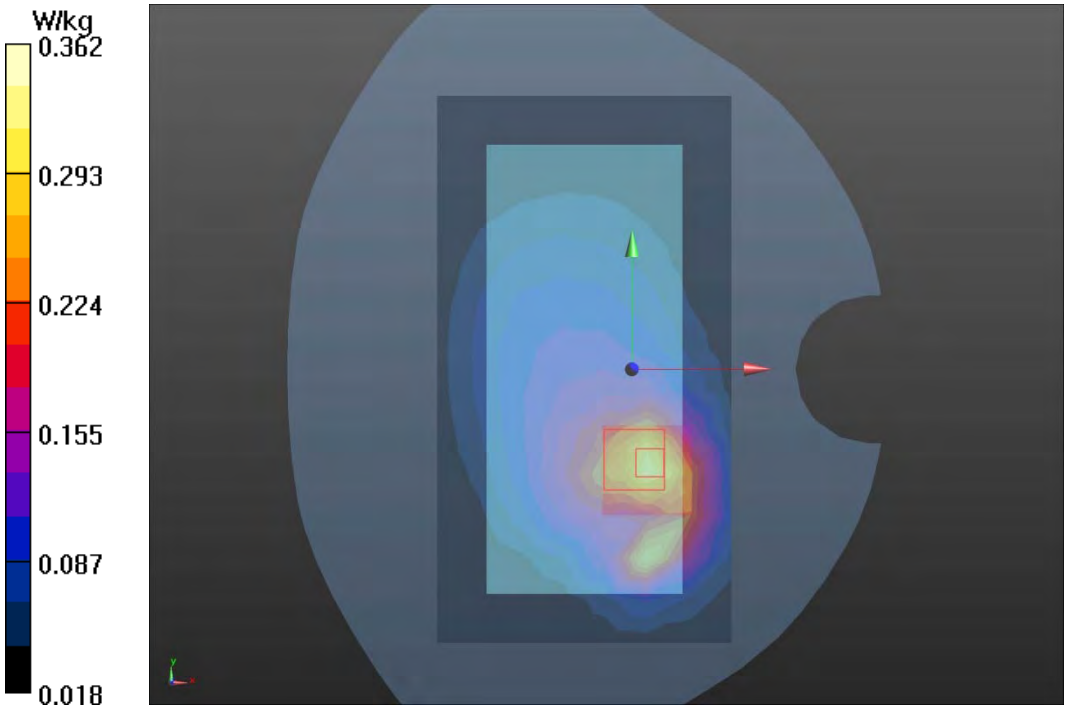
Front Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.19 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.651 W/kg

SAR(1 g) = 0.338 W/kg; SAR(10 g) = 0.224 W/kg

Maximum value of SAR (measured) = 0.362 W/kg



Plot 69 LTE Band 17 1RB Back Side Middle (Distance 10mm)

Date: 3/27/2021

Communication System: UID 0, LTE (0); Frequency: 710 MHz;Duty Cycle: 1:1

Medium parameters used: f = 710 MHz; σ = 0.871 S/m; ε_r = 40.712; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.78, 9.78, 9.78); Calibrated: 7/6/2020;

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.436 W/kg

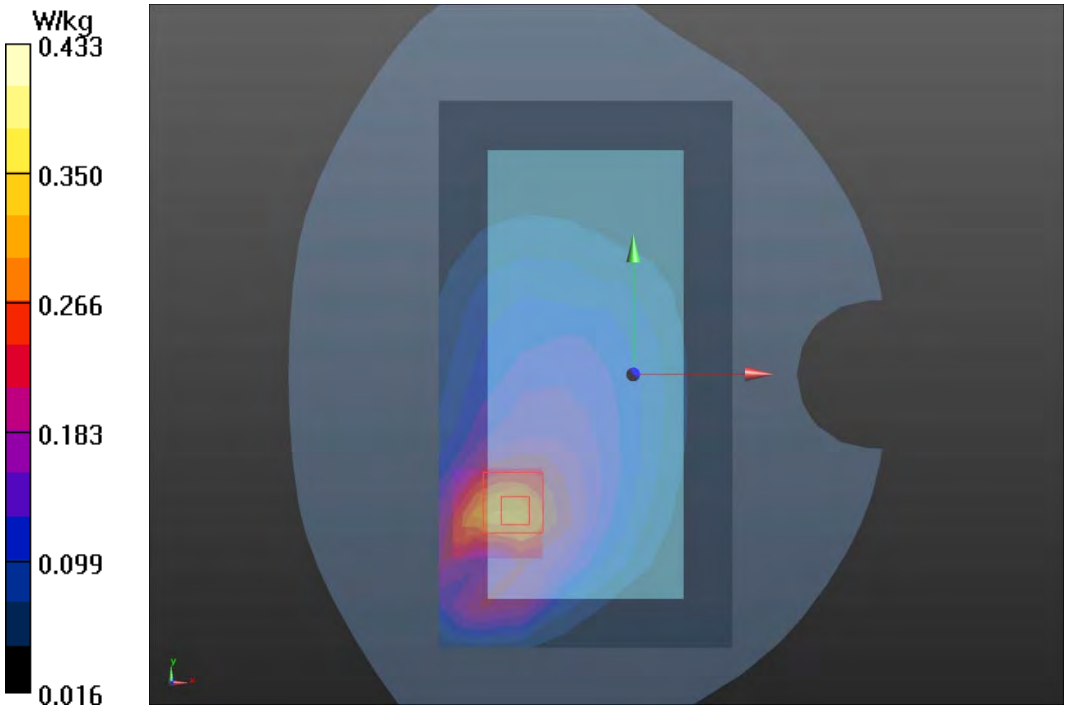
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.90 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.612 W/kg

SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.252 W/kg

Maximum value of SAR (measured) = 0.433 W/kg



Plot 70 LTE Band 26 1RB Back Side High (Distance 10mm)

Date: 3/24/2021

Communication System: UID 0, LTE (0); Frequency: 841.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 841.5 MHz; σ = 0.957 S/m; ε_r = 39.746; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.655 W/kg

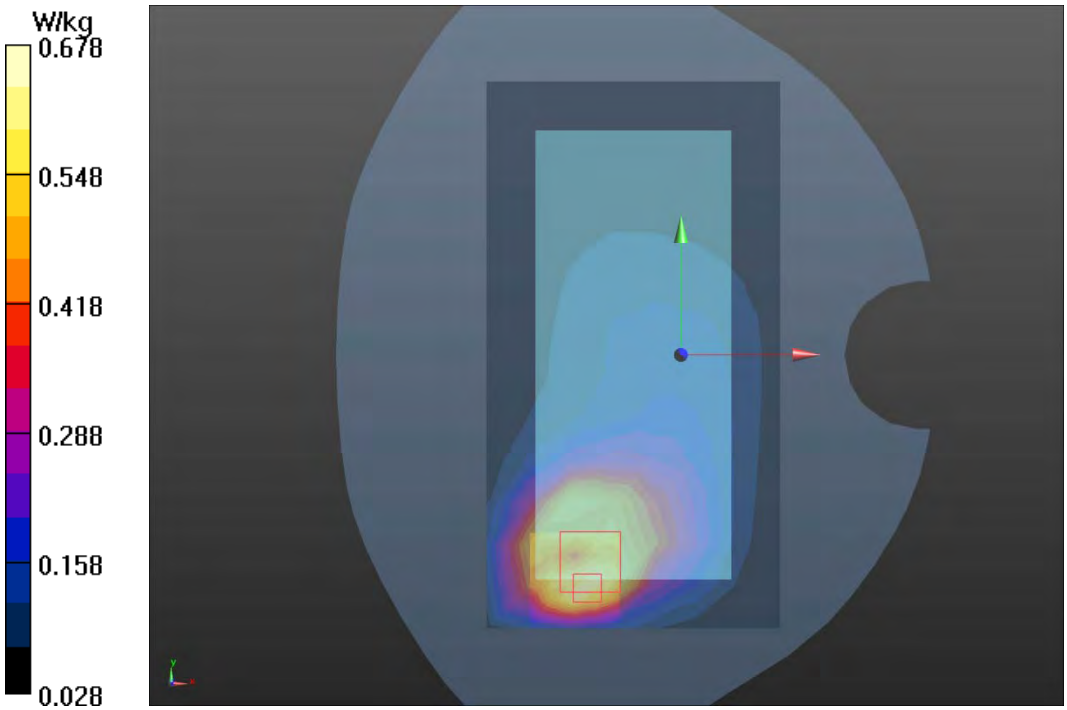
Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.92 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.574 W/kg; SAR(10 g) = 0.353 W/kg

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



Plot 71 LTE Band 38 1RB Bottom Edge Middle (Distance 10mm)

Date: 4/10/2021

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

Medium parameters used: f = 2595 MHz; σ = 1.973 S/m; ε_r = 38.008; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 1.06 W/kg

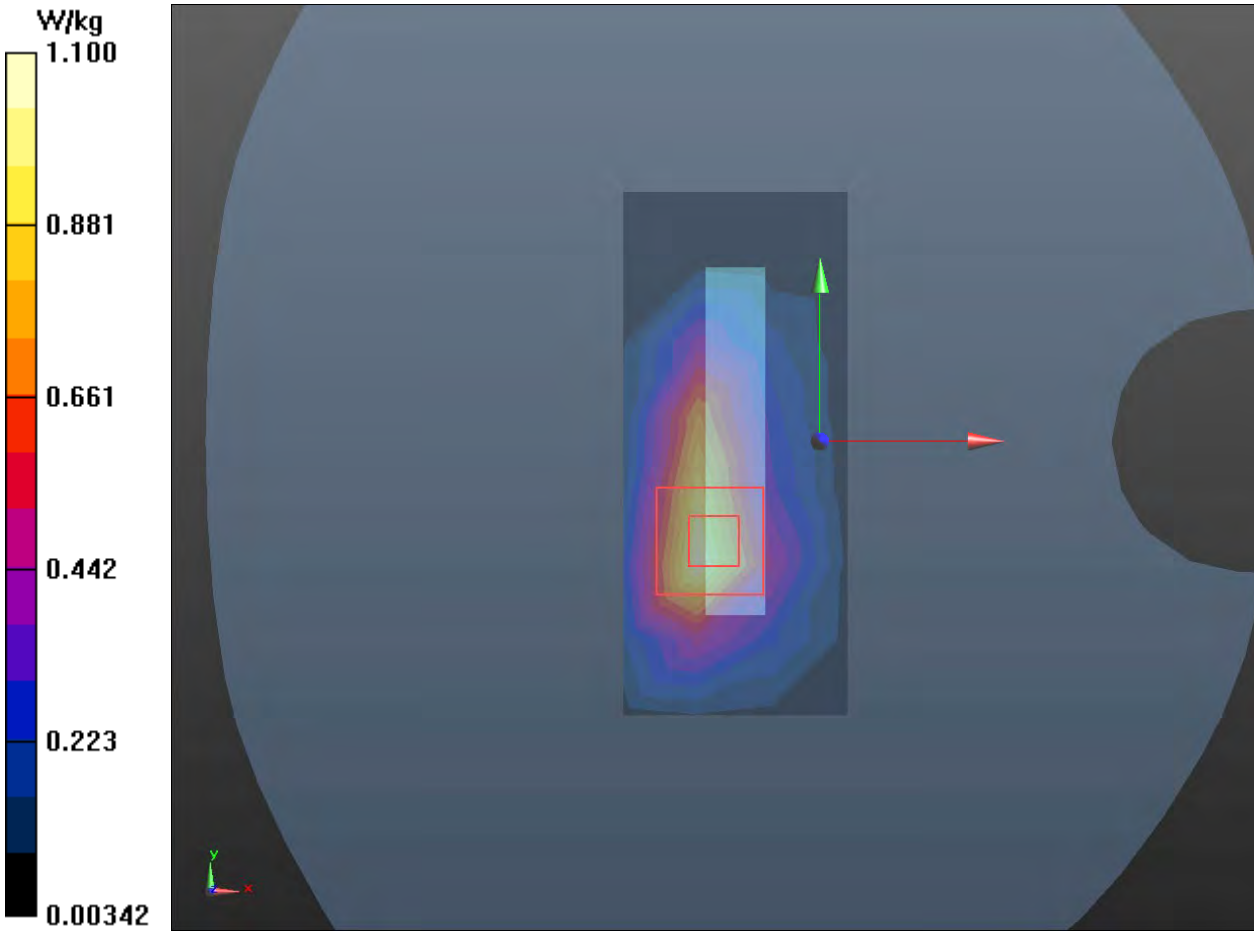
Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.78 V/m; Power Drift = 0.079 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 0.988 W/kg; SAR(10 g) = 0.465 W/kg

Maximum value of SAR (measured) = 1.10 W/kg



Plot 72 LTE Band 41 1RB Bottom Edge High (Distance 10mm)

Date: 4/10/2021

Communication System: UID 0, LTE (0); Frequency: 2680 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2680 MHz; σ = 2.106 S/m; ε_r = 36.793; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 0.796 W/kg

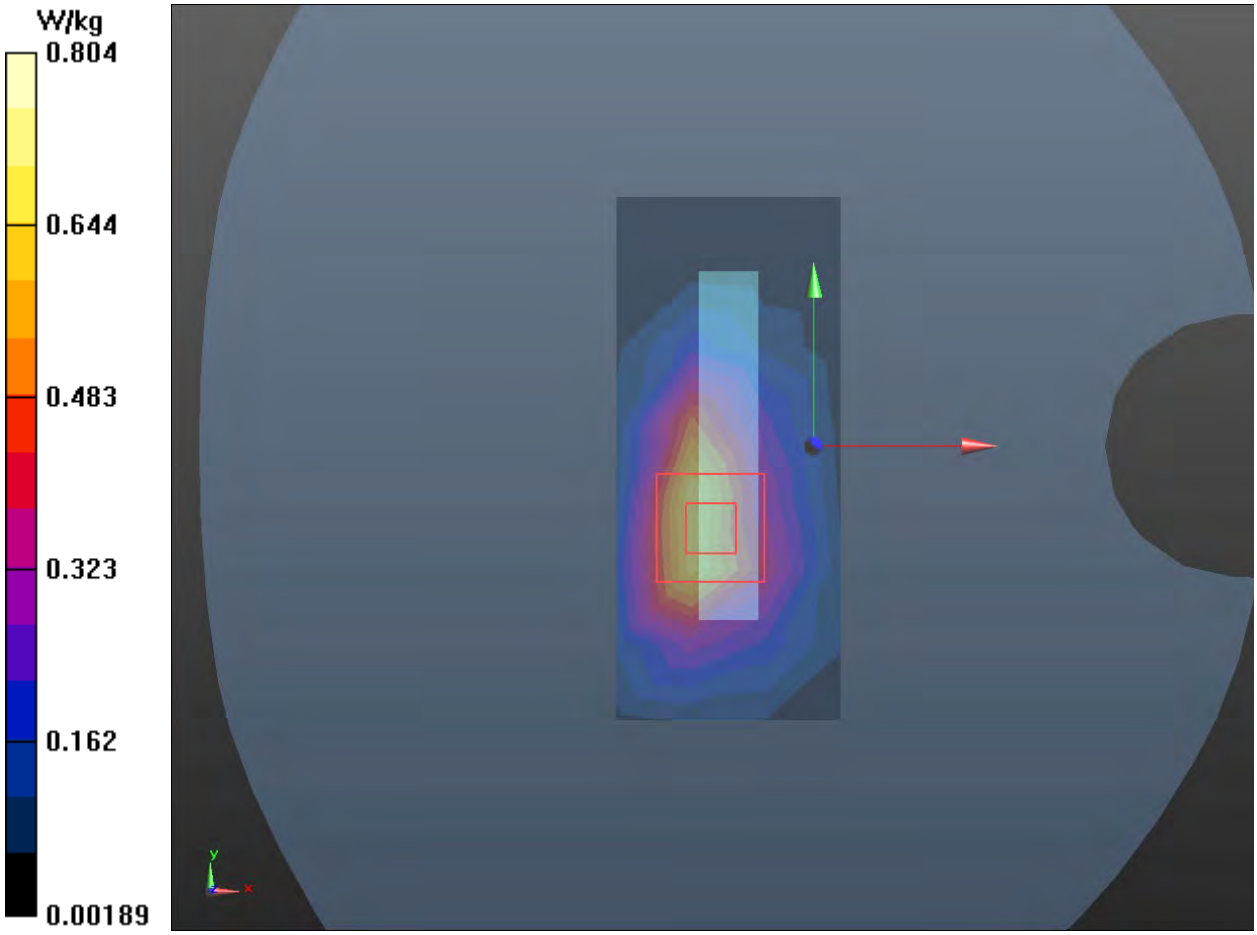
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.79 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.718 W/kg; SAR(10 g) = 0.337 W/kg

Maximum value of SAR (measured) = 0.804 W/kg



Plot 73 NR n41 1RB Bottom Edge Middle (Distance 10mm,Ant 2)

Date: 4/13/2021

Communication System: UID 0, 5G NR (0); Frequency: 2592.99 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2592.99 MHz; σ = 2.009 S/m; ε_r = 37.118; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Bottom Edge Middle/Area Scan (5x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.868 W/kg

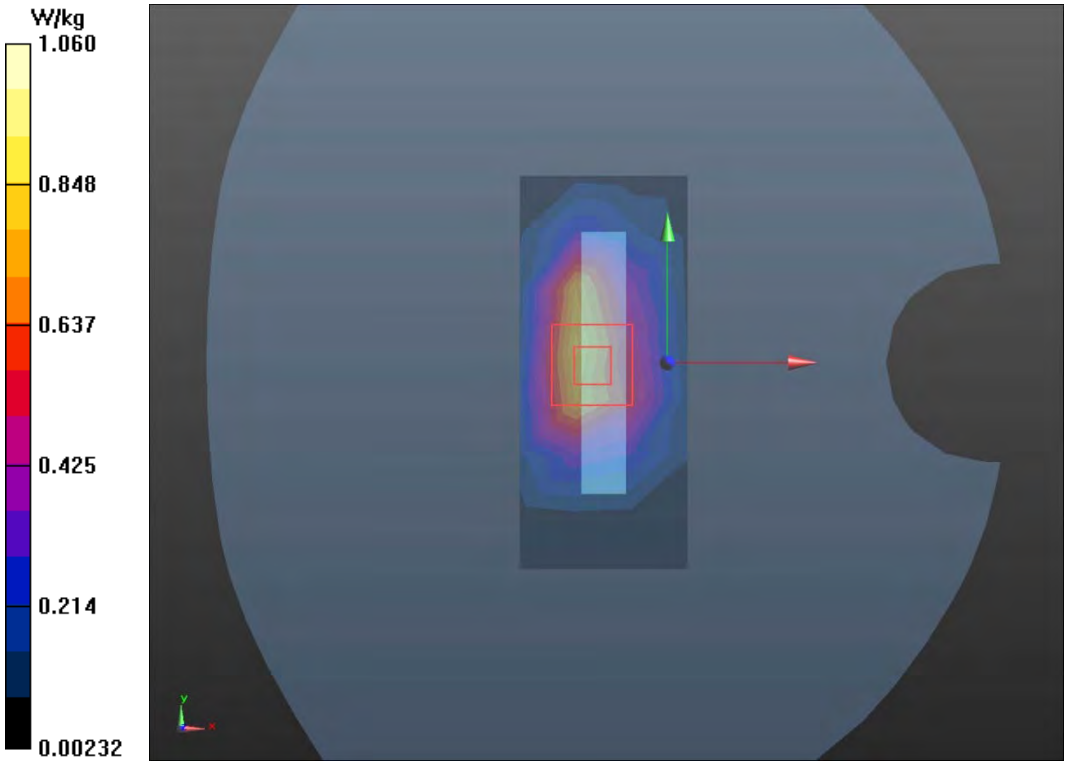
Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.57 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.637 W/kg; SAR(10 g) = 0.304 W/kg

Maximum value of SAR (measured) = 1.06 W/kg



Plot 74 802.11b Right Edge Middle (Distance 10mm,MIMO)

Date: 3/25/2021

Communication System: UID 0, 802.11b (0); Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.831 S/m; ε_r = 37.663; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Right Edge Middle/Area Scan (5x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.528 W/kg

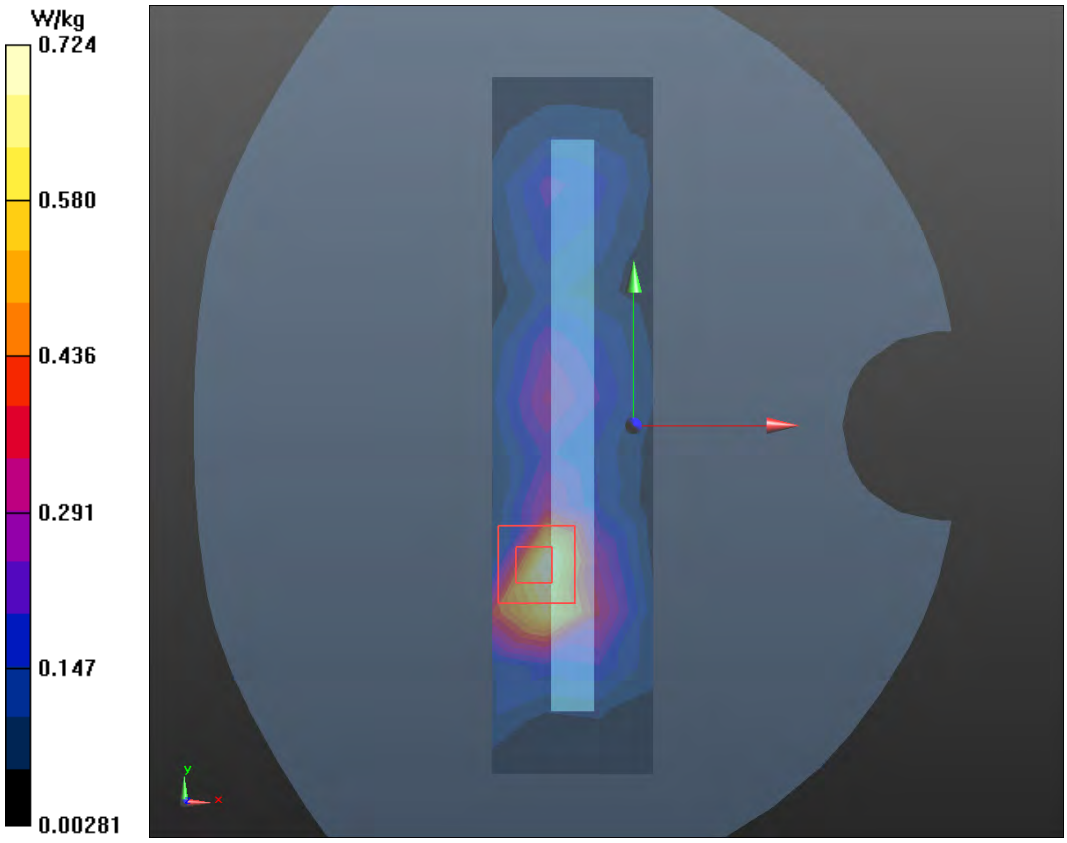
Right Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.59 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.955 W/kg

SAR(1 g) = 0.437 W/kg; SAR(10 g) = 0.193 W/kg

Maximum value of SAR (measured) = 0.724 W/kg



Plot 75 802.11a U-NII-1 Back Side Low (Distance 10mm,Ant 8)

Date: 4/3/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5180 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5180 MHz; σ = 4.75 S/m; ε_r = 36.766; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side Low/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.586 W/kg

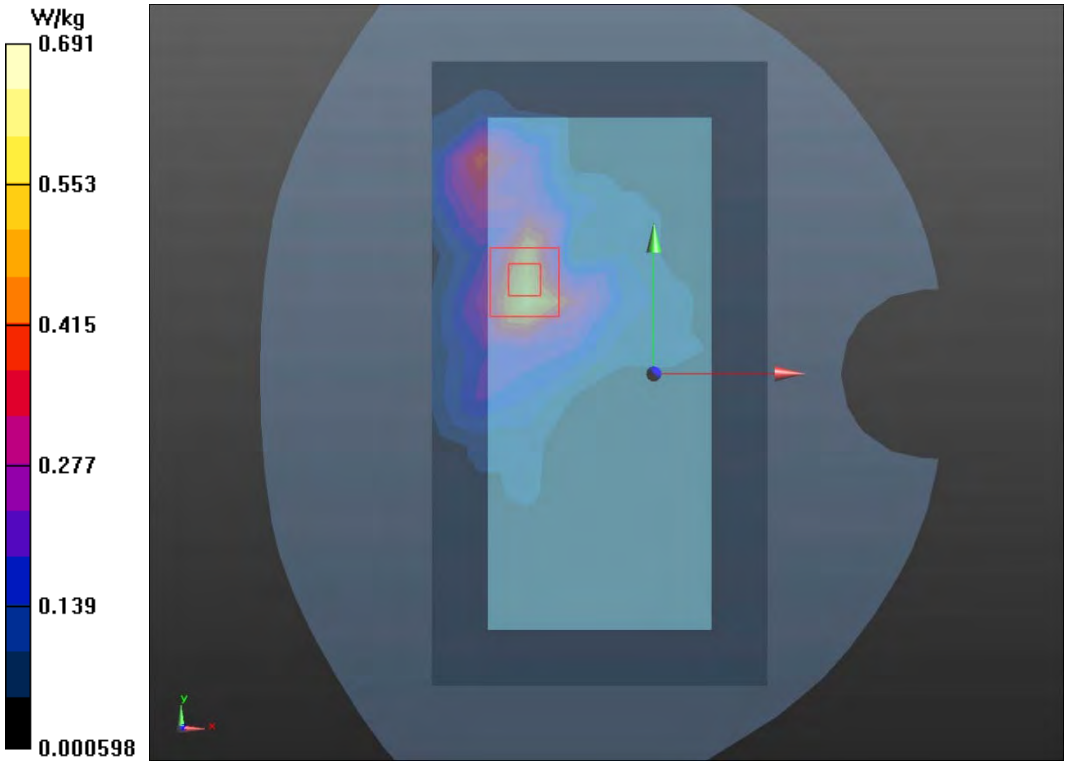
Back Side Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.669 V/m; Power Drift = 0.135 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.320 W/kg; SAR(10 g) = 0.114 W/kg

Maximum value of SAR (measured) = 0.691 W/kg



Plot 76 802.11a U-NII-3 Back Side High (Distance 10mm,Ant 8)

Date: 4/4/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5745 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5745 MHz; σ = 5.479 S/m; ε_r = 35.186; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Back Side High/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.846 W/kg

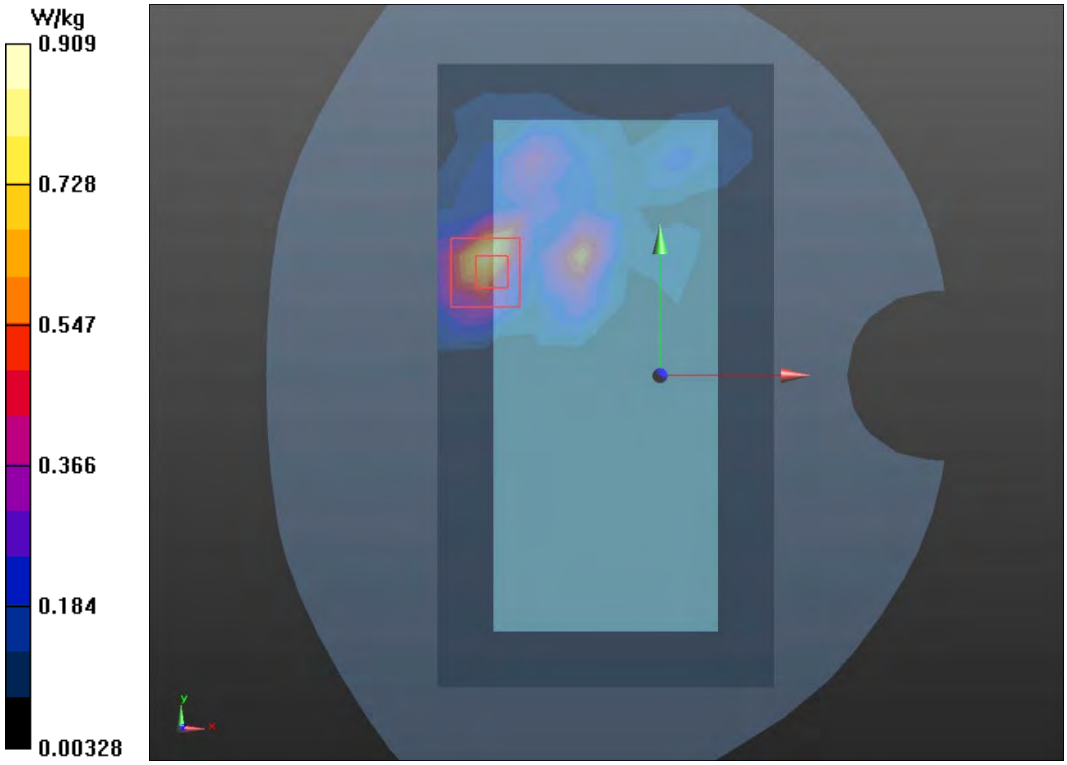
Back Side High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0.9660 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 0.398 W/kg; SAR(10 g) = 0.12 W/kg

Maximum value of SAR (measured) = 0.909 W/kg



Plot 77 Bluetooth Right Edge Middle (Distance 10mm)

Date: 3/25/2021

Communication System: UID 0, BT (0); Frequency: 2441 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2441 MHz; σ = 1.834 S/m; ε_r = 37.585; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Right Edge Middle/Area Scan (5x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.059 W/kg

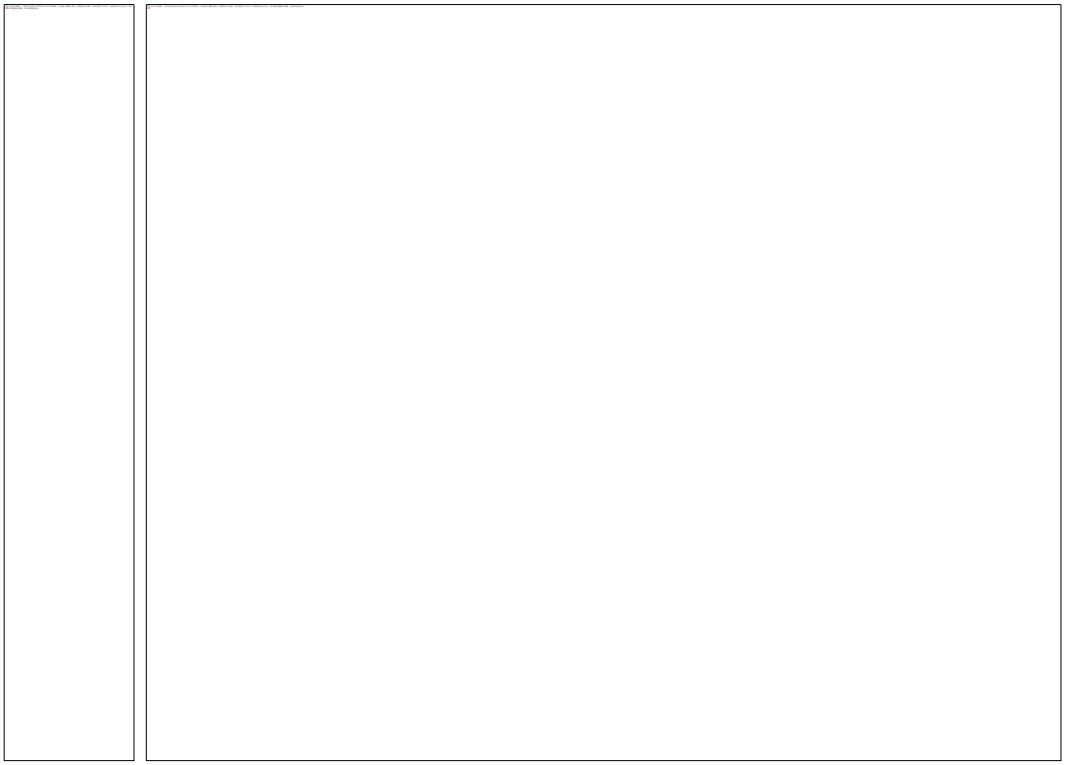
Right Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.328 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 0.134 W/kg

SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.025 W/kg

Maximum value of SAR (measured) = 0.062 W/kg



Plot 78 UMTS Band II Bottom Edge Middle (Distance 0mm)

Date: 4/9/2021

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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) = 13.6 W/kg

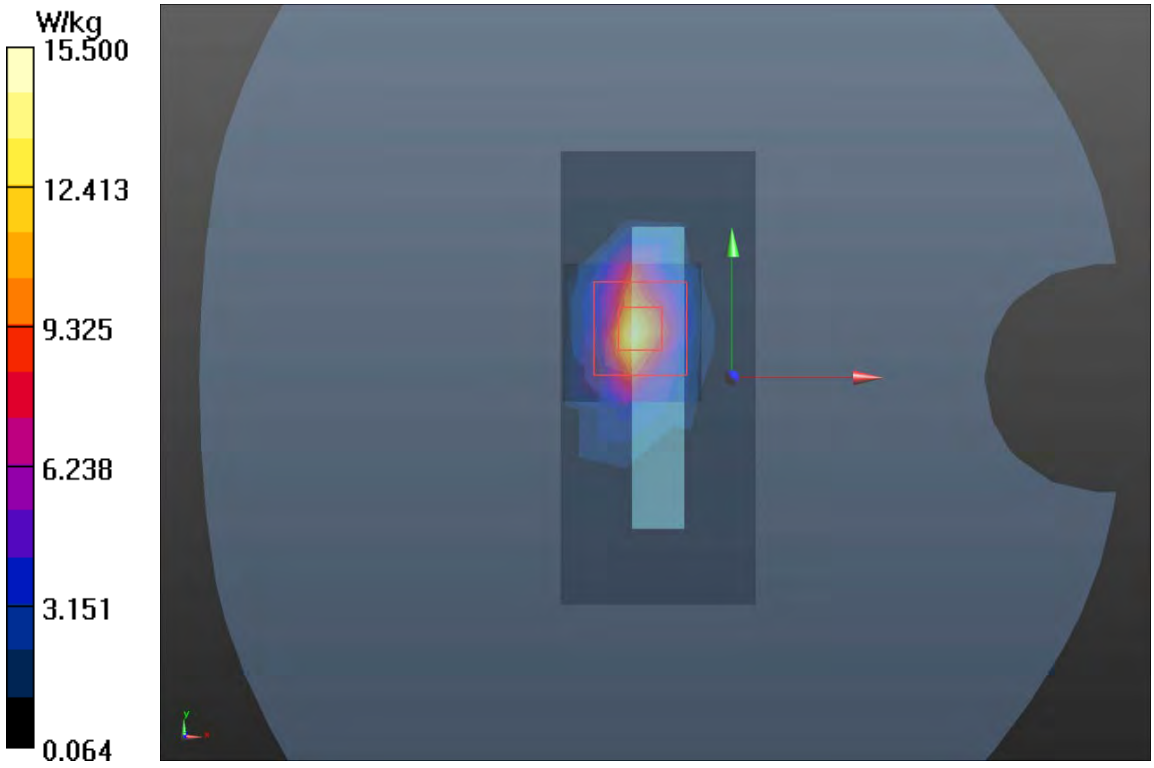
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 60.31 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 22.3 W/kg

SAR(1 g) = 7.86 W/kg; SAR(10 g) = 3.01 W/kg

Maximum value of SAR (measured) = 15.5 W/kg



Plot 79 UMTS Band IV Bottom Edge Low (Distance 0mm)

Date: 3/28/2021

Communication System: UID 0, WCDMA (0); Frequency: 1712.4 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.298 S/m; ε_r = 39.443; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 10.8 W/kg

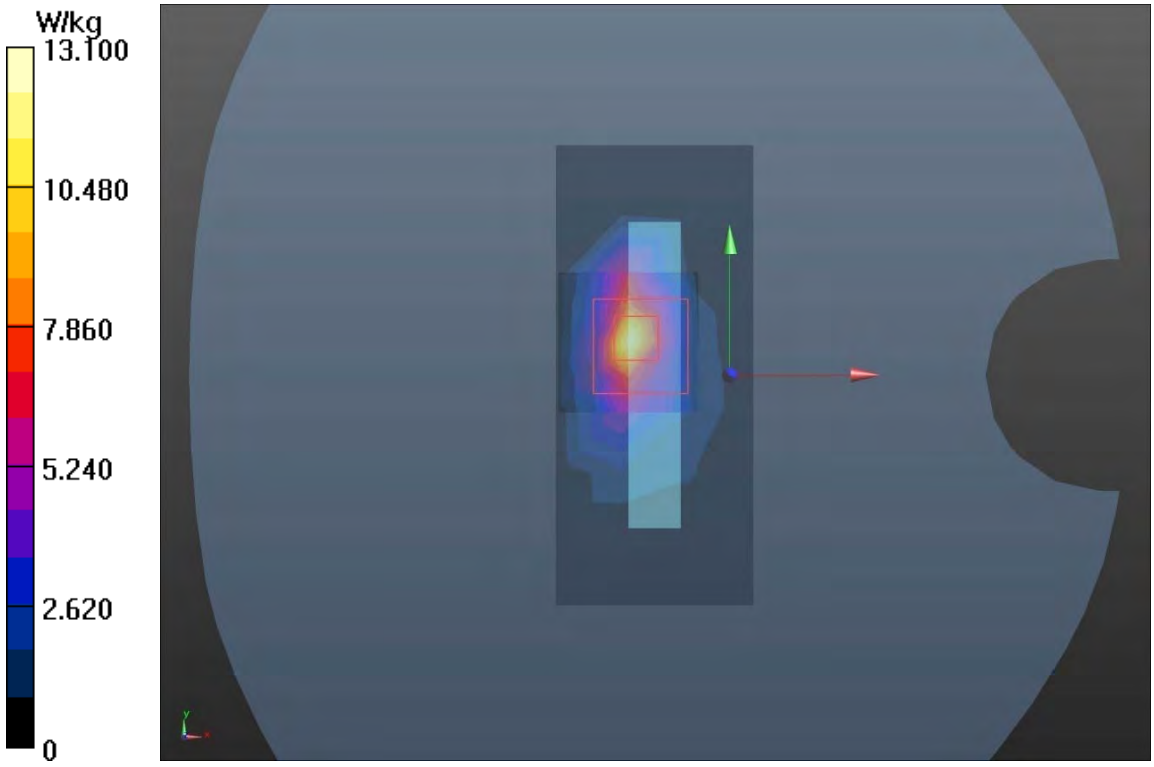
Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 61.06 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 18.0 W/kg

SAR(1 g) = 6.02 W/kg; SAR(10 g) = 2.45 W/kg

Maximum value of SAR (measured) = 13.1 W/kg



Plot 80 LTE Band 4 1RB Bottom Edge Low (Distance 0mm)

Date: 3/29/2021

Communication System: UID 0, LTE (0); Frequency: 1720 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1720 MHz; σ = 1.303 S/m; ε_r = 39.467; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 12.6 W/kg

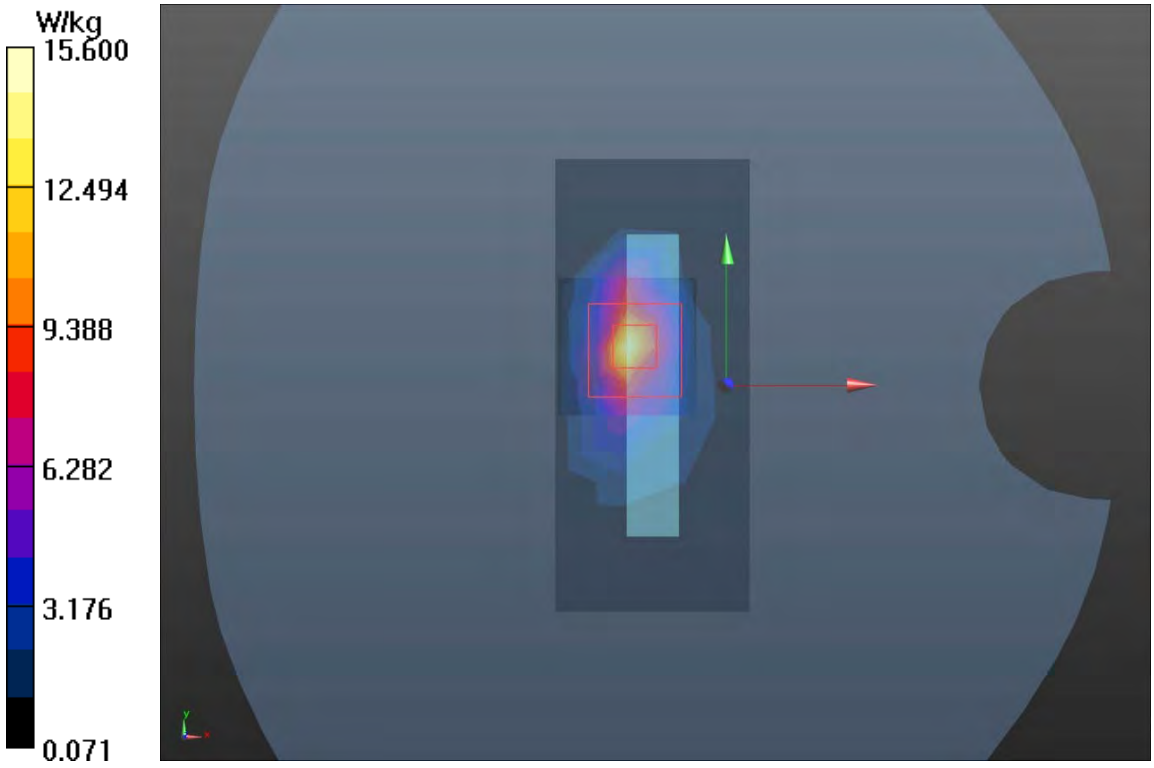
Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 66.52 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 22.2 W/kg

SAR(1 g) = 7.21 W/kg; SAR(10 g) = 2.84 W/kg

Maximum value of SAR (measured) = 15.6 W/kg



Plot 81 LTE Band 7 1RB Bottom Edge High (Distance 0mm)

Date: 4/8/2021

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

Medium parameters used: f = 2560 MHz; σ = 1.971 S/m; ε_r = 37.231; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 6.66 W/kg

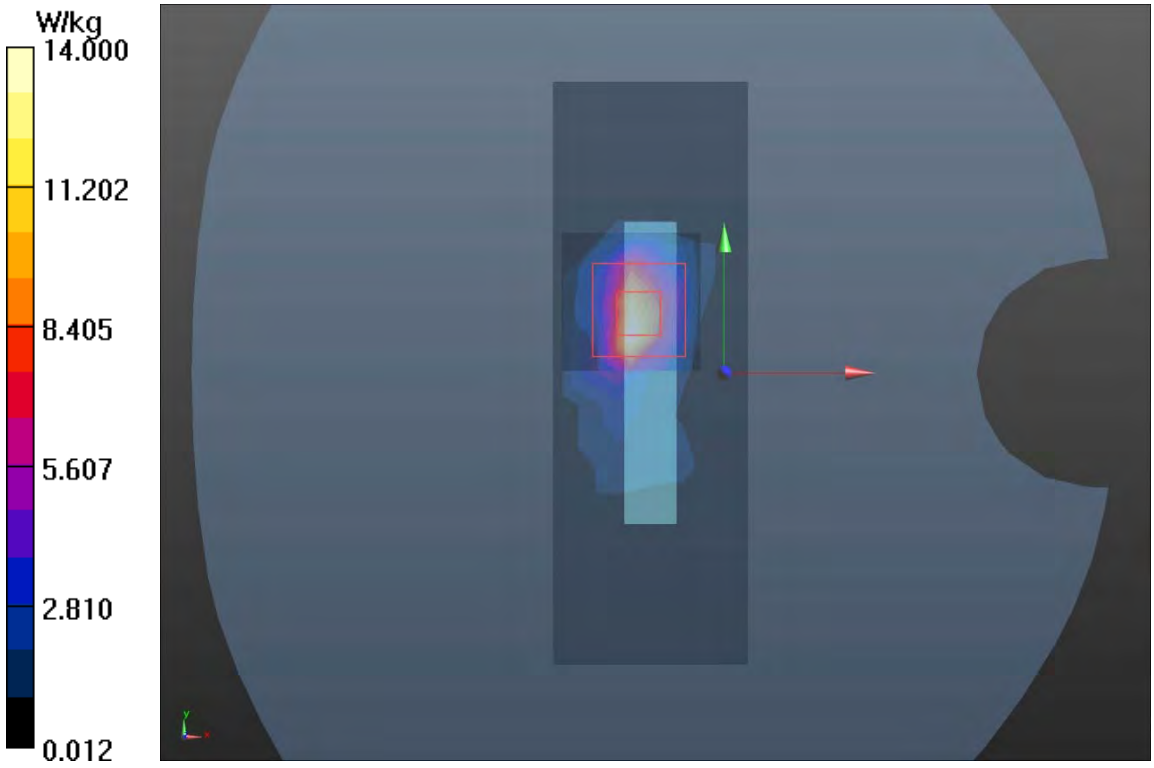
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 62.42 V/m; Power Drift = 0.052 dB

Peak SAR (extrapolated) = 21.8 W/kg

SAR(1 g) = 5.51 W/kg; SAR(10 g) = 1.89 W/kg

Maximum value of SAR (measured) = 14.0 W/kg



Plot 82 LTE Band 38 1RB Back Side Low (Distance 0mm)

Date: 4/10/2021

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

Medium parameters used: f = 2580 MHz; σ = 2.027 S/m; ε_r = 37.056; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 4.37 W/kg

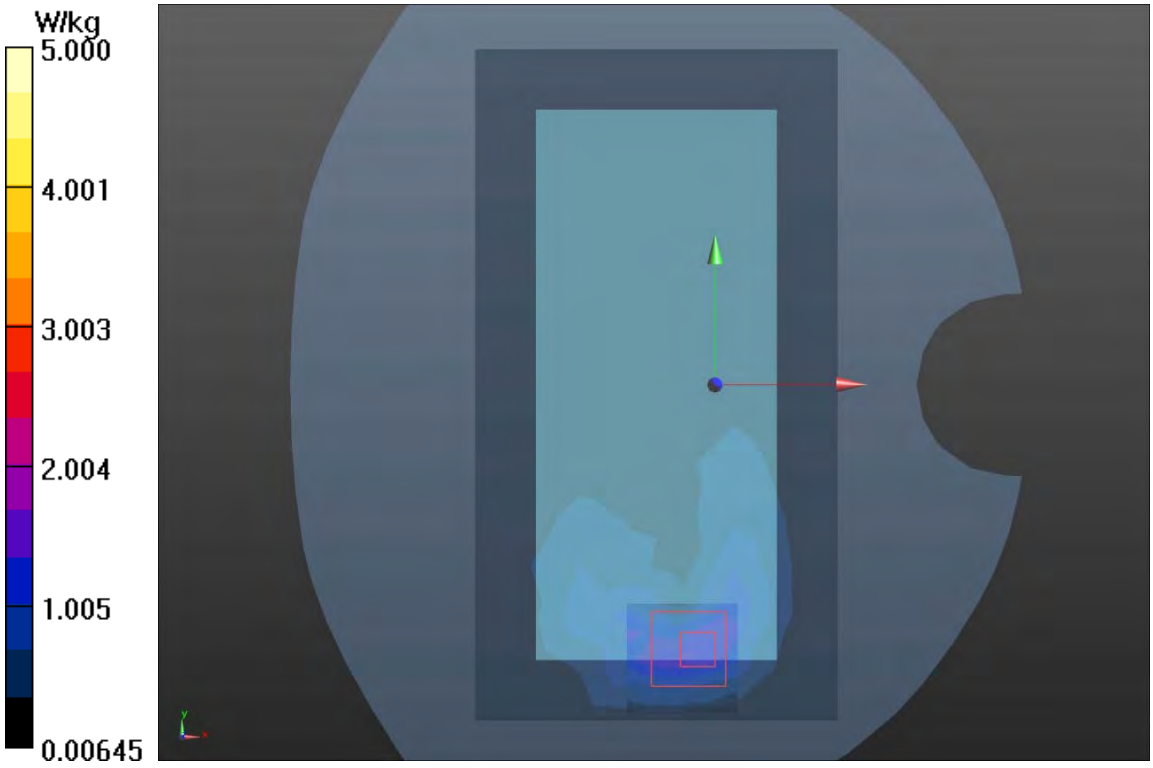
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.626 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 8.36 W/kg

SAR(1 g) = 4.0 W/kg; SAR(10 g) = 1.54 W/kg

Maximum value of SAR (measured) = 5.000 W/kg



Plot 83 LTE Band 41 1RB Bottom Edge Middle (Distance 0mm)

Date: 4/10/2021

Communication System: UID 0, LTE (0); Frequency: 2593 MHz;Duty Cycle: 1:1.58

Medium parameters used: f = 2593 MHz; σ = 1.905 S/m; ε_r = 37.414; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

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

Maximum value of SAR (measured) = 4.77 W/kg

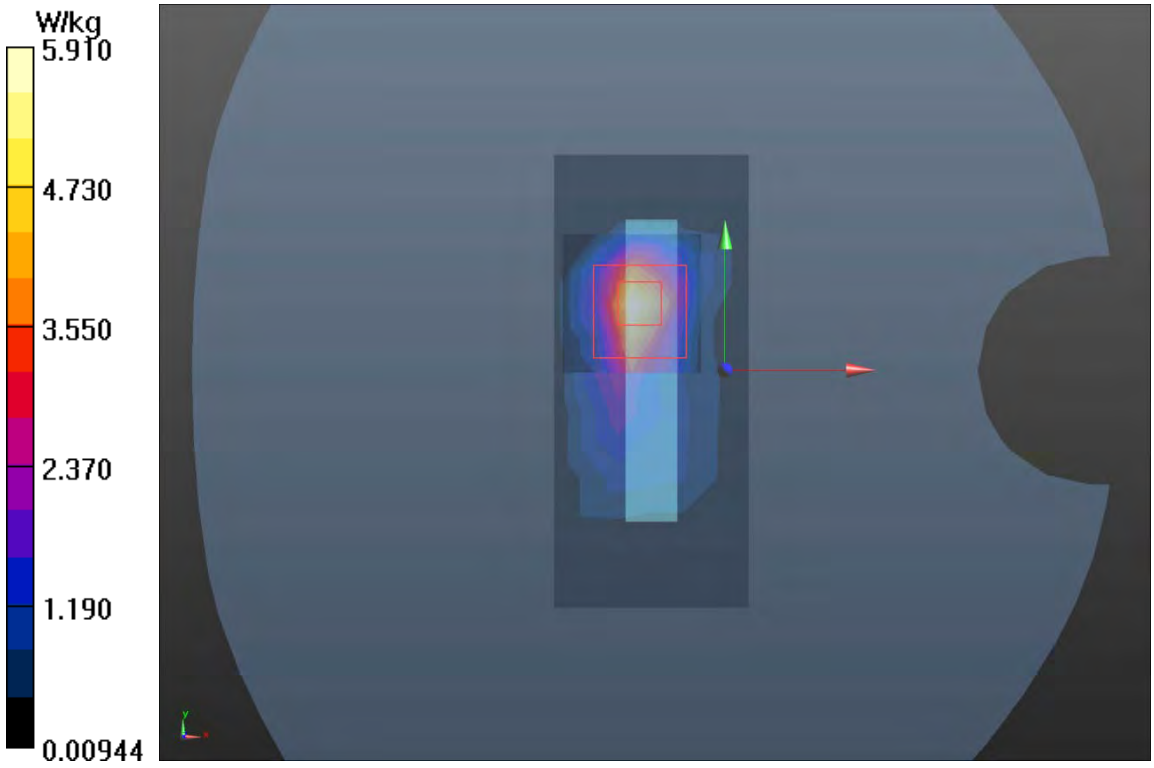
Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 45.08 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 15.4 W/kg

SAR(1 g) = 4.39 W/kg; SAR(10 g) = 1.51 W/kg

Maximum value of SAR (measured) = 5.91 W/kg



Plot 84 802.11a U-NII-2A Top Edge High (Distance 0mm,MIMO)

Date: 4/3/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5260 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5260 MHz; σ = 4.95 S/m; ε_r = 36.328; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Top Edge High/Area Scan (6x12x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 18.0 W/kg

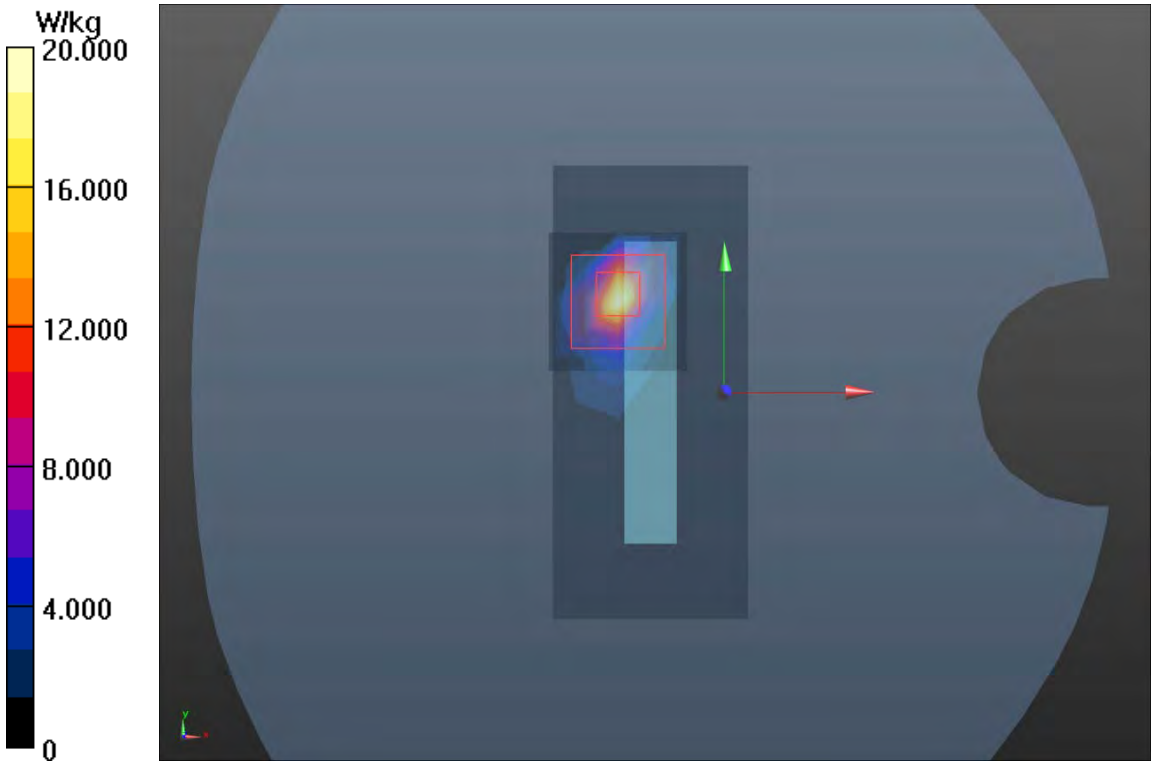
Top Edge High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 6.837 V/m; Power Drift = 0.109 dB

Peak SAR (extrapolated) = 33.5 W/kg

SAR(1 g) = 5.83 W/kg; SAR(10 g) = 1.39 W/kg

Maximum value of SAR (measured) = 20.0 W/kg



Plot 85 802.11a U-NII-2C Top Edge Middle (Distance 0mm,Ant)

Date: 4/4/2021

Communication System: UID 0, 802.11n HT20 (0); Frequency: 5660 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5660 MHz; σ = 5.32 S/m; ε_r = 35.668; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

Electronics: DAE4 SN1317; Calibrated: 2/23/2021

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

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

Top Edge Middle/Area Scan (6x12x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 15.4 W/kg

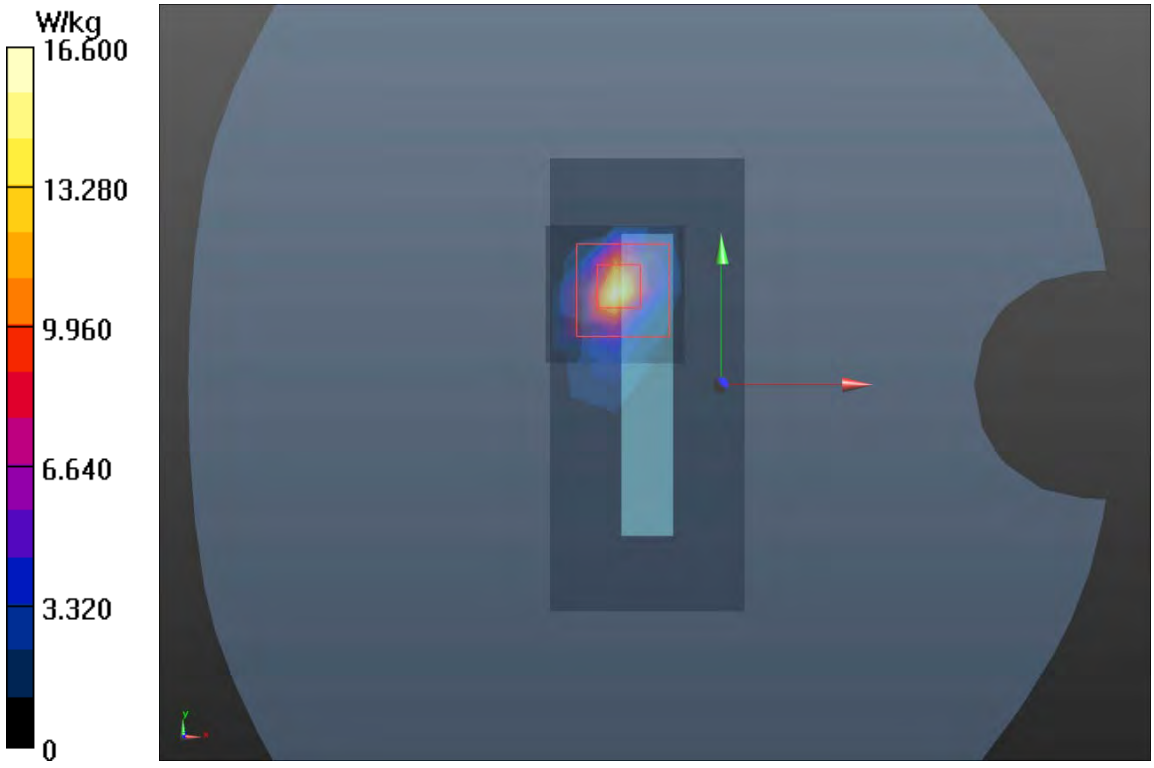
Top Edge Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 8.965 V/m; Power Drift = 0.078 dB

Peak SAR (extrapolated) = 30.4 W/kg

SAR(1 g) = 6.14 W/kg; SAR(10 g) = 1.43 W/kg

Maximum value of SAR (measured) = 16.6 W/kg



ANNEX D: Probe Calibration Certificate

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中国认可 国际互认 校准 CALIBRATION CNAS L0570

Client TA(Shanghai) Certificate No: Z20-60218

CALIBRATION CERTIFICATE

Object EX3DV4 - SN : 3677

Calibration Procedure(s) FF-Z11-004-01
Calibration Procedures for Dosimetric E-field Probes

Calibration date: July 06, 2020

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)℃ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	16-Jun-20(CTTL, No.J20X04344)	Jun-21
Power sensor NRP-Z91	101547	16-Jun-20(CTTL, No.J20X04344)	Jun-21
Power sensor NRP-Z91	101548	16-Jun-20(CTTL, No.J20X04344)	Jun-21
Reference 10dBAttenuator	18N50W-10dB	10-Feb-20(CTTL, No.J20X00525)	Feb-22
Reference 20dBAttenuator	18N50W-20dB	10-Feb-20(CTTL, No.J20X00526)	Feb-22
Reference Probe EX3DV4	SN 3617	30-Jan-20(SPEAG, No.EX3-3617_Jan20/2)	Jan-21
DAE4	SN 1556	4-Feb-20(SPEAG, No.DAE4-1556_Feb20)	Feb-21
Secondary Standards	**ID #**	**Cal Date(Calibrated by, Certificate No.)**	**Scheduled Calibration**
SignalGenerator MG3700A	6201052605	23-Jun-20(CTTL, No.J20X04343)	Jun-21
Network Analyzer E5071C	MY46110673	10-Feb-20(CTTL, No.J20X00515)	Feb-21

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: July 08, 2020

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: Z20-60218 Page 1 of 9

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Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i θ=0 is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

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

b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016

c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010

d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization θ=0 (f≤900MHz in TEM-cell; f>1800MHz: waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below ConvF).
- *NORM(f)x,y,z = NORMx,y,z* frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- *Ax,y,z; Bx,y,z; Cx,y,z;VRx,y,z:*A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f≤800MHz) and inside waveguide using analytical field distributions based on power measurements for f >800MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORMx,y,z* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from±50MHz to±100MHz.
- *Spherical isotropy (3D deviation from isotropy):* in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset:* The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle:* The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (*k*=2)
Norm(μV/(V/m)²)[A]	0.41	0.46	0.40	±10.0%
DCP(mV)[B]	100.7	102.6	102.1	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB√μV	C	D dB	VR mV	Unc[E] (*k*=2)
0	CW	X	0.0	0.0	1.0	0.00	174.8	±2.0%
		Y	0.0	0.0	1.0		186.9	
		Z	0.0	0.0	1.0		173.5	

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor *k*=2, which for a normal distribution Corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X, Y, Z do not affect the E²-field uncertainty inside TSL (see Page 4).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainly is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz][C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unct. (k=2)
750	41.9	0.89	9.78	9.78	9.78	0.40	0.75	±12.1%
835	41.5	0.90	9.38	9.38	9.38	0.21	1.11	±12.1%
1750	40.1	1.37	8.25	8.25	8.25	0.26	1.05	±12.1%
1900	40.0	1.40	7.90	7.90	7.90	0.28	1.06	±12.1%
2000	40.0	1.40	7.97	7.97	7.97	0.23	1.17	±12.1%
2300	39.5	1.67	7.69	7.69	7.69	0.66	0.68	±12.1%
2450	39.2	1.80	7.54	7.54	7.54	0.66	0.70	±12.1%
2600	39.0	1.96	7.26	7.26	7.26	0.74	0.67	±12.1%
3300	38.2	2.71	7.07	7.07	7.07	0.48	0.97	±13.3%
3500	37.9	2.91	7.03	7.03	7.03	0.49	0.93	±13.3%
3700	37.7	3.12	6.83	6.83	6.83	0.49	0.97	±13.3%
3900	37.5	3.32	6.76	6.76	6.76	0.40	1.20	±13.3%
4100	37.2	3.53	6.78	6.78	6.78	0.40	1.15	±13.3%
4400	36.9	3.84	6.47	6.47	6.47	0.40	1.20	±13.3%
4600	36.7	4.04	6.42	6.42	6.42	0.50	1.13	±13.3%
4800	36.4	4.25	6.35	6.35	6.35	0.45	1.25	±13.3%
4950	36.3	4.40	6.22	6.22	6.22	0.45	1.25	±13.3%
5250	35.9	4.71	5.55	5.55	5.55	0.50	1.15	±13.3%
5600	35.5	5.07	4.97	4.97	4.97	0.55	1.22	±13.3%
5750	35.4	5.22	5.00	5.00	5.00	0.55	1.27	±13.3%

[C] Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

[F] At frequency below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.

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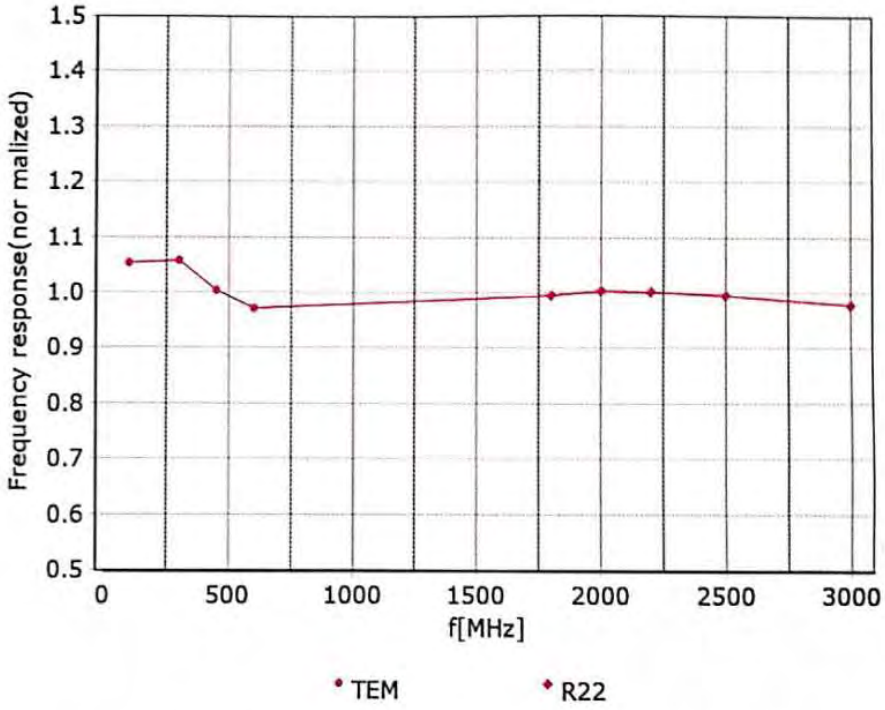
Frequency Response of E-Field
(TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ±7.4% (*k*=2)

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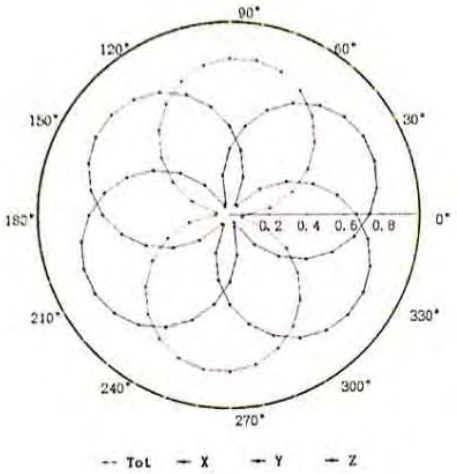
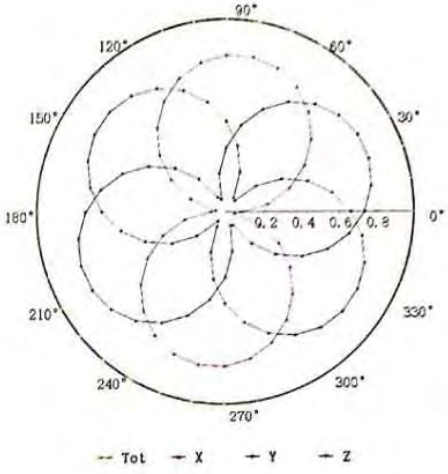
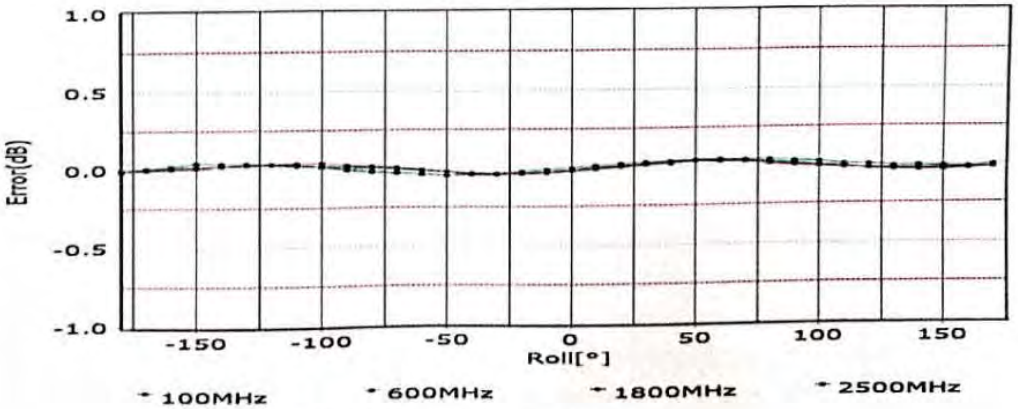
Receiving Pattern (Φ), θ=0°

f=600 MHz, TEM



f=1800 MHz, R22





Uncertainty of Axial Isotropy Assessment: ±1.2% (*k*=2)

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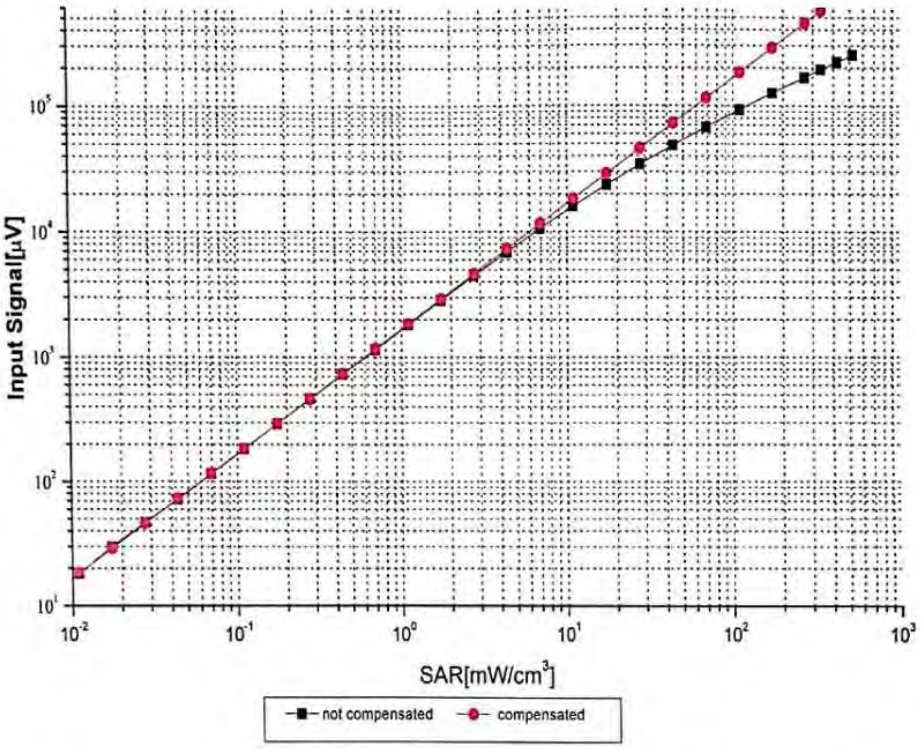
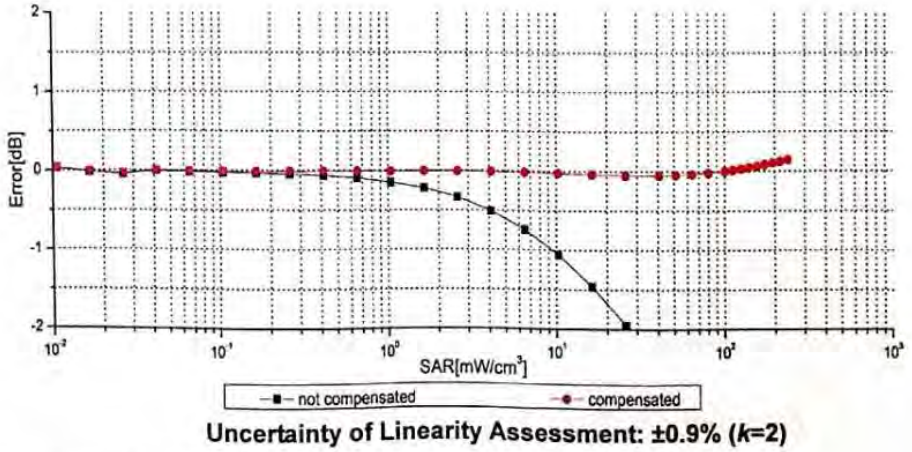
Dynamic Range f(SAR_{head})
(TEM cell, f = 900 MHz)





Uncertainty of Linearity Assessment: ±0.9% (*k*=2)

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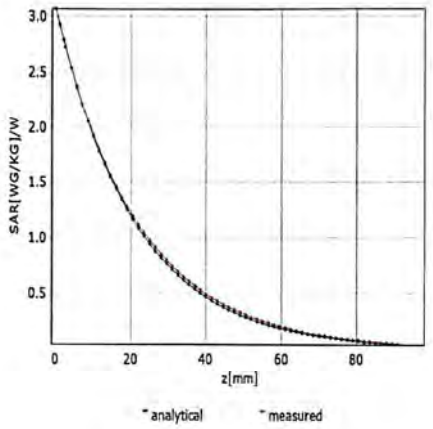
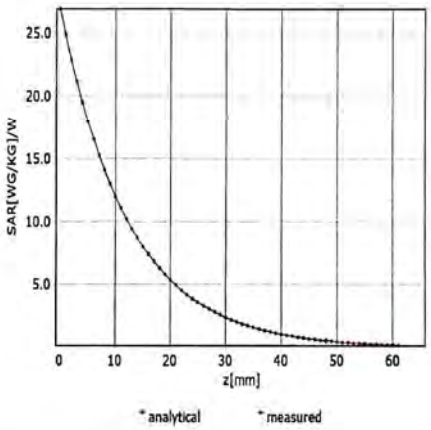
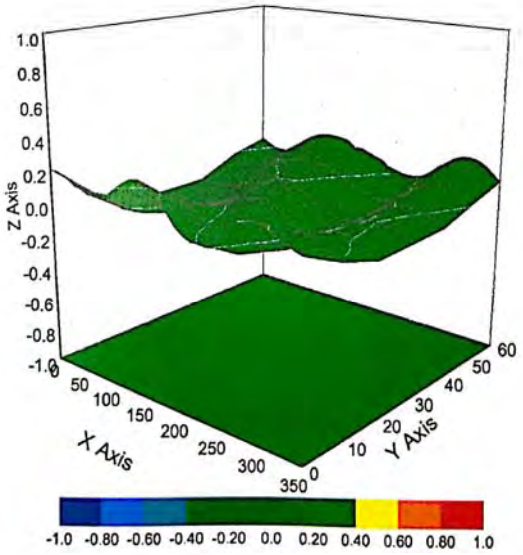
Conversion Factor Assessment

f=750 MHz,WGLS R9(H_convF) **f=1750 MHz,WGLS R22(H_convF)**





Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: ±3.2% (*k*=2)

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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	115.7
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	10mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm

ANNEX E: D750V3 Dipole Calibration Certificate

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CALIBRATION
CNAS L0570

Client TA(Shanghai) Certificate No: Z20-60299

CALIBRATION CERTIFICATE

Object	D750V3 - SN: 1045
Calibration Procedure(s)	FF-Z11-003-01 Calibration Procedures for dipole validation kits
Calibration date:	August 28, 2020

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)℃ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	12-May-20 (CTTL, No.J20X02965)	May-21
Power sensor NRP6A	101369	12-May-20 (CTTL, No.J20X02965)	May-21
Reference Probe EX3DV4	SN 3617	30-Jan-20(SPEAG,No.EX3-3617_Jan20)	Jan-21
DAE4	SN 771	10-Feb-20(CTTL-SPEAG,No.Z20-60017)	Feb-21
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	25-Feb-20 (CTTL, No.J20X00516)	Feb-21
NetworkAnalyzer E5071C	MY46110673	10-Feb-20 (CTTL, No.J20X00515)	Feb-21

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: September 3, 2020

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Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORMx,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor k=2, which for a normal distribution Corresponds to a coverage probability of approximately 95%.

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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.3 ± 6 %	0.87 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.07 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**8.37 W/kg ± 18.8 % (*k*=2)**
SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.38 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	**5.57 W/kg ± 18.7 % (*k*=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.5	0.96 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.4 ± 6 %	0.94 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	---	---

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.12 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**8.58 W/kg ± 18.8 % (*k*=2)**
SAR averaged over 10 cm^3 (10 g) of Body TSL	Condition	
SAR measured	250 mW input power	1.41 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	**5.70 W/kg ±18.7 % (*k*=2)**

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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.3Ω- 2.29jΩ
Return Loss	- 26.6dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	47.7Ω- 4.58jΩ
Return Loss	- 25.6dB

General Antenna Parameters and Design

Electrical Delay (one direction)	0.900 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG

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DASY5 Validation Report for Head TSL Date: 08.28.2020

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1045

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; σ = 0.873 S/m; ε_r = 41.28; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(10.07, 10.07, 10.07) @ 750 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn771; Calibrated: 2020-02-10
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.97 V/m; Power Drift = -0.02 dB

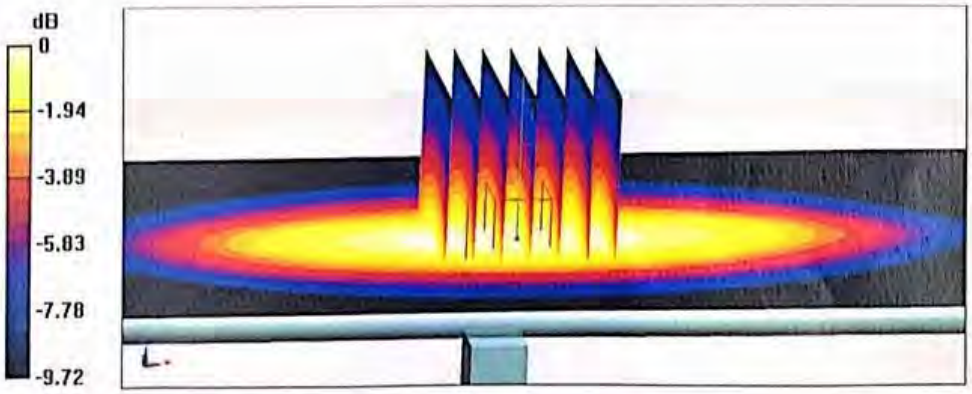
Peak SAR (extrapolated) = 3.00 W/kg

SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.38 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 68.7%

Maximum value of SAR (measured) = 2.71 W/kg



0 dB = 2.71 W/kg = 4.33 dBW/kg

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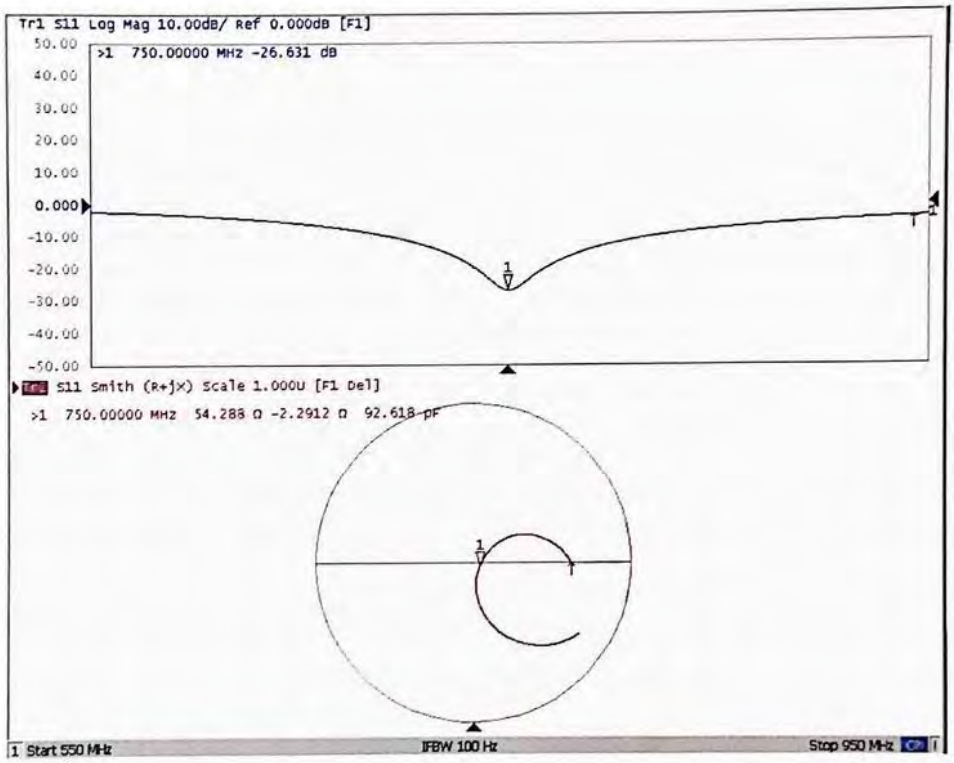
Impedance Measurement Plot for Head TSL



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DASY5 Validation Report for Body TSL Date: 08.28.2020

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1045

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: f = 750 MHz; σ = 0.94 S/m; ε_r = 54.36; ρ = 1000 kg/m^3

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(9.8, 9.8, 9.8) @ 750 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn771; Calibrated: 2020-02-10
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Dipole Calibration/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.84 V/m; Power Drift = -0.02 dB

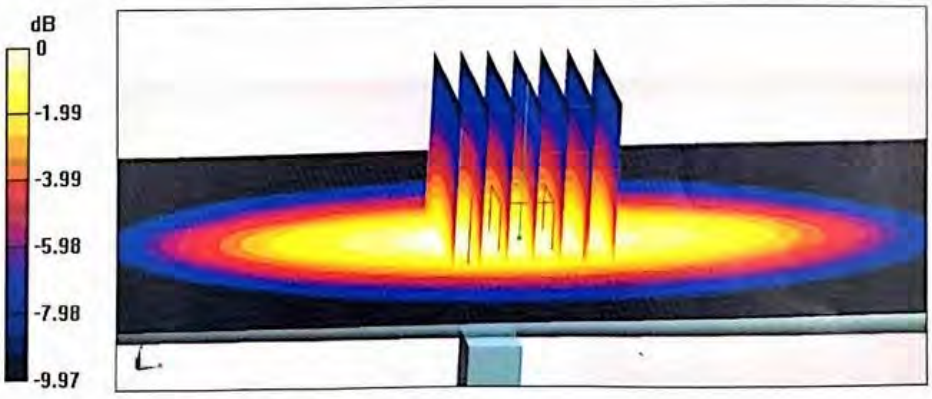
Peak SAR (extrapolated) = 3.14 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.41 W/kg

Smallest distance from peaks to all points 3 dB below = 18.4 mm

Ratio of SAR at M2 to SAR at M1 = 67.9%

Maximum value of SAR (measured) = 2.80 W/kg



0 dB = 2.80 W/kg = 4.47 dBW/kg

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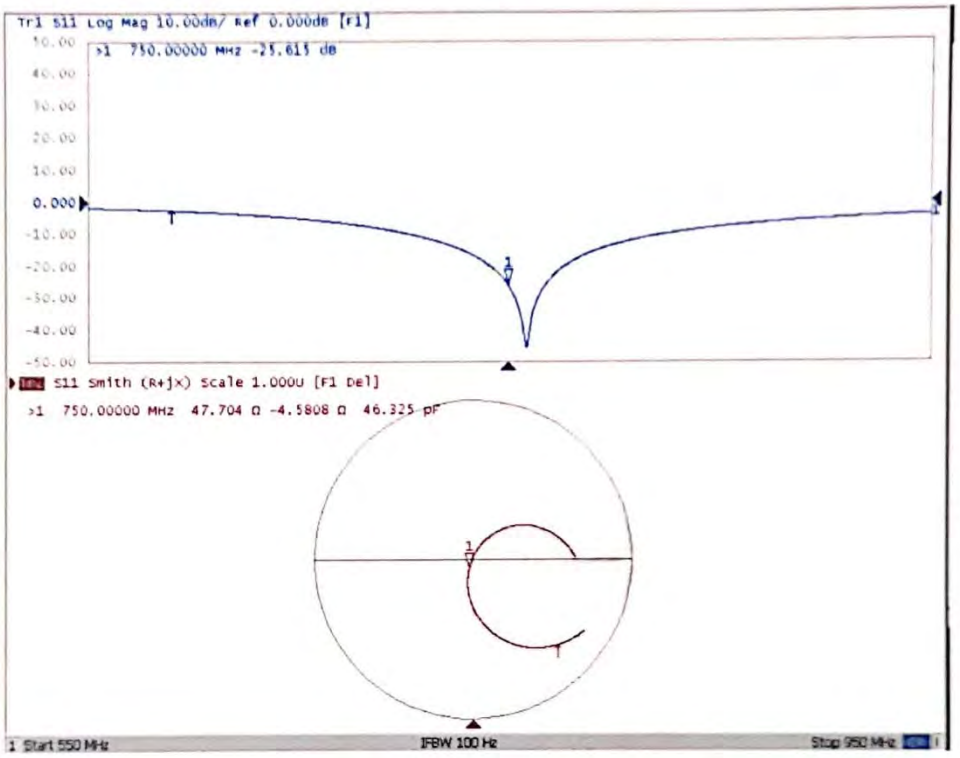
Impedance Measurement Plot for Body TSL



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ANNEX F: D835V2 Dipole Calibration Certificate

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Client TA(Shanghai) Certificate No: Z20-60296

CALIBRATION CERTIFICATE

Object	D835V2 - SN: 4d020
Calibration Procedure(s)	FF-Z11-003-01 Calibration Procedures for dipole validation kits
Calibration date:	August 28, 2020

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)℃ and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	12-May-20 (CTTL, No.J20X02965)	May-21
Power sensor NRP6A	101369	12-May-20 (CTTL, No.J20X02965)	May-21
Reference Probe EX3DV4	SN 3617	30-Jan-20(SPEAG,No.EX3-3617_Jan20)	Jan-21
DAE4	SN 771	10-Feb-20(CTTL-SPEAG,No.Z20-60017)	Feb-21
Secondary Standards	**ID #**	**Cal Date(Calibrated by, Certificate No.)**	**Scheduled Calibration**
Signal Generator E4438C	MY49071430	25-Feb-20 (CTTL, No.J20X00516)	Feb-21
NetworkAnalyzer E5071C	MY46110673	10-Feb-20 (CTTL, No.J20X00515)	Feb-21

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: September 3, 2020

Certificate No: Z20-60296 Page 1 of 8

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Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORMx,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
b) IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
c) IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
d) KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

e) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
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- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor k=2, which for a normal distribution Corresponds to a coverage probability of approximately 95%.