



SAR TEST REPORT

Applicant Honor Device Co., Ltd.
FCC ID 2AYGCNZA-LX9N
Product Smart Phone
Model NZA-LX9N
Report No. R2101A0067-S1
Issue Date February 9, 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.

Prepared by: Yu Wang

Approved by: Guangchang Fan

TA Technology (Shanghai) Co., Ltd.

No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China

TEL: +86-021-50791141/2/3

FAX: +86-021-50791141/2/3-8000



Table of Contents

1	Test Laboratory.....	4
1.1	Notes of the Test Report.....	4
1.2	Test facility.....	4
1.3	Testing Location.....	4
1.4	Laboratory Environment.....	5
2	Statement of Compliance.....	6
3	Description of Equipment under Test.....	8
4	Test Specification, Methods and Procedures.....	11
5	Operational Conditions during Test.....	12
5.1	Test Positions.....	12
5.1.1	Against Phantom Head.....	12
5.1.2	Body Worn Configuration.....	12
5.1.3	Phablet SAR test considerations.....	13
5.2	Measurement Variability.....	14
5.3	Test Configuration.....	15
5.3.1	GSM Test Configuration.....	15
5.3.2	UMTS Test Configuration.....	15
5.3.3	LTE Test Configuration.....	20
5.3.4	Additional requirements for TDD LTE specification.....	21
5.3.5	Wi-Fi Test Configuration.....	24
5.3.6	BT Test Configuration.....	25
5.3.7	Dynamic antenna switching specification.....	25
5.3.8	Receiver detection mechanism specification.....	25
6	SAR Measurements System Configuration.....	27
6.1	SAR Measurement Set-up.....	27
6.2	DASY5 E-field Probe System.....	28
6.3	SAR Measurement Procedure.....	29
7	Main Test Equipment.....	31
8	Tissue Dielectric Parameter Measurements & System Verification.....	32
8.1	Tissue Verification.....	32
8.2	System Performance Check.....	34
8.3	SAR System Validation.....	36
9	Normal and Maximum Output Power.....	37
9.1	GSM Mode.....	37
9.2	WCDMA Mode.....	41
9.3	LTE Mode.....	46
9.4	WLAN Mode.....	95
9.5	Bluetooth Mode.....	97
10	Measured and Reported (Scaled) SAR Results.....	98
10.1	EUT Antenna Locations.....	98
10.2	Measured SAR Results.....	99



10.4	Simultaneous Transmission Analysis.....	146
11	Measurement Uncertainty.....	153
ANNEX A:	Test Layout.....	154
ANNEX B:	System Check Results.....	156
ANNEX C:	Highest Graph Results.....	168
ANNEX D:	Probe Calibration Certificate.....	251
ANNEX E:	D835V2 Dipole Calibration Certificate.....	260
ANNEX F:	D1750V2 Dipole Calibration Certificate.....	268
ANNEX G:	D1900V2 Dipole Calibration Certificate.....	276
ANNEX H:	D2450V2 Dipole Calibration Certificate.....	284
ANNEX I:	D2600V2 Dipole Calibration Certificate.....	292
ANNEX J:	DAE4 Calibration Certificate.....	300
ANNEX K:	The EUT Appearance.....	303
ANNEX L:	Test Setup Photos.....	304



1 Test Laboratory

1.1 Notes of the Test Report

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

1.2 Test facility

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

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

A2LA (Certificate Number: 3857.01)

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

1.3 Testing Location

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



1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5
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	0.42	0.27	0.34	NA
GSM 1900	0.74	0.30	0.52	NA
WCDMA Band II	0.87	0.42	0.76	1.19
WCDMA Band IV	0.66	0.34	0.40	NA
WCDMA Band V	0.46	0.32	0.43	NA
LTE FDD 2	0.85	0.41	0.77	1.47
LTE FDD 4	0.81	0.37	0.49	NA
LTE FDD 5	0.38	0.34	0.35	NA
LTE FDD 7	0.68	0.51	0.61	2.00
LTE TDD 38	0.75	0.50	0.77	1.52
LTE TDD 41	0.72	0.58	0.73	1.58
LTE FDD 66	0.84	0.49	0.48	NA
Wi-Fi (2.4G)	0.18	0.20	0.30	NA
BT	0.16	0.11	0.11	NA
Date of Testing: January 20, 2020 ~ February 9, 2020				
Date of Sample Received: January 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.				

Note: 1) The highest Reported SAR for head, body-worn, hotspot ,Product Specific 10-g SAR and simultaneous transmission exposure conditions are 0.87W/kg, 0.58W/kg, 0.77W/kg ,2.00W/kg and 1.997W/kg.

2) For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions the handset a minimum of 15mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.



3) According to TCB workshop October, 2014 RF Exposure Procedures Update (Overlapping LTE Bands):

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits according to the FCC rule § 2.1093, the ANSI C95.1: 1992/IEEE C95.1: 1991, and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013.

3 Description of Equipment under Test

Client Information

Applicant	Honor Device Co., Ltd.
Applicant address	Suite 3401, Unit A, Building 6, Shum Yip Sky Park, No. 8089, Hongli West Road, Xiangmihu Street, Futian District, Shenzhen, Guangdong 518040, People's Republic of China
Manufacturer	Honor Device Co., Ltd.
Manufacturer address	Suite 3401, Unit A, Building 6, Shum Yip Sky Park, No. 8089, Hongli West Road, Xiangmihu Street, Futian District, Shenzhen, Guangdong 518040, People's Republic of China

General Technologies

Application Purpose	Original Grant		
EUT Stage	Identical Prototype		
Model	NZA-LX9N		
SN	L4H0120C21000068(Battery1) L4H0120C21000089(Battery2) L4H0120C21000110(Battery3) L4H0120C21000111(Battery4) L4H0120C21000066(Battery5) L4H0120C21000073(Battery6)		
Hardware Version	HL1WKGM		
Software Version	5.0.0.76		
Antenna Type	Internal Antenna		
Device Class	B		
Wi-Fi Hotspot	Wi-Fi 2.4G		
Power Class	GSM 850: 4 GSM 1900: 1 UMTS Band II/IV/V: 3 LTE FDD 2/4/5/7/66: 3 LTE TDD 38/41: 3		
Power Level	GSM 850: level 5 GSM 1900: level 0 UMTS Band II/IV/V: all up bits LTE FDD 2/4/5/7/66: max power LTE TDD 38/41: max power		
EUT Accessory			
Accessory	Model	Manufacture	No.
Battery	HB526488EEW	Honor Device Co., Ltd.	1



		(Manufacturer: Sunwoda Electronic Co.,LTD)	
		Honor Device Co., Ltd. (Manufacturer: Huizhou Desay Battery Co., Ltd.)	2
		Honor Device Co., Ltd. (Manufacturer: Dongguan NVT Technology Co., Ltd)	3
	HB536488EEW	Honor Device Co., Ltd. (Manufacturer: Sunwoda Electronic Co.,LTD)	4
		Honor Device Co., Ltd. (Manufacturer: Huizhou Desay Battery Co., Ltd.)	5
		Honor Device Co., Ltd. (Manufacturer: Dongguan NVT Technology Co., Ltd)	6
Earphone	MEND1532B528A11	Jiangxi Lianchuang Hongsheng Electronic Co. ,LTD.	1
	1293-3283-3.5mm-339	Boluo County Quancheng Electronic Co.,ltd.	2
	EPAB542-2WH05-DH	FOXCONN INTERCONNECT TECHNOLOGY LIMITED	3
Note: The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.			

Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)
GSM	850	Voice(GMSK) GPRS(GMSK) EGPRS(GMSK,8PSK)	☐ Multi-slot Class:8-1UP	824 ~ 849
	1900		☐ Multi-slot Class:10-2UP	1850 ~ 1910
			☒ Multi-slot Class:12-4UP	
			☐ Multi-slot Class:33-4UP	
Does this device support DTM (Dual Transfer Mode)? ☐ Yes ☒ No				
UMTS	Band II	QPSK, 16QAM	HSDPA UE Category:14	1850 ~ 1910
	Band IV		HSUPA UE Category:7	1710 ~ 1755
	Band V		DC-HSDPA UE Category:24 HSPA+ Category:7	824 ~ 849
LTE	FDD 2	QPSK, 16QAM	Rel.10 /Category 4	1850 ~ 1910
	FDD 4			1710 ~ 1755
	FDD 5			824 ~ 849
	FDD 7			2500 ~ 2570
	TDD 38			2570 ~ 2620
	TDD 41			2535 ~ 2675
	FDD 66			1710 ~ 1780
	Does this device support Carrier Aggregation (CA) ☐ Yes ☒ No			
	Does this device support SV-LTE (1xRTT-LTE)? ☐ Yes ☒ No			
BT	2.4G	Version 5.1 LE		2402 ~2480
Wi-Fi	2.4G	DSSS, OFDM	802.11b/g/n HT20	2412 ~ 2462
		OFDM	802.11n HT40	2422 ~ 2452
	Does this device support MIMO ☐ Yes ☒ No			
NFC	13.56MHz			

4 Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with FCC 47 CFR § 2.1093, IEEE 1528- 2013, ANSI C95.1: 1992, IEEE C95.1: 1991, the following FCC Published RF exposure KDB procedures:

IEC 62209-1

Reference Standards

KDB 248227 D01 802.11Wi-Fi SAR v02r02

KDB 447498 D01 General RF Exposure Guidance v06

KDB 648474 D04 Handset SAR v01r03

KDB 690783 D01 SAR Listings on Grants v01r03

KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04

KDB 865664 D02 RF Exposure Reporting v01r02

KDB 941225 D01 3G SAR Procedures v03r01

KDB 941225 D05 SAR for LTE Devices v02r05

KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02

KDB 941225 D06 Hotspot Mode v02r01

5 Operational Conditions during Test

5.1 Test Positions

5.1.1 Against Phantom Head

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

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

5.1.2 Body Worn Configuration

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations.

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

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

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

5.1.3 Phablet SAR test considerations

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

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

5.2 Measurement Variability

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

SAR Measurement Variability was assessed using the following procedures for each frequency band:

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

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

5.3 Test Configuration

5.3.1 GSM Test Configuration

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

Output power of reductions:

Table 1: The allowed power reduction in the multi-slot configuration

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

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

5.3.2 UMTS Test Configuration

5.3.2.1 3G SAR Test Reduction Procedure

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

5.3.2.2 Head SAR

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

5.3.2.3 Body-worn accessory SAR

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

5.3.2.4 Release 5 HSDPA Test Configuration

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

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

Table 4: Subtests for UMTS Release 5 HSDPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5
Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$ Note 2: CM=1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.							

5.3.2.5 Release 6 HSUPA Test Configuration

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

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

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

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

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

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

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

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

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

Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

Table 6: HSUPA UE category

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



3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	11484	5.76
	4	4	10		20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?
	4	4	10		20000	?

NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4.

UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM.
(TS25.306-7.3.0)

5.3.2.6 HSPA, HSPA+ and DC-HSDPA Test Configuration

SAR test exclusion may apply to 3GPP Rel. 6 HSPA and Rel. 8 DC-HSDPA. When SAR measurement is required for HSPA or DC-HSDPA, a KDB inquiry is required to confirm that the wireless mode configurations in the test setup have remained stable throughout the SAR measurements. Without prior KDB confirmation to determine the SAR results are acceptable, a PAG is required for equipment approval.

SAR test exclusion for HSPA, HSPA+ and DC-HSDPA is determined according to the following:

1) The HSPA procedures are applied to configure 3GPP Rel. 6 HSPA devices in the required sub-test mode(s) to determine SAR test exclusion.

2) SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode. Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.

3) SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

4) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting HSPA, HSPA+ or DC-HSDPA:

a) The output power measurement results and applicable release version(s) of 3GPP TS 34.121.

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

b) The power measurement results are in agreement with the individual device implementation and specifications. When Enhanced MPR (E-MPR) applies, the normal MPR targets may be modified according to the Cubic Metric (CM) measured by the device, which must be taken into consideration.

c) The UE category, operating parameters, such as the β and Δ values used to configure the device for testing, power setback procedures described in 3GPP TS 34.121 for the power measurements, and HSPA/HSPA+ channel conditions (active and stable) for the entire duration of the measurement



according to the required E-TFCI and AG index values.

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

Table 7: HS-DSCH UE category

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

5.3.3 LTE Test Configuration

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

A) Spectrum Plots for RB Configurations

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

B) MPR

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

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

C) A-MPR

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

D) Largest channel bandwidth standalone SAR test requirements

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

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

4) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

E) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

5.3.4 Additional requirements for TDD LTE specification

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

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

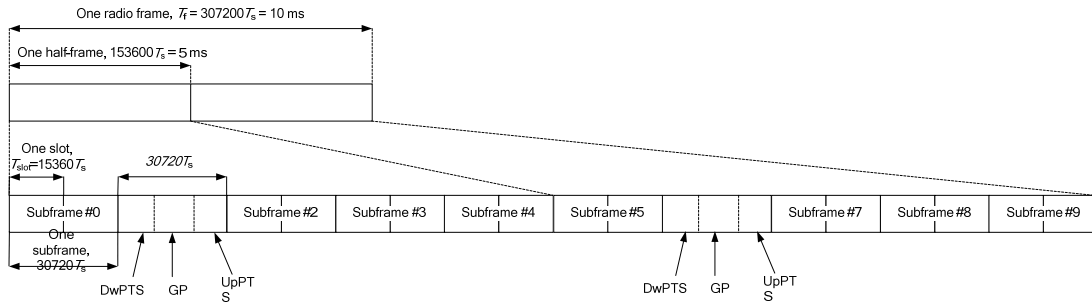


Figure 1: Frame structure type 2

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

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

Table 9: Uplink-downlink configurations

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

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

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

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

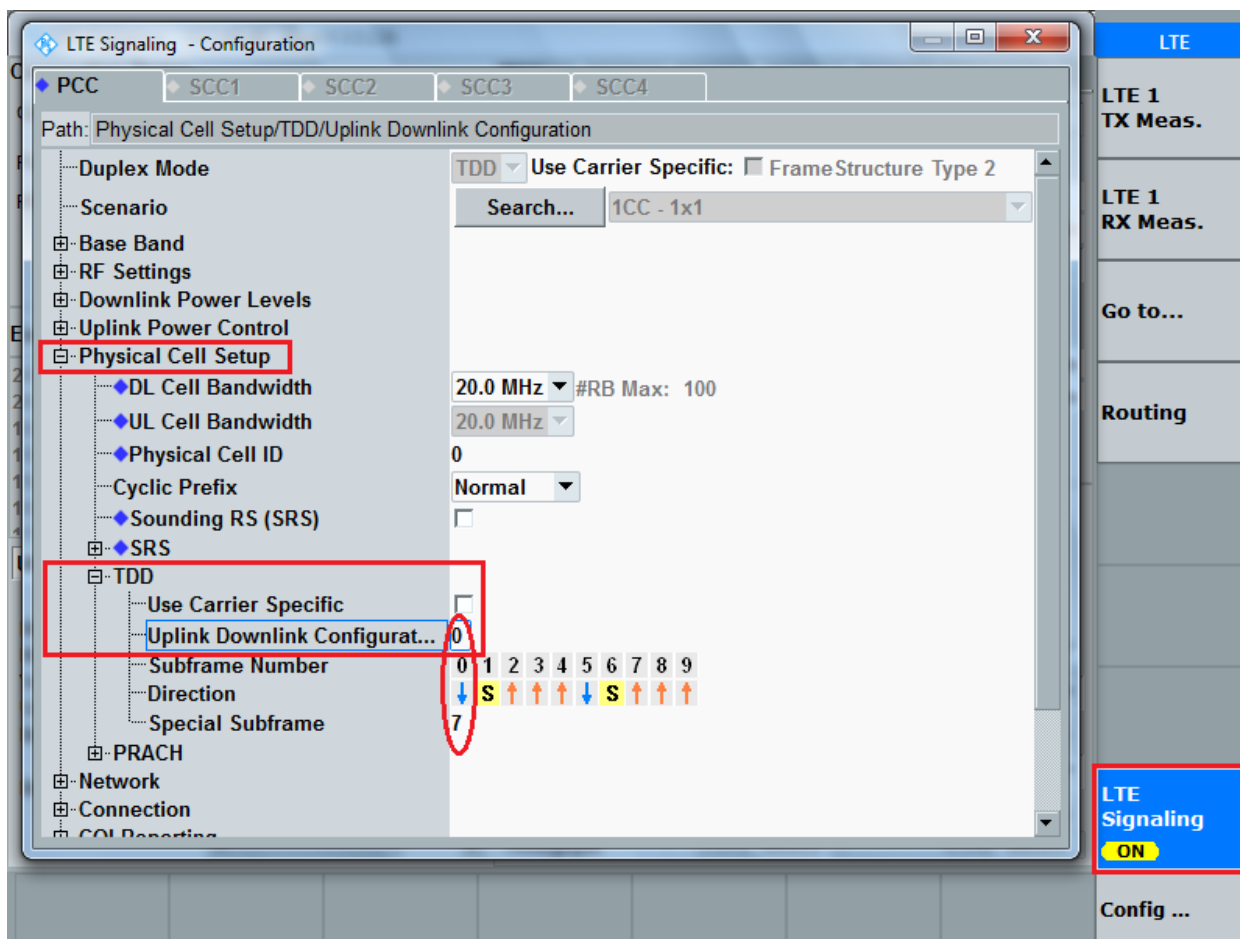
In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. All these sets are ok when we test, or we can set as below.

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

And we can get different Duty cycles under different configurations:

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

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



5.3.5 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.

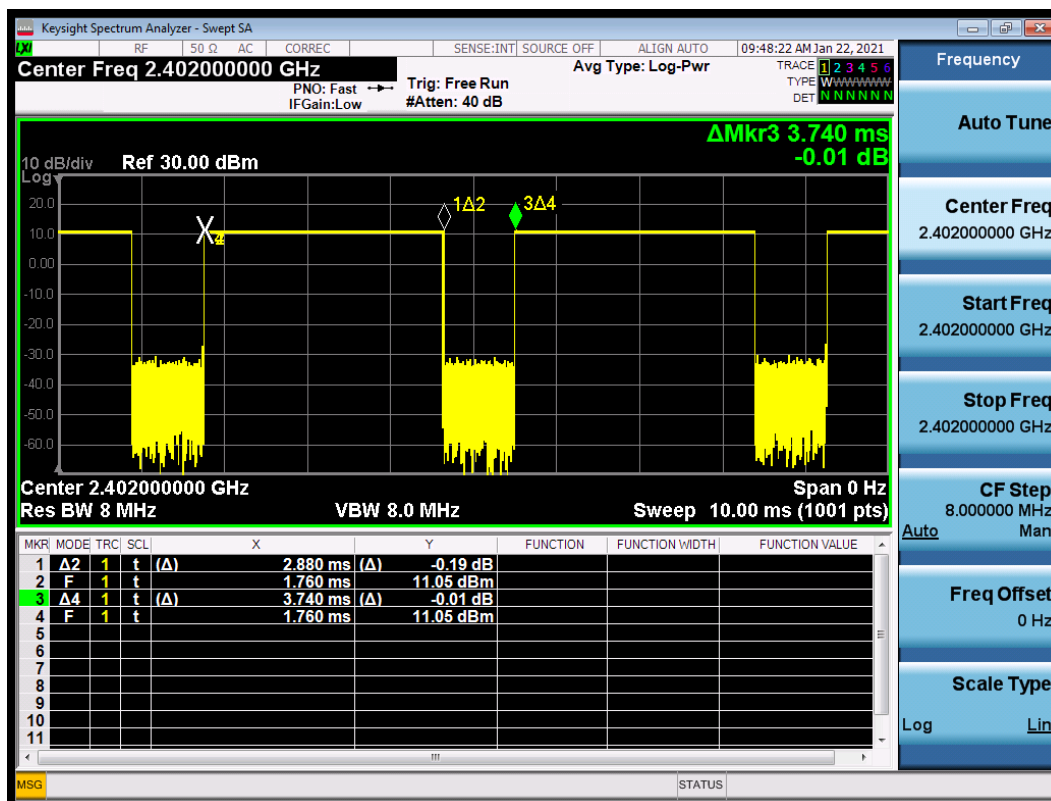
To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

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.

5.3.6 BT Test Configuration

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

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



Note: Duty factor= Ton (ms)/ T(on+off) (ms)=2.880/3.740=77%

5.3.7 Dynamic antenna switching specification

The device supports the dynamic antenna switching function to optimize transmission efficiency for wide range frequency operations. It has two 2G/3G/4G TX antennas (Down Antenna and Up Antenna). It can transmit from either Down Antenna or Up Antenna. The Down Antenna support GSM850/1900, WCDMA B2/B4/B5 LTE:B2/4/5/7/38/41/66 operating bands, and Up Antenna support GSM850/1900, WCDMA B2/B4/B5 LTE:B2/4/5/7/38/41/66 operating bands, only one antenna can be used for 2G/3G/4G transmission at a time.

5.3.8 Receiver detection mechanism specification

This device uses the receiver to indicate whether the user is making a call in head scenario or not. The selection between head and body power levels is based on the receiver detection mechanism. It can determine proximity to head or body and set the relevant power level for 2G&3G&4G and Wi-Fi antennas accordingly.

More details information followings:



Bottom antenna		Power Reduction Level Amount (dBm)												
Power Reduction Scenario	GSM850	GSM1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B20	LTE B28	LTE 38	LTE 41	LTE B66
Receiver on	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
Receiver off	0.0	0.0	2.5	2.5	0.0	1.5	2.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0
Receiver off+hotspot on	0.0	4.0	5.0	5.0	0.0	4.0	2.0	0.0	1.0	0.0	0.0	0.0	0.0	3.0
Receiver off+hotspot off	0.0	0.0	2.5	2.5	0.0	1.5	2.0	0.0	1.0	0.0	0.0	0.0	0.0	2.0

Top antenna		Power Reduction Level Amount (dBm)												
Power Reduction Scenario	GSM850	GSM1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B20	LTE B28	LTE 38	LTE 41	LTE B66
Receiver on	0.0	2.0	3.5	3.5	0.0	3.5	3.0	0.0	6.3	0.0	0.0	5.5	6.0	3.0
Receiver off	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Receiver off+hotspot on	0.0	2.5	3.5	3.5	0.0	3.5	3.0	0.0	6.3	0.0	0.0	5.5	6.0	3.0
Receiver off+hotspot off	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0

WLAN antenna		Power Reduction Level Amount (dBm)			
Power Reduction Scenario	2.4 G 802.11b	2.4 G 802.11g	2.4 G 802.11n 20	2.4 G 802.11n 40	
Receiver on	7.5	7.0	5.0	1.0	
Receiver off	0.0	0.0	0.0	0.0	

SAR test Plan

Table: Summary of Receiver detection mechanism

Antenna	Receiver on (head scenario)	Receiver off (Body/other scenario)
2G&3G&4G Up ant	Power Level A1	Power Level B1
2G&3G&4G Down ant	Power Level A2	Power Level B2
Wi-Fi Ant	Power Level A3	Power Level B3

Based on the Summary table of Receiver detection mechanism above,

For Head SAR test,

- 1) Standalone Head SAR of 2G&3G&4G Up ant is evaluated at power level A1 (Receiver on)
- 2) Standalone Head SAR of 2G&3G&4G Down ant is evaluated at power level A2 (Receiver on);
- 3) Standalone Head SAR of Wi-Fi ant is evaluated at power level A3(Receiver on);

For Body SAR test,

- 1) Standalone Body SAR of 2G&3G&4G Up ant is evaluated at power level B1 (Receiver off);
- 2) Standalone Body SAR of 2G&3G&4G Down ant is evaluated at power level B2 (Receiver off);
- 3) Standalone Body SAR of Wi-Fi ant is evaluated at power level B3 (Receiver off);

6.1 SAR Measurement Set-up

The schematic diagram illustrates the DASYS system architecture. At the center is the **DASYS Measurement Server**, which interfaces with various components:

- Sensors and Input Devices:** A **Touch Display** is connected to the server. The server also receives input from a **Start up** button, a **Reverse Control Box**, a **Signaler**, and a **Light Sensor**.
- Data Processing and Storage:** The server is linked to a **PC** (Personal Computer) via a network connection.
- Robot Controller:** The server communicates with a **robot controller** box containing a **C58C** microcontroller. This controller manages the robot's movements through **PWM** (Pulse Width Modulation) signals sent to **act** (actuators) and **sens** (sensors).
- Robot Arm:** The robot arm, labeled **DASYS**, is controlled by the robot controller. It features a **Model Output Converter 4000** at its end effector, which includes a **start line** sensor and a **sensor** for detecting **if two yellow paint surface detect**.
- Base Unit:** The entire system is supported by a base unit containing a **Platform**, **Motor Mounting**, **Motor**, **Control unit board**, and **Signal board**.

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

6.2 DASY5 E-field Probe System

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

EX3DV4 Probe Specification

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



E-field Probe Calibration

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

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

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

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

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

Or

$$SAR = IEI^2 \sigma / \rho$$

Where: σ = Simulated tissue conductivity,
 ρ = Tissue density (kg/m³).

6.3 SAR Measurement Procedure

Power Reference Measurement

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

Area Scan

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

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

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

Zoom Scan

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

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

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

Volume Scan Procedures

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

Power Drift Monitoring

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

7 Main Test Equipment

Name of Equipment	Manufacturer	Type/Model	Serial Number	Last Cal.	Cal. Due Date
Network analyzer	Agilent	E5071B	MY42404014	2020-05-17	2021-05-16
Dielectric Probe Kit	HP	85070E	US44020115	2020-05-17	2021-05-16
Power meter	Agilent	E4417A	GB41291714	2020-05-17	2021-05-16
Power sensor	Agilent	N8481H	MY50350004	2020-05-17	2021-05-16
Power sensor	Agilent	E9327A	US40441622	2020-05-17	2021-05-16
Dual directional coupler	Agilent	778D-012	50519	/	/
Dual directional coupler	Agilent	777D	50146	/	/
Amplifier	INDEXSAR	IXA-020	0401	2020-05-17	2021-05-16
Wireless communication tester	Anritsu	MT8820C	6201342015	2020-05-17	2021-05-16
Wideband radio communication tester	R&S	CMW 500	113645	2020-05-17	2021-05-16
Base Station Simulator	R&S	CMW270	100673	2020-05-17	2021-05-16
E-field Probe	SPEAG	EX3DV4	3677	2020-07-06	2021-07-05
DAE	SPEAG	DAE4	1291	2020-02-24	2021-02-23
Validation Kit 835MHz	SPEAG	D835V2	4d020	2020-08-28	2023-08-27
Validation Kit 1750MHz	SPEAG	D1750V2	1033	2020-02-25	2023-02-24
Validation Kit 1900MHz	SPEAG	D1900V2	5d060	2020-08-27	2023-08-26
Validation Kit 2450MHz	SPEAG	D2450V2	786	2020-08-27	2023-08-26
Validation Kit 2600MHz	SPEAG	D2600V2	1025	2018-05-02	2021-05-01
Temperature Probe	Tianjin jinming	JM222	381	2020-05-25	2021-05-24
Hygrothermograph	Anymetr	HTC-1	TY2020A043	2020-05-19	2021-05-18
Twin SAM Phantom	Speag	SAM1	1534	/	/
Software for Test	Speag	DASY52	/	/	/
Softwarefor Tissue	Agilent	85070	/	/	/

8 Tissue Dielectric Parameter Measurements & System Verification

8.1 Tissue Verification

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

Target values

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	Glycol (%)	Preventol (%)	Cellulose (%)	ϵ_r	$\sigma(\text{s/m})$
835	41.450	1.450	56	0.000	0.1	1.0	41.5	0.90
1750	55.240	0.310	0	44.450	0	0	40.1	1.37
1900	55.242	0.306	0	44.452	0	0	40.0	1.40
2450	62.700	0.500	0	36.800	0	0	39.2	1.80
2600	55.242	0.306	0	44.452	0	0	39.0	1.96

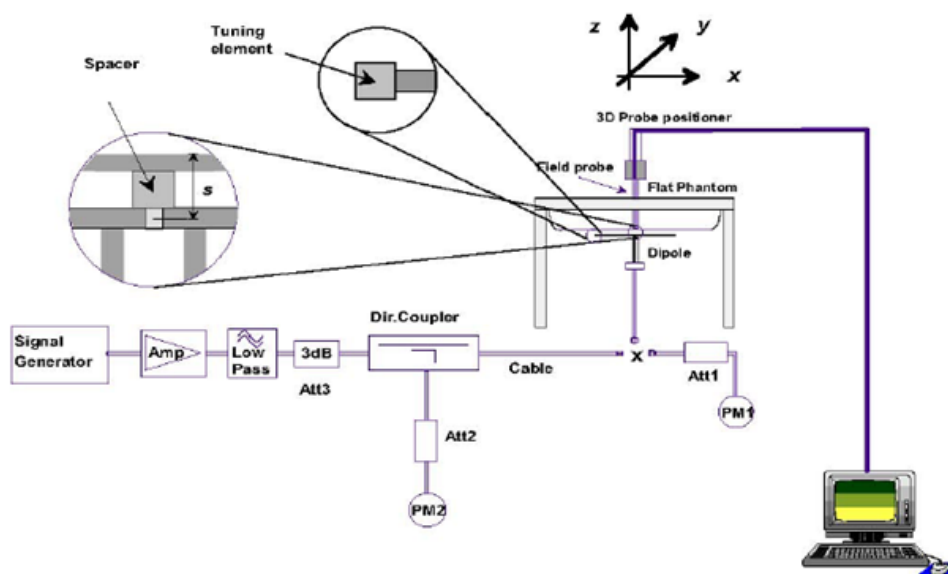
Measurements results

Frequency (MHz)	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within $\pm 5\%$)	
			ϵ_r	σ (s/m)	ϵ_r	σ (s/m)	Dev ϵ_r (%)	Dev σ (%)
835	1/25/2021	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	1/26/2021	21.5	41.3	0.87	41.5	0.90	-0.48	-3.33
1750	1/31/2021	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
	1/28/2021	21.5	40.1	1.34	40.1	1.37	0.00	-2.19
	1/27/2021	21.5	40.2	1.36	40.1	1.37	0.25	-0.73
1900	1/30/2021	21.5	40.1	1.41	40.0	1.40	0.25	0.71
	1/29/2021	21.5	40.2	1.43	40.0	1.40	0.50	2.14
2450	2/1/2021	21.5	38.6	1.81	39.2	1.80	-1.53	0.56
2600	1/20/2021	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
	1/21/2021	21.5	38.4	1.94	39.0	1.96	-1.54	-1.02
	2/9/2021	21.5	38.3	1.99	39.0	1.96	-1.79	1.53
Note: The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.								

8.2 System Performance Check

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

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



Picture 1 System Performance Check setup



Picture 2 Setup Photo

**Justification for Extended SAR Dipole Calibrations**

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

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

System Check results

Frequency (MHz)	Test Date	Temp °C	250mW Measured SAR _{1g} (W/kg)	1W Normalized SAR _{1g} (W/kg)	1W Target SAR _{1g} (W/kg)	Δ % (Limit $\pm 10\%$)	Plot No.
835	1/25/2021	21.5	2.44	9.76	9.65	1.14	1
	1/26/2021	21.5	2.46	9.84	9.65	1.97	6
1750	1/31/2021	21.5	8.95	35.80	35.90	-0.28	12
	1/28/2021	21.5	9.11	36.44	35.90	1.50	13
	1/27/2021	21.5	8.96	35.84	35.90	-0.17	24
1900	1/30/2021	21.5	9.88	39.52	39.50	0.05	16
	1/29/2021	21.5	9.85	39.40	39.50	-0.25	17
2450	2/1/2021	21.5	13.70	54.80	52.30	4.78	21
2600	1/20/2021	21.5	13.90	55.60	54.10	2.77	23
	1/21/2021	21.5	13.88	55.52	54.10	2.62	24
	1/22/2021	21.5	13.94	55.76	54.10	3.07	11
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

Down Antenna

GSM 850 Receiver on/off Hotspot		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	33.80	33.29	33.27	33.28	9.03	24.77	24.26	24.24	24.25
GPRS/ EGPRS (GMSK)	1 Tx Slot	33.80	33.24	33.27	33.22	9.03	24.77	24.21	24.24	24.19
	2 Tx Slots	30.80	30.51	30.48	30.47	6.02	24.78	24.49	24.46	24.45
	3 Tx Slots	29.00	28.68	28.71	28.70	4.26	24.74	24.42	24.45	24.44
	4 Tx Slots	27.80	27.34	27.38	27.36	3.01	24.79	24.33	24.37	24.35
EGPRS (8PSK)	1 Tx Slot	27.80	27.13	27.15	27.20	9.03	18.77	18.10	18.12	18.17
	2 Tx Slots	24.80	23.90	23.95	24.00	6.02	18.78	17.88	17.93	17.98
	3 Tx Slots	23.00	22.05	21.83	22.01	4.26	18.74	17.79	17.57	17.75
	4 Tx Slots	21.80	20.28	20.25	20.32	3.01	18.79	17.27	17.24	17.31
GSM 1900 Receiver on/off		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1710.2	698 /1747.4	885 /1784.8		MAX	512 /1710.2	698 /1747.4	885 /1784.8
GSM	CS	30.50	30.25	30.30	30.15	9.03	21.47	21.22	21.27	21.12
GPRS/ EGPRS (GMSK)	1 Tx Slot	30.50	30.28	30.25	30.07	9.03	21.47	21.25	21.22	21.04
	2 Tx Slots	27.50	27.19	27.25	27.10	6.02	21.48	21.17	21.23	21.08
	3 Tx Slots	25.70	25.46	25.52	25.38	4.26	21.44	21.20	21.26	21.12
	4 Tx Slots	24.50	24.11	24.20	24.06	3.01	21.49	21.10	21.19	21.05
EGPRS (8PSK)	1 Tx Slot	26.50	26.27	26.30	26.32	9.03	17.47	17.24	17.27	17.29
	2 Tx Slots	23.50	23.30	23.32	23.49	6.02	17.48	17.28	17.30	17.47
	3 Tx Slots	21.70	21.35	21.38	21.41	4.26	17.44	17.09	17.12	17.15
	4 Tx Slots	20.50	20.19	20.30	20.35	3.01	17.49	17.18	17.29	17.34
GSM 1900		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1710.2	698 /1747.4	885 /1784.8		MAX	512 /1710.2	698 /1747.4	885 /1784.8
GSM	CS	26.50	26.18	26.20	26.22	9.03	17.47	17.15	17.17	17.19
GPRS/	1 Tx Slot	26.50	26.18	26.19	26.19	9.03	17.47	17.15	17.16	17.16



EGPRS (GMSK)	2 Tx Slots	23.50	23.26	23.25	23.32	6.02	17.48	17.24	17.23	17.30
	3 Tx Slots	21.70	21.41	21.38	21.42	4.26	17.44	17.15	17.12	17.16
	4 Tx Slots	20.50	20.22	20.18	20.16	3.01	17.49	17.21	17.17	17.15
EGPRS (8PSK)	1 Tx Slot	22.50	22.32	22.37	22.39	9.03	13.47	13.29	13.34	13.36
	2 Tx Slots	19.50	19.35	19.38	19.46	6.02	13.48	13.33	13.36	13.44
	3 Tx Slots	17.70	17.29	17.32	17.51	4.26	13.44	13.03	13.06	13.25
	4 Tx Slots	16.50	16.40	16.47	16.66	3.01	13.49	13.39	13.46	13.65

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

1. Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.



Second – Antenna

GSM 850 Receiver on/off Hotspot		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	33.80	32.95	33.04	32.97	9.03	24.77	23.92	24.01	23.94
GPRS/ EGPRS (GMSK)	1 Tx Slot	33.80	32.85	32.90	33.03	9.03	24.77	23.82	23.87	24.00
	2 Tx Slots	30.80	30.18	30.19	30.26	6.02	24.78	24.16	24.17	24.24
	3 Tx Slots	29.00	28.45	28.41	28.50	4.26	24.74	24.19	24.15	24.24
	4 Tx Slots	27.80	26.98	27.08	27.16	3.01	24.79	23.97	24.07	24.15
EGPRS (8PSK)	1 Tx Slot	27.80	26.93	26.85	27.00	9.03	18.77	17.90	17.82	17.97
	2 Tx Slots	24.80	23.75	23.69	23.86	6.02	18.78	17.73	17.67	17.84
	3 Tx Slots	23.00	21.68	21.61	21.69	4.26	18.74	17.42	17.35	17.43
	4 Tx Slots	21.80	20.22	20.20	20.17	3.01	18.79	17.21	17.19	17.16
GSM 1900 Receiver on		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1710.2	698 /1747.4	885 /1784.8		MAX	512 /1710.2	698 /1747.4	885 /1784.8
GSM	CS	28.50	28.16	28.23	28.21	9.03	19.47	19.13	19.20	19.18
GPRS/ EGPRS (GMSK)	1 Tx Slot	28.50	28.15	28.23	28.25	9.03	19.47	19.12	19.20	19.22
	2 Tx Slots	25.50	25.25	25.30	25.33	6.02	19.48	19.23	19.28	19.31
	3 Tx Slots	23.70	23.35	23.43	23.49	4.26	19.44	19.09	19.17	19.23
	4 Tx Slots	22.50	22.19	22.25	22.26	3.01	19.49	19.18	19.24	19.25
EGPRS (8PSK)	1 Tx Slot	24.50	24.00	24.34	24.28	9.03	15.47	14.97	15.31	15.25
	2 Tx Slots	21.50	21.28	21.39	21.31	6.02	15.48	15.26	15.37	15.29
	3 Tx Slots	19.70	19.32	19.52	19.43	4.26	15.44	15.06	15.26	15.17
	4 Tx Slots	18.50	18.39	18.48	18.27	3.01	15.49	15.38	15.47	15.26
GSM 1900 Receiver off		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1710.2	698 /1747.4	885 /1784.8		MAX	512 /1710.2	698 /1747.4	885 /1784.8
GSM	CS	30.50	29.93	29.98	30.10	9.03	21.47	20.90	20.95	21.07
GPRS/ EGPRS (GMSK)	1 Tx Slot	30.50	29.91	29.97	29.98	9.03	21.47	20.88	20.94	20.95
	2 Tx Slots	27.50	27.16	27.23	27.28	6.02	21.48	21.14	21.21	21.26
	3 Tx Slots	25.70	25.40	25.50	25.56	4.26	21.44	21.14	21.24	21.30
	4 Tx Slots	24.50	24.08	24.15	24.18	3.01	21.49	21.07	21.14	21.17
EGPRS (8PSK)	1 Tx Slot	26.50	26.27	26.30	26.32	9.03	17.47	17.24	17.27	17.29
	2 Tx Slots	23.50	23.30	23.32	23.49	6.02	17.48	17.28	17.30	17.47
	3 Tx Slots	21.70	21.35	21.38	21.41	4.26	17.44	17.09	17.12	17.15
	4 Tx Slots	20.50	20.09	20.20	20.25	3.01	17.49	17.08	17.19	17.24



GSM 1900 Hotspot		Burst-Averaged output power(dBm)				Division Factors	Frame-Averaged output power(dBm)			
		Tune-up	Channel/Frenqucy(MHz)				Tune-up	Channel/Frenqucy(MHz)		
		MAX	512 /1710.2	698 /1747.4	885 /1784.8		MAX	512 /1710.2	698 /1747.4	885 /1784.8
GSM	CS	28.00	27.41	27.43	27.45	9.03	18.97	18.38	18.40	18.42
GPRS/ EGPRS (GMSK)	1 Tx Slot	28.00	27.41	27.42	27.42	9.03	18.97	18.38	18.39	18.39
	2 Tx Slots	25.00	24.49	24.48	24.55	6.02	18.98	18.47	18.46	18.53
	3 Tx Slots	23.20	22.64	22.61	22.65	4.26	18.94	18.38	18.35	18.39
	4 Tx Slots	22.00	21.45	21.41	21.39	3.01	18.99	18.44	18.40	18.38
EGPRS (8PSK)	1 Tx Slot	24.00	23.85	23.90	23.92	9.03	14.97	14.82	14.87	14.89
	2 Tx Slots	21.00	20.88	20.91	20.99	6.02	14.98	14.86	14.89	14.97
	3 Tx Slots	19.20	18.52	18.55	18.74	4.26	14.94	14.26	14.29	14.48
	4 Tx Slots	18.00	17.63	17.70	17.89	3.01	14.99	14.62	14.69	14.88

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

1. Standalone: GSM 850 GMSK (GPRS) mode with 4 time slots for Max power, GSM 1900 GMSK (GPRS) mode with 4 time slots for Max power, based on the output power measurements above.



9.2 WCDMA Mode

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

Down Antenna

WCDMA		Band II(dBm) Receiver on				Band II(dBm) Receiver off				Band II(dBm) Hotspot			
Tx Channel		9262	9400	9538	Tune-up	9262	9400	9538	Tune-up	9262	9400	9538	Tune-up
Frequency(MHz)		1852.4	1880	1907.6	Limit	1852.4	1880	1907.6	Limit	1852.4	1880	1907.6	Limit
RMC	12.2kbps	23.47	23.52	23.43	24.00	20.99	21.01	20.95	21.50	18.09	18.10	18.05	19.00
AMR	12.2kbps	23.43	23.44	23.59	24.00	20.97	21.09	21.11	21.50	17.97	18.00	18.19	19.00
HSDPA	Sub 1	22.51	22.56	22.41	23.00	19.89	20.01	19.79	20.50	17.09	17.00	17.07	18.00
	Sub 2	22.33	22.50	22.41	23.00	20.09	20.07	19.81	20.50	16.93	17.14	17.09	18.00
	Sub 3	21.95	22.04	21.99	22.50	19.65	19.51	19.41	20.00	16.67	16.54	16.51	17.50
	Sub 4	22.05	22.10	22.05	22.50	19.43	19.47	19.61	20.00	16.59	16.56	16.51	17.50
HSUPA	Sub 1	20.35	20.62	20.35	21.00	18.11	17.97	17.95	18.50	15.23	15.20	15.01	16.00
	Sub 2	20.41	20.48	20.27	21.00	17.93	17.89	17.85	18.50	14.93	15.04	14.97	16.00
	Sub 3	21.49	21.50	21.37	22.00	19.15	18.85	19.09	19.50	16.11	16.06	16.01	17.00
	Sub 4	19.87	20.00	19.87	20.50	17.49	17.63	17.31	18.00	14.47	14.66	14.53	15.50
	Sub 5	21.43	21.56	21.41	22.00	19.15	19.01	19.09	19.50	16.05	16.02	16.13	17.00
DC-HSDPA	Sub 1	22.37	22.38	22.47	23.00	19.97	20.09	20.05	20.50	17.17	16.98	17.19	18.00
	Sub 2	22.31	22.60	22.55	23.00	19.89	20.17	20.03	20.50	17.03	17.08	17.07	18.00
	Sub 3	21.89	22.04	22.05	22.50	19.45	19.63	19.49	20.00	16.73	16.64	16.53	17.50
	Sub 4	21.89	22.12	21.77	22.50	19.49	19.43	19.61	20.00	16.51	16.60	16.41	17.50
HSPA+	16QAM	22.63	22.76	22.53	23.00	20.03	20.17	20.11	20.50	17.17	17.18	17.23	18.00

Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".

WCDMA		Band IV(dBm) Receiver on				Band IV(dBm) Receiver off				Band IV(dBm) Hotspot			
Tx Channel		1312	1413	1513	Tune-up	1312	1413	1513	Tune-up	1312	1413	1513	Tune-up
Frequency(MHz)		1712.4	1732.6	1752.6	Limit	1712.4	1732.6	1752.6	Limit	1712.4	1732.6	1752.6	Limit
RMC	12.2kbps	23.66	23.67	23.73	24.30	21.09	21.18	21.20	21.80	18.47	18.41	18.52	19.30
AMR	12.2kbps	23.78	23.67	23.83	24.30	21.09	21.02	21.28	21.80	18.55	18.35	18.36	19.30
HSDPA	Sub 1	22.72	22.53	22.89	23.30	20.21	20.10	20.18	20.80	17.33	17.41	17.36	18.30
	Sub 2	22.82	22.79	22.77	23.30	19.93	20.04	20.12	20.80	17.45	17.49	17.66	18.30
	Sub 3	22.08	22.01	22.23	22.80	19.53	19.52	19.80	20.30	16.93	16.93	16.90	17.80
	Sub 4	22.02	22.01	22.09	22.80	19.51	19.62	19.64	20.30	17.07	16.81	16.88	17.80
HSUPA	Sub 1	20.56	20.51	20.57	21.30	18.11	18.02	18.18	18.80	15.49	15.25	15.38	16.30



	Sub 2	20.50	20.63	20.71	21.30	17.97	18.02	18.26	18.80	15.53	15.45	15.40	16.30
	Sub 3	21.62	21.59	21.87	22.30	18.93	19.26	19.18	19.80	16.63	16.37	16.58	17.30
	Sub 4	20.02	20.01	20.17	20.80	17.47	17.66	17.54	18.30	14.81	14.95	15.04	15.80
	Sub 5	21.80	21.57	21.73	22.30	19.03	19.04	19.30	19.80	16.45	16.35	16.54	17.30
DC-HSDPA	Sub 1	22.74	22.57	22.81	23.30	20.11	20.34	20.10	20.80	17.45	17.27	17.52	18.30
	Sub 2	22.74	22.69	22.69	23.30	20.15	20.32	20.24	20.80	17.53	17.35	17.46	18.30
	Sub 3	22.20	22.27	22.25	22.80	19.71	19.84	19.74	20.30	16.95	16.93	17.04	17.80
	Sub 4	22.08	22.21	22.21	22.80	19.69	19.62	19.82	20.30	17.13	16.97	17.10	17.80
HSPA+	16QAM	22.82	22.67	22.61	23.30	20.01	20.10	20.08	20.80	17.71	17.59	17.62	18.30

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)			
		Receiver off/Receiver on/Hotspot			Tune-up Limit
Tx Channel		4132	4183	4233	
Frequency(MHz)		826.4	836.6	846.6	
RMC	12.2kbps	24.45	24.42	24.43	25.00
AMR	12.2kbps	24.41	24.48	24.41	25.00
HSDPA	Sub 1	23.51	23.52	23.55	24.00
	Sub 2	23.43	23.52	23.35	24.00
	Sub 3	23.05	23.00	22.81	23.50
	Sub 4	22.79	22.98	22.89	23.50
HSUPA	Sub 1	21.41	21.58	21.41	22.00
	Sub 2	21.59	21.26	21.29	22.00
	Sub 3	22.53	22.56	22.59	23.00
	Sub 4	20.79	20.88	20.81	21.50
	Sub 5	22.35	22.58	22.35	23.00
DC-HSDPA	Sub 1	23.35	23.50	23.47	24.00
	Sub 2	23.43	23.46	23.55	24.00
	Sub 3	22.81	22.80	22.97	23.50
	Sub 4	22.83	22.82	22.85	23.50
HSPA+	16QAM	23.63	23.62	23.57	24.00

Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".

**Second - Antenna**

WCDMA		Band II(dBm) Receiver on/Hotspot				Band II(dBm) Receiver off			
Tx Channel		9262	9400	9538	Tune-up	9262	9400	9538	Tune-up
Frequency(MHz)		1852.4	1880	1907.6	Limit	1852.4	1880	1907.6	Limit
RMC	12.2kbps	17.95	18.17	17.90	19.00	21.43	21.45	21.39	22.50
AMR	12.2kbps	18.07	17.81	17.74	19.00	21.35	21.41	21.47	22.50
HSDPA	Sub 1	16.79	17.05	16.82	18.00	20.55	20.41	20.43	21.50
	Sub 2	17.01	16.85	16.80	18.00	20.53	20.61	20.23	21.50
	Sub 3	16.37	16.49	16.32	17.50	20.05	20.11	19.79	21.00
	Sub 4	16.47	16.53	16.46	17.50	19.79	20.07	19.79	21.00
HSUPA	Sub 1	14.89	14.85	14.88	16.00	18.49	18.31	18.41	19.50
	Sub 2	14.91	15.07	14.96	16.00	18.57	18.29	18.29	19.50
	Sub 3	15.79	15.97	16.06	17.00	19.51	19.41	19.29	20.50
	Sub 4	14.59	14.59	14.32	15.50	17.95	18.09	17.83	19.00
	Sub 5	15.97	15.97	16.02	17.00	19.33	19.61	19.49	20.50
DC-HSDPA	Sub 1	16.93	17.09	16.90	18.00	20.55	20.33	20.35	21.50
	Sub 2	17.09	17.13	16.82	18.00	20.33	20.57	20.41	21.50
	Sub 3	16.35	16.45	16.50	17.50	19.99	20.09	20.01	21.00
	Sub 4	16.53	16.49	16.54	17.50	19.95	19.93	19.75	21.00
HSPA+	16QAM	17.05	17.45	17.20	18.00	20.69	20.75	20.75	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 IV(dBm)				Band IV(dBm)			
Tx Channel		1312	1413	1513	Tune-up	1312	1413	1513	Tune-up
Frequency(MHz)		1712.4	1732.6	1752.6	Limit	1712.4	1732.6	1752.6	Limit
RMC	12.2kbps	18.03	17.89	17.94	18.80	21.58	21.56	21.60	22.30
AMR	12.2kbps	17.99	17.81	18.10	18.80	21.70	21.60	21.70	22.30
HSDPA	Sub 1	16.95	16.73	16.82	17.80	20.48	20.54	20.56	21.30
	Sub 2	17.03	16.91	16.96	17.80	20.46	20.70	20.46	21.30
	Sub 3	16.63	16.29	16.28	17.30	20.10	20.18	20.04	20.80
	Sub 4	16.47	16.45	16.52	17.30	19.98	20.18	20.26	20.80
HSUPA	Sub 1	15.03	14.75	15.10	15.80	18.72	18.50	18.58	19.30
	Sub 2	14.93	14.89	15.00	15.80	18.50	18.42	18.54	19.30
	Sub 3	16.01	15.91	15.98	16.80	19.72	19.62	19.44	20.30
	Sub 4	14.49	14.43	14.56	15.30	18.08	18.00	18.10	18.80
	Sub 5	15.91	15.99	15.80	16.80	19.46	19.56	19.66	20.30
DC-HSDPA	Sub 1	17.09	16.87	16.82	17.80	20.52	20.56	20.44	21.30
	Sub 2	17.15	16.95	17.04	17.80	20.50	20.40	20.50	21.30



	Sub 3	16.43	16.55	16.32	17.30	20.06	20.02	20.20	20.80
	Sub 4	16.67	16.25	16.32	17.30	20.04	19.96	20.16	20.80
HSPA+	16QAM	17.15	17.17	17.26	17.80	20.62	20.80	20.80	21.30
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)			
		Receiver off/Receiver on/Hotspot			
Tx Channel		4132	4183	4233	Tune-up Limit
Frequency(MHz)		826.4	836.6	846.6	
RMC	12.2kbps	24.28	24.21	24.35	25.00
AMR	12.2kbps	24.24	24.31	24.29	25.00
HSDPA	Sub 1	23.36	23.23	23.27	24.00
	Sub 2	23.12	23.15	23.47	24.00
	Sub 3	22.80	22.57	22.99	23.50
	Sub 4	22.90	22.63	22.75	23.50
HSUPA	Sub 1	21.14	21.29	21.49	22.00
	Sub 2	21.30	21.17	21.29	22.00
	Sub 3	22.32	22.11	22.35	23.00
	Sub 4	20.92	20.81	20.85	21.50
	Sub 5	22.18	22.23	22.33	23.00
DC-HSDPA	Sub 1	23.40	23.19	23.31	24.00
	Sub 2	23.32	23.21	23.19	24.00
	Sub 3	22.94	22.75	22.75	23.50
	Sub 4	22.88	22.57	22.73	23.50
HSPA+	16QAM	23.40	23.33	23.55	24.00
Note: 1.Per KDB 941225 D01, SAR for each exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".					

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

Down Antenna

LTE FDD Band 2 Receiver on				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	23.08	23.22	23.05	24.00
		1	2	23.47	23.49	23.43	24.00
		1	5	23.04	22.90	22.97	24.00
		3	0	23.34	23.39	23.33	24.00
		3	2	23.24	23.47	23.37	24.00
		3	3	23.35	23.25	23.35	24.00
		6	0	22.34	22.34	22.44	23.00
	16QAM	1	0	22.72	22.34	22.40	23.00
		1	2	22.70	22.68	22.72	23.00
		1	5	22.38	22.35	22.42	23.00
		3	0	22.39	22.33	22.40	23.00
		3	2	22.31	22.28	22.36	23.00
		3	3	22.40	22.37	22.43	23.00
		6	0	21.39	21.38	21.48	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	23.10	23.26	23.08	24.00
		1	7	23.45	23.52	23.47	24.00
		1	14	23.07	22.95	23.01	24.00
		8	0	22.44	22.51	22.46	23.00
		8	4	22.36	22.57	22.49	23.00
		8	7	22.45	22.36	22.45	23.00
		15	0	22.34	22.38	22.47	23.00
	16QAM	1	0	22.75	22.36	22.43	23.00
		1	7	22.73	22.68	22.76	23.00
		1	14	22.40	22.39	22.45	23.00



		8	0	21.50	21.46	21.52	22.00
		8	4	21.42	21.41	21.48	22.00
		8	7	21.50	21.49	21.56	22.00
		15	0	21.42	21.42	21.51	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	23.07	23.24	23.04	24.00
		1	13	23.43	23.48	23.44	24.00
		1	24	23.04	22.90	22.97	24.00
		12	0	22.41	22.46	22.42	23.00
		12	6	22.34	22.53	22.44	23.00
		12	13	22.43	22.34	22.41	23.00
		25	0	22.34	22.37	22.45	23.00
	16QAM	1	0	22.72	22.32	22.40	23.00
		1	13	22.70	22.66	22.73	23.00
		1	24	22.37	22.37	22.41	23.00
		12	0	21.48	21.42	21.49	22.00
		12	6	21.39	21.36	21.44	22.00
		12	13	21.47	21.44	21.52	22.00
		25	0	21.40	21.38	21.46	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	23.09	23.25	23.07	24.00
		1	25	23.46	23.53	23.48	24.00
		1	49	23.06	22.94	23.00	24.00
		25	0	22.44	22.51	22.46	23.00
		25	13	22.37	22.58	22.48	23.00
		25	25	22.45	22.38	22.46	23.00
		50	0	22.38	22.39	22.49	23.00
	16QAM	1	0	22.74	22.35	22.42	23.00
		1	25	22.73	22.70	22.76	23.00
		1	49	22.40	22.39	22.44	23.00
		25	0	21.51	21.47	21.53	22.00
		25	13	21.41	21.40	21.47	22.00
		25	25	21.50	21.49	21.56	22.00
		50	0	21.43	21.43	21.50	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	23.08	23.21	23.05	24.00
		1	38	23.44	23.52	23.45	24.00
		1	74	23.03	22.89	22.96	24.00
		36	0	22.42	22.47	22.43	23.00
		36	18	22.34	22.53	22.44	23.00



		36	39	22.42	22.35	22.42	23.00
		75	0	22.36	22.35	22.44	23.00
	16QAM	1	0	22.69	22.33	22.40	23.00
		1	38	22.71	22.67	22.74	23.00
		1	74	22.37	22.35	22.41	23.00
		36	0	21.48	21.45	21.50	22.00
		36	18	21.38	21.35	21.43	22.00
		36	39	21.48	21.45	21.53	22.00
		75	0	21.40	21.38	21.46	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	23.05	23.17	23.02	24.00
		1	50	23.43	23.48	23.43	24.00
		1	99	23.01	22.88	22.93	24.00
		50	0	22.39	22.42	22.39	23.00
		50	25	22.32	22.49	22.41	23.00
		50	50	22.39	22.30	22.38	23.00
		100	0	22.33	22.30	22.40	23.00
	16QAM	1	0	22.33	22.29	22.35	23.00
		1	50	22.67	22.65	22.70	23.00
		1	99	22.35	22.32	22.39	23.00
		50	0	21.45	21.41	21.47	22.00
		50	25	21.35	21.33	21.40	22.00
		50	50	21.45	21.40	21.49	22.00
		100	0	21.38	21.34	21.43	22.00

LTE FDD Band 2 Receiver off				Maximum Output 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	21.59	21.61	21.67	22.50
		1	2	21.86	21.90	21.86	22.50
		1	5	21.52	21.50	21.55	22.50
		3	0	21.76	21.84	21.83	22.50
		3	2	21.78	21.83	21.89	22.50
		3	3	21.81	21.78	21.81	22.50
		6	0	21.82	21.95	21.99	22.50
	16QAM	1	0	21.85	21.67	21.64	22.50
		1	2	21.83	21.90	21.80	22.50
		1	5	21.88	21.88	21.82	22.50
		3	0	21.85	21.91	21.83	22.50
		3	2	21.90	21.90	21.85	22.50
		3	3	21.81	21.90	21.85	22.50



		6	0	21.37	21.47	21.40	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	21.61	21.63	21.70	22.50
		1	7	21.84	21.93	21.90	22.50
		1	14	21.55	21.55	21.59	22.50
		8	0	21.86	21.96	21.96	22.50
		8	4	21.90	21.93	22.01	22.50
		8	7	21.91	21.89	21.91	22.50
		15	0	21.82	21.99	22.02	22.50
	16QAM	1	0	21.88	21.69	21.67	22.50
		1	7	21.86	21.90	21.84	22.50
		1	14	21.90	21.92	21.85	22.50
		8	0	21.36	21.44	21.35	22.00
		8	4	21.41	21.43	21.37	22.00
		8	7	21.31	21.42	21.38	22.00
		15	0	21.40	21.51	21.43	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	21.58	21.61	21.66	22.50
		1	13	21.82	21.89	21.87	22.50
		1	24	21.52	21.50	21.55	22.50
		12	0	21.83	21.91	21.92	22.50
		12	6	21.88	21.89	21.96	22.50
		12	13	21.89	21.87	21.87	22.50
		25	0	21.82	21.98	22.00	22.50
	16QAM	1	0	21.85	21.65	21.64	22.50
		1	13	21.83	21.88	21.81	22.50
		1	24	21.87	21.90	21.81	22.50
		12	0	21.34	21.40	21.32	22.00
		12	6	21.38	21.38	21.33	22.00
		12	13	21.28	21.37	21.34	22.00
		25	0	21.38	21.47	21.38	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	21.60	21.62	21.69	22.50
		1	25	21.85	21.94	21.91	22.50
		1	49	21.54	21.54	21.58	22.50
		25	0	21.86	21.96	21.96	22.50
		25	13	21.91	21.94	22.00	22.50
		25	25	21.91	21.91	21.92	22.50
		50	0	21.86	22.00	22.04	22.50
	16QAM	1	0	21.87	21.68	21.66	22.50



		1	25	21.86	21.92	21.84	22.50
		1	49	21.90	21.92	21.84	22.50
		25	0	21.37	21.45	21.36	22.00
		25	13	21.40	21.42	21.36	22.00
		25	25	21.31	21.42	21.38	22.00
		50	0	21.41	21.52	21.42	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	21.59	21.58	21.67	22.50
		1	38	21.83	21.93	21.88	22.50
		1	74	21.51	21.49	21.54	22.50
		36	0	21.84	21.92	21.93	22.50
		36	18	21.88	21.89	21.96	22.50
		36	39	21.88	21.88	21.88	22.50
		75	0	21.84	21.96	21.99	22.50
	16QAM	1	0	21.82	21.66	21.64	22.50
		1	38	21.84	21.89	21.82	22.50
		1	74	21.87	21.88	21.81	22.50
		36	0	21.34	21.43	21.33	22.00
		36	18	21.37	21.37	21.32	22.00
		36	39	21.29	21.38	21.35	22.00
		75	0	21.38	21.47	21.38	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	21.56	21.54	21.64	22.50
		1	50	21.82	21.89	21.86	22.50
		1	99	21.49	21.48	21.51	22.50
		50	0	21.81	21.87	21.89	22.50
		50	25	21.86	21.85	21.93	22.50
		50	50	21.85	21.83	21.84	22.50
		100	0	21.81	21.91	21.95	22.50
	16QAM	1	0	21.64	21.62	21.59	22.50
		1	50	21.80	21.87	21.78	22.50
		1	99	21.85	21.85	21.79	22.50
		50	0	21.31	21.39	21.30	22.00
		50	25	21.34	21.35	21.29	22.00
		50	50	21.26	21.33	21.31	22.00
		100	0	21.36	21.43	21.35	22.00

LTE FDD Band 2 Hotspot				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	



1.4MHz	QPSK	1	0	18.92	18.97	18.86	20.00
		1	2	19.26	19.17	19.18	20.00
		1	5	18.98	18.77	18.91	20.00
		3	0	19.31	19.28	19.29	20.00
		3	2	19.21	19.08	19.13	20.00
		3	3	19.11	19.12	19.00	20.00
		6	0	19.21	19.19	19.27	20.00
	16QAM	1	0	19.45	19.41	19.47	20.00
		1	2	19.43	19.41	19.45	20.00
		1	5	19.37	19.31	19.38	20.00
		3	0	19.24	19.14	19.21	20.00
		3	2	19.26	19.21	19.29	20.00
		3	3	19.06	19.03	19.09	20.00
		6	0	19.24	19.23	19.33	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	18.94	19.01	18.89	20.00
		1	7	19.24	19.20	19.22	20.00
		1	14	19.01	18.82	18.95	20.00
		8	0	19.33	19.28	19.31	20.00
		8	4	19.22	19.18	19.25	20.00
		8	7	19.20	19.11	19.25	20.00
		15	0	19.21	19.23	19.30	20.00
	16QAM	1	0	19.48	19.43	19.50	20.00
		1	7	19.46	19.41	19.49	20.00
		1	14	19.39	19.35	19.41	20.00
		8	0	19.35	19.27	19.33	20.00
		8	4	19.37	19.34	19.41	20.00
		8	7	19.16	19.15	19.22	20.00
		15	0	19.27	19.27	19.36	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	18.91	18.99	18.85	20.00
		1	13	19.22	19.16	19.19	20.00
		1	24	18.98	18.77	18.91	20.00
		12	0	19.30	19.23	19.27	20.00
		12	6	19.20	19.14	19.20	20.00
		12	13	19.18	19.09	19.21	20.00
		25	0	19.21	19.22	19.28	20.00
	16QAM	1	0	19.45	19.39	19.47	20.00
		1	13	19.43	19.39	19.46	20.00
		1	24	19.36	19.33	19.37	20.00
		12	0	19.33	19.23	19.30	20.00



		12	6	19.34	19.29	19.37	20.00
		12	13	19.13	19.10	19.18	20.00
		25	0	19.25	19.23	19.31	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	18.93	19.00	18.88	20.00
		1	25	19.25	19.21	19.23	20.00
		1	49	19.00	18.81	18.94	20.00
		25	0	19.33	19.28	19.31	20.00
		25	13	19.23	19.19	19.24	20.00
		25	25	19.20	19.13	19.26	20.00
		50	0	19.25	19.24	19.32	20.00
	16QAM	1	0	19.47	19.42	19.49	20.00
		1	25	19.46	19.43	19.49	20.00
		1	49	19.39	19.35	19.40	20.00
		25	0	19.36	19.28	19.34	20.00
		25	13	19.36	19.33	19.40	20.00
		25	25	19.16	19.15	19.22	20.00
		50	0	19.28	19.28	19.35	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	18.92	18.96	18.86	20.00
		1	38	19.23	19.20	19.20	20.00
		1	74	18.97	18.76	18.90	20.00
		36	0	19.31	19.24	19.28	20.00
		36	18	19.20	19.14	19.20	20.00
		36	39	19.17	19.10	19.22	20.00
		75	0	19.23	19.20	19.27	20.00
	16QAM	1	0	19.42	19.40	19.47	20.00
		1	38	19.44	19.40	19.47	20.00
		1	74	19.36	19.31	19.37	20.00
		36	0	19.33	19.26	19.31	20.00
		36	18	19.33	19.28	19.36	20.00
		36	39	19.14	19.11	19.19	20.00
		75	0	19.25	19.23	19.31	20.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	18.89	18.92	18.83	20.00
		1	50	19.22	19.16	19.18	20.00
		1	99	18.95	18.75	18.87	20.00
		50	0	19.28	19.19	19.24	20.00
		50	25	19.18	19.10	19.17	20.00
		50	50	19.14	19.05	19.18	20.00



		100	0	19.20	19.15	19.23	20.00
	16QAM	1	0	19.40	19.36	19.42	20.00
		1	50	19.40	19.38	19.43	20.00
		1	99	19.34	19.28	19.35	20.00
		50	0	19.30	19.22	19.28	20.00
		50	25	19.30	19.26	19.33	20.00
		50	50	19.11	19.06	19.15	20.00
		100	0	19.23	19.19	19.28	20.00

LTE FDD Band 4 Receiver on				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				19957/1710.7	20175/1732.5	20393/1754.3	
1.4MHz	QPSK	1	0	23.53	23.50	23.46	24.30
		1	2	23.84	23.83	23.71	24.30
		1	5	23.39	23.28	23.36	24.30
		3	0	23.73	23.76	23.62	24.30
		3	2	23.62	23.74	23.61	24.30
		3	3	23.62	23.61	23.50	24.30
		6	0	22.69	22.74	22.65	23.30
	16QAM	1	0	22.89	22.92	22.98	23.30
		1	2	22.87	22.85	22.89	23.30
		1	5	22.89	22.83	22.90	23.30
		3	0	22.72	22.62	22.69	23.30
		3	2	22.77	22.72	22.80	23.30
		3	3	22.67	22.64	22.70	23.30
		6	0	21.84	21.83	21.93	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19965/1711.5	20175/1732.5	20385/1753.5	
3MHz	QPSK	1	0	23.55	23.54	23.49	24.30
		1	7	23.82	23.86	23.75	24.30
		1	14	23.42	23.33	23.40	24.30
		8	0	22.83	22.88	22.75	23.30
		8	4	22.74	22.84	22.73	23.30
		8	7	22.72	22.72	22.60	23.30
		15	0	22.69	22.78	22.68	23.30
	16QAM	1	0	22.92	22.94	23.01	23.30
		1	7	22.90	22.85	22.93	23.30
		1	14	22.91	22.87	22.93	23.30
		8	0	21.83	21.75	21.81	22.30
		8	4	21.88	21.85	21.92	22.30
		8	7	21.77	21.76	21.83	22.30
		15	0	21.87	21.87	21.96	22.30



Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				19975/1712.5	20175/1732.5	20375/1752.5	
5MHz	QPSK	1	0	23.52	23.52	23.45	24.30
		1	13	23.80	23.82	23.72	24.30
		1	24	23.39	23.28	23.36	24.30
		12	0	22.80	22.83	22.71	23.30
		12	6	22.72	22.80	22.68	23.30
		12	13	22.70	22.70	22.56	23.30
		25	0	22.69	22.77	22.66	23.30
	16QAM	1	0	22.89	22.90	22.98	23.30
		1	13	22.87	22.83	22.90	23.30
		1	24	22.88	22.85	22.89	23.30
		12	0	21.81	21.71	21.78	22.30
		12	6	21.85	21.80	21.88	22.30
		12	13	21.74	21.71	21.79	22.30
		25	0	21.85	21.83	21.91	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	23.54	23.53	23.48	24.30
		1	25	23.83	23.87	23.76	24.30
		1	49	23.41	23.32	23.39	24.30
		25	0	22.83	22.88	22.75	23.30
		25	13	22.75	22.85	22.72	23.30
		25	25	22.72	22.74	22.61	23.30
		50	0	22.73	22.79	22.70	23.30
	16QAM	1	0	22.91	22.93	23.00	23.30
		1	25	22.90	22.87	22.93	23.30
		1	49	22.91	22.87	22.92	23.30
		25	0	21.84	21.76	21.82	22.30
		25	13	21.87	21.84	21.91	22.30
		25	25	21.77	21.76	21.83	22.30
		50	0	21.88	21.88	21.95	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20025/1717.5	20175/1732.5	20325/1747.5	
15MHz	QPSK	1	0	23.53	23.49	23.46	24.30
		1	38	23.81	23.86	23.73	24.30
		1	74	23.38	23.27	23.35	24.30
		36	0	22.81	22.84	22.72	23.30
		36	18	22.72	22.80	22.68	23.30
		36	39	22.69	22.71	22.57	23.30
		75	0	22.71	22.75	22.65	23.30
	16QAM	1	0	22.86	22.91	22.98	23.30
		1	38	22.88	22.84	22.91	23.30



		1	74	22.88	22.83	22.89	23.30
		36	0	21.81	21.74	21.79	22.30
		36	18	21.84	21.79	21.87	22.30
		36	39	21.75	21.72	21.80	22.30
		75	0	21.85	21.83	21.91	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	23.50	23.45	23.43	24.30
		1	50	23.80	23.82	23.71	24.30
		1	99	23.36	23.26	23.32	24.30
		50	0	22.78	22.79	22.68	23.30
		50	25	22.70	22.76	22.65	23.30
		50	50	22.66	22.66	22.53	23.30
		100	0	22.68	22.70	22.61	23.30
	16QAM	1	0	22.91	22.87	22.93	23.30
		1	50	22.84	22.82	22.87	23.30
		1	99	22.86	22.80	22.87	23.30
		50	0	21.78	21.70	21.76	22.30
		50	25	21.81	21.77	21.84	22.30
		50	50	21.72	21.67	21.76	22.30
		100	0	21.83	21.79	21.88	22.30

LTE FDD Band 4 Receiver off/Hotspot				Maximum Output 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	21.38	21.35	21.41	22.30
		1	2	21.45	21.71	21.62	22.30
		1	5	21.32	21.15	21.26	22.30
		3	0	21.51	21.60	21.54	22.30
		3	2	21.52	21.58	21.51	22.30
		3	3	21.53	21.52	21.42	22.30
		6	0	21.55	21.58	21.60	22.30
	16QAM	1	0	21.71	21.69	21.75	22.30
		1	2	21.69	21.69	21.73	22.30
		1	5	21.71	21.63	21.70	22.30
		3	0	21.50	21.52	21.59	22.30
		3	2	21.68	21.47	21.55	22.30
		3	3	21.59	21.64	21.70	22.30
		6	0	21.56	21.64	21.74	22.30
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	21.40	21.39	21.44	22.30



		1	7	21.43	21.74	21.66	22.30
		1	14	21.35	21.20	21.30	22.30
		8	0	21.61	21.72	21.67	22.30
		8	4	21.64	21.68	21.63	22.30
		8	7	21.63	21.63	21.52	22.30
		15	0	21.55	21.62	21.63	22.30
		15	0	21.59	21.68	21.77	22.30
	16QAM	1	0	21.74	21.71	21.78	22.30
		1	7	21.72	21.69	21.77	22.30
		1	14	21.73	21.67	21.73	22.30
		8	0	21.61	21.65	21.71	22.30
		8	4	21.79	21.60	21.67	22.30
		8	7	21.69	21.76	21.83	22.30
		15	0	21.59	21.68	21.77	22.30
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	21.37	21.37	21.40	22.30
		1	13	21.41	21.70	21.63	22.30
		1	24	21.32	21.15	21.26	22.30
		12	0	21.58	21.67	21.63	22.30
		12	6	21.62	21.64	21.58	22.30
		12	13	21.61	21.61	21.48	22.30
		25	0	21.55	21.61	21.61	22.30
	16QAM	1	0	21.71	21.67	21.75	22.30
		1	13	21.69	21.67	21.74	22.30
		1	24	21.70	21.65	21.69	22.30
		12	0	21.59	21.61	21.68	22.30
		12	6	21.76	21.55	21.63	22.30
		12	13	21.66	21.71	21.79	22.30
		25	0	21.57	21.64	21.72	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	21.39	21.38	21.43	22.30
		1	25	21.44	21.75	21.67	22.30
		1	49	21.34	21.19	21.29	22.30
		25	0	21.61	21.72	21.67	22.30
		25	13	21.65	21.69	21.62	22.30
		25	25	21.63	21.65	21.53	22.30
		50	0	21.59	21.63	21.65	22.30
	16QAM	1	0	21.73	21.70	21.77	22.30
		1	25	21.72	21.71	21.77	22.30
		1	49	21.73	21.67	21.72	22.30
		25	0	21.62	21.66	21.72	22.30
		25	13	21.78	21.59	21.66	22.30



		25	25	21.69	21.76	21.83	22.30
		50	0	21.60	21.69	21.76	22.30
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	21.38	21.34	21.41	22.30
		1	38	21.42	21.74	21.64	22.30
		1	74	21.31	21.14	21.25	22.30
		36	0	21.59	21.68	21.64	22.30
		36	18	21.62	21.64	21.58	22.30
		36	39	21.60	21.62	21.49	22.30
		75	0	21.57	21.59	21.60	22.30
	16QAM	1	0	21.68	21.68	21.75	22.30
		1	38	21.70	21.68	21.75	22.30
		1	74	21.70	21.63	21.69	22.30
		36	0	21.59	21.64	21.69	22.30
		36	18	21.75	21.54	21.62	22.30
		36	39	21.67	21.72	21.80	22.30
		75	0	21.57	21.64	21.72	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	21.35	21.30	21.38	22.30
		1	50	21.41	21.70	21.62	22.30
		1	99	21.29	21.13	21.22	22.30
		50	0	21.56	21.63	21.60	22.30
		50	25	21.60	21.60	21.55	22.30
		50	50	21.57	21.57	21.45	22.30
		100	0	21.54	21.54	21.56	22.30
	16QAM	1	0	21.68	21.64	21.70	22.30
		1	50	21.66	21.66	21.71	22.30
		1	99	21.68	21.60	21.67	22.30
		50	0	21.56	21.60	21.66	22.30
		50	25	21.72	21.52	21.59	22.30
		50	50	21.64	21.67	21.76	22.30
		100	0	21.55	21.60	21.69	22.30

LTE FDD Band 5 Receiver on/off/Hotspot				Maximum Output 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	22.78	22.76	22.65	23.50
		1	2	24.17	24.13	24.06	25.00
		1	5	23.38	23.43	23.35	24.00
		3	0	24.40	24.22	24.31	25.00



		3	2	24.11	24.25	24.12	25.00
		3	3	23.68	23.72	23.67	25.00
		6	0	23.38	23.36	23.33	24.00
	16QAM	1	0	23.40	23.34	23.30	24.00
		1	2	23.37	23.31	23.27	24.00
		1	5	23.35	23.41	23.29	24.00
		3	0	22.28	22.23	21.93	24.00
		3	2	23.24	23.21	23.42	24.00
		3	3	23.68	23.48	23.59	24.00
		6	0	22.27	22.29	22.22	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	22.80	22.77	22.68	23.50
		1	4	24.20	24.18	24.10	25.00
		1	7	24.42	24.26	24.34	25.00
		1	11	24.14	24.30	24.16	25.00
		1	14	23.71	23.77	23.71	25.00
		8	0	23.40	23.40	23.38	24.00
		8	4	23.44	23.36	23.34	24.00
		8	7	23.39	23.34	23.29	24.00
		15	0	23.38	23.45	23.32	24.00
	16QAM	1	0	22.31	22.25	21.96	22.50
		1	4	23.27	23.26	23.46	24.00
		1	7	23.70	23.52	23.62	24.00
		1	11	23.30	23.34	23.26	24.00
		1	14	22.09	22.01	22.17	24.00
		8	0	22.37	22.38	22.45	23.00
		8	4	22.38	22.26	22.30	23.00
		8	7	22.38	22.30	22.25	23.00
		15	0	22.29	22.36	22.34	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	22.79	22.73	22.66	23.50
		1	6	24.18	24.17	24.07	25.00
		1	13	24.39	24.21	24.30	25.00
		1	18	24.12	24.26	24.13	25.00
		1	24	23.68	23.72	23.67	25.00
		12	0	23.37	23.37	23.34	24.00
		12	6	23.42	23.32	23.29	24.00
		12	13	23.34	23.32	23.27	24.00
		25	0	23.36	23.42	23.30	24.00
	16QAM	1	0	22.28	22.21	21.93	22.50
		1	6	23.24	23.24	23.43	24.00



		1	13	23.67	23.47	23.58	24.00
		1	18	23.28	23.30	23.23	24.00
		1	24	22.06	21.96	22.13	24.00
		12	0	22.32	22.36	22.43	23.00
		12	6	22.36	22.23	22.28	23.00
		12	13	22.39	22.29	22.26	23.00
		25	0	22.28	22.38	22.35	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	22.76	22.69	22.63	23.50
		1	1	24.17	24.13	24.05	25.00
		1	25	24.37	24.20	24.27	25.00
		1	48	24.09	24.21	24.09	25.00
		1	49	22.66	22.68	22.64	23.50
		25	0	23.34	23.32	23.30	24.00
		25	13	23.39	23.27	23.25	24.00
		25	25	23.38	23.28	23.22	24.00
		50	0	23.32	23.40	23.26	24.00
	16QAM	1	0	22.26	22.18	21.91	22.50
		1	0	23.21	23.20	23.40	24.00
		1	25	23.64	23.45	23.55	24.00
		1	48	23.25	23.25	23.19	24.00
		1	49	22.04	21.92	22.10	22.50
		25	0	22.30	22.32	22.38	23.00
		25	13	22.32	22.21	22.24	23.00
		25	25	22.33	22.23	22.20	23.00
		50	0	22.23	22.30	22.28	23.00

LTE FDD Band 7 Receiver on				Maximum Output 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	23.10	23.66	22.95	24.50
		1	13	23.57	24.13	23.64	24.50
		1	24	23.46	23.85	23.43	24.50
		12	0	22.35	23.04	22.42	23.50
		12	6	22.55	23.12	22.54	23.50
		12	13	22.91	23.01	22.80	23.50
		25	0	22.65	23.06	22.63	23.50
	16QAM	1	0	23.23	22.72	22.80	23.50
		1	13	23.21	23.17	23.24	23.50
		1	24	22.94	22.91	22.95	23.50
		12	0	22.19	22.09	22.16	22.50



		12	6	22.10	22.05	22.13	22.50
		12	13	22.02	21.99	22.07	22.50
		25	0	21.99	21.97	22.05	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	23.12	23.67	22.98	24.50
		1	25	23.60	24.18	23.68	24.50
		1	49	23.48	23.89	23.46	24.50
		25	0	22.38	23.09	22.46	23.50
		25	13	22.58	23.17	22.58	23.50
		25	25	22.93	23.05	22.85	23.50
		50	0	22.69	23.08	22.67	23.50
	16QAM	1	0	23.25	22.75	22.82	23.50
		1	25	23.24	23.21	23.27	23.50
		1	49	22.97	22.93	22.98	23.50
		25	0	22.22	22.14	22.20	22.50
		25	13	22.12	22.09	22.16	22.50
		25	25	22.05	22.04	22.11	22.50
		50	0	22.02	22.02	22.09	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	23.11	23.63	22.96	24.50
		1	38	23.58	24.17	23.65	24.50
		1	74	23.45	23.84	23.42	24.50
		36	0	22.36	23.05	22.43	23.50
		36	18	22.55	23.12	22.54	23.50
		36	39	22.90	23.02	22.81	23.50
		75	0	22.67	23.04	22.62	23.50
	16QAM	1	0	23.20	22.73	22.80	23.50
		1	38	23.22	23.18	23.25	23.50
		1	74	22.94	22.89	22.95	23.50
		36	0	22.19	22.12	22.17	22.50
		36	18	22.09	22.04	22.12	22.50
		36	39	22.03	22.00	22.08	22.50
		75	0	21.99	21.97	22.05	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	23.08	23.59	22.93	24.50
		1	50	23.57	24.13	23.63	24.50
		1	99	23.43	23.83	23.39	24.50
		50	0	22.33	23.00	22.39	23.50
		50	25	22.53	23.08	22.51	23.50
		50	50	22.87	22.97	22.77	23.50



		100	0	22.64	22.99	22.58	23.50
	16QAM	1	0	22.73	22.69	22.75	23.50
		1	50	23.18	23.16	23.21	23.50
		1	99	22.92	22.86	22.93	23.50
		50	0	22.16	22.08	22.14	22.50
		50	25	22.06	22.02	22.09	22.50
		50	50	22.00	21.95	22.04	22.50
		100	0	21.97	21.93	22.02	22.50

LTE FDD Band 7 Receiver off / Hotspot				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	22.52	22.68	22.67	23.50
		1	13	22.53	23.03	22.98	23.50
		1	24	22.63	22.64	22.80	23.50
		12	0	22.46	22.92	22.96	23.50
		12	6	22.51	23.03	23.01	23.50
		12	13	22.80	22.94	22.85	23.50
		25	0	22.64	22.88	22.93	23.50
	16QAM	1	0	23.27	22.89	22.97	23.50
		1	13	23.25	23.21	23.28	23.50
		1	24	23.29	23.26	23.30	23.50
		12	0	22.03	21.93	22.00	22.50
		12	6	22.13	22.08	22.16	22.50
		12	13	22.00	21.97	22.05	22.50
		25	0	22.03	22.01	22.09	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	22.54	22.69	22.70	23.50
		1	25	22.56	23.08	23.02	23.50
		1	49	22.65	22.68	22.83	23.50
		25	0	22.49	22.97	23.00	23.50
		25	13	22.54	23.08	23.05	23.50
		25	25	22.82	22.98	22.90	23.50
		50	0	22.68	22.90	22.97	23.50
	16QAM	1	0	23.29	22.92	22.99	23.50
		1	25	23.28	23.25	23.31	23.50
		1	49	23.32	23.28	23.33	23.50
		25	0	22.06	21.98	22.04	22.50
		25	13	22.15	22.12	22.19	22.50
		25	25	22.03	22.02	22.09	22.50
		50	0	22.06	22.06	22.13	22.50



Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	22.53	22.65	22.68	23.50
		1	38	22.54	23.07	22.99	23.50
		1	74	22.62	22.63	22.79	23.50
		36	0	22.47	22.93	22.97	23.50
		36	18	22.51	23.03	23.01	23.50
		36	39	22.79	22.95	22.86	23.50
		75	0	22.66	22.86	22.92	23.50
	16QAM	1	0	23.24	22.90	22.97	23.50
		1	38	23.26	23.22	23.29	23.50
		1	74	23.29	23.24	23.30	23.50
		36	0	22.03	21.96	22.01	22.50
		36	18	22.12	22.07	22.15	22.50
		36	39	22.01	21.98	22.06	22.50
		75	0	22.03	22.01	22.09	22.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	22.50	22.61	22.65	23.50
		1	50	22.53	23.03	22.97	23.50
		1	99	22.60	22.62	22.76	23.50
		50	0	22.44	22.88	22.93	23.50
		50	25	22.49	22.99	22.98	23.50
		50	50	22.76	22.90	22.82	23.50
		100	0	22.63	22.81	22.88	23.50
	16QAM	1	0	22.90	22.86	22.92	23.50
		1	50	23.22	23.20	23.25	23.50
		1	99	23.27	23.21	23.28	23.50
		50	0	22.00	21.92	21.98	22.50
		50	25	22.09	22.05	22.12	22.50
		50	50	21.98	21.93	22.02	22.50
		100	0	22.01	21.97	22.06	22.50

LTE TDD Band 38 Receiver on/off / Hotspot				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				37775/2572.5	38000/2595	38225/2617.5	
5MHz	QPSK	1	0	23.20	23.23	23.28	24.30
		1	13	23.60	23.56	23.65	24.30
		1	24	23.35	23.49	23.37	24.30
		12	0	22.41	22.41	22.55	23.30
		12	6	22.53	22.53	22.56	23.30
		12	13	22.50	22.49	22.53	23.30



	16QAM	25	0	22.47	22.55	22.63	23.30
		1	0	22.64	22.17	22.25	23.30
		1	13	22.62	22.58	22.65	23.30
		1	24	22.34	22.31	22.35	23.30
		12	0	21.62	21.52	21.59	22.30
		12	6	21.58	21.53	21.61	22.30
		12	13	21.62	21.59	21.67	22.30
		25	0	21.60	21.58	21.66	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	23.22	23.24	23.31	24.30
		1	25	23.63	23.61	23.69	24.30
		1	49	23.37	23.53	23.40	24.30
		25	0	22.44	22.46	22.59	23.30
		25	13	22.56	22.58	22.60	23.30
		25	25	22.52	22.53	22.58	23.30
		50	0	22.51	22.57	22.67	23.30
	16QAM	1	0	22.66	22.20	22.27	23.30
		1	25	22.65	22.62	22.68	23.30
		1	49	22.37	22.33	22.38	23.30
		25	0	21.65	21.57	21.63	22.30
		25	13	21.60	21.57	21.64	22.30
		25	25	21.65	21.64	21.71	22.30
		50	0	21.63	21.63	21.70	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	23.21	23.20	23.29	24.30
		1	38	23.61	23.60	23.66	24.30
		1	74	23.34	23.48	23.36	24.30
		36	0	22.42	22.42	22.56	23.30
		36	18	22.53	22.53	22.56	23.30
		36	39	22.49	22.50	22.54	23.30
		75	0	22.49	22.53	22.62	23.30
	16QAM	1	0	22.61	22.18	22.25	23.30
		1	38	22.63	22.59	22.66	23.30
		1	74	22.34	22.29	22.35	23.30
		36	0	21.62	21.55	21.60	22.30
		36	18	21.57	21.52	21.60	22.30
		36	39	21.63	21.60	21.68	22.30
		75	0	21.60	21.58	21.66	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	23.18	23.16	23.26	24.30



		1	50	23.60	23.56	23.64	24.30
		1	99	23.32	23.47	23.33	24.30
		50	0	22.39	22.37	22.52	23.30
		50	25	22.51	22.49	22.53	23.30
		50	50	22.46	22.45	22.50	23.30
		100	0	22.46	22.48	22.58	23.30
	16QAM	1	0	22.18	22.14	22.20	23.30
		1	50	22.59	22.57	22.62	23.30
		1	99	22.32	22.26	22.33	23.30
		50	0	21.59	21.51	21.57	22.30
		50	25	21.54	21.50	21.57	22.30
		50	50	21.60	21.55	21.64	22.30
		100	0	21.58	21.54	21.63	22.30

LTE TDD Band 41 Receiver on/off / Hotspot				Maximum Output Power (dBm)				Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				
				40065/25 37.5	40515/25 82.5	40965/26 27.5	41415/26 72.5	
5MHz	QPSK	1	0	23.42	23.49	23.57	23.60	24.30
		1	13	23.90	23.87	23.96	23.95	24.30
		1	24	23.66	23.84	23.70	23.75	24.30
		12	0	22.74	22.86	23.01	22.98	23.30
		12	6	22.80	22.93	22.96	22.97	23.30
		12	13	22.84	22.92	22.95	23.01	23.30
		25	0	22.87	22.90	22.95	23.01	23.30
	16QAM	1	0	23.03	22.64	22.72	23.04	23.30
		1	13	23.01	22.97	23.04	23.02	23.30
		1	24	22.93	22.90	22.94	22.94	23.30
		12	0	21.98	21.88	21.95	21.95	22.30
		12	6	22.00	21.95	22.03	22.04	22.30
		12	13	22.06	22.03	22.11	22.10	22.30
		25	0	21.89	21.87	21.95	21.93	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/25 40	40523/25 83.3	40957/26 26.7	41390/26 70	
10MHz	QPSK	1	0	23.44	23.50	23.60	23.62	24.30
		1	25	23.93	23.92	24.00	23.98	24.30
		1	49	23.68	23.88	23.73	23.77	24.30
		25	0	22.77	22.91	23.05	23.01	23.30
		25	13	22.83	22.98	23.00	23.00	23.30
		25	25	22.86	22.96	23.00	23.03	23.30
		50	0	22.91	22.92	22.99	23.05	23.30



	16QAM	1	0	23.05	22.67	22.74	23.06	23.30
		1	25	23.04	23.01	23.07	23.05	23.30
		1	49	22.96	22.92	22.97	22.97	23.30
		25	0	22.01	21.93	21.99	21.98	22.30
		25	13	22.02	21.99	22.06	22.06	22.30
		25	25	22.09	22.08	22.15	22.13	22.30
		50	0	21.92	21.92	21.99	21.96	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40115/25 42.5	40532/25 84.2	40948/26 25.8	41365/26 67.5	
15MHz	QPSK	1	0	23.43	23.46	23.58	23.61	24.30
		1	38	23.91	23.91	23.97	23.96	24.30
		1	74	23.65	23.83	23.69	23.74	24.30
		36	0	22.75	22.87	23.02	22.99	23.30
		36	18	22.80	22.93	22.96	22.97	23.30
		36	39	22.83	22.93	22.96	23.00	23.30
		75	0	22.89	22.88	22.94	23.03	23.30
	16QAM	1	0	23.00	22.65	22.72	23.01	23.30
		1	38	23.02	22.98	23.05	23.03	23.30
		1	74	22.93	22.88	22.94	22.94	23.30
		36	0	21.98	21.91	21.96	21.95	22.30
		36	18	21.99	21.94	22.02	22.03	22.30
		36	39	22.07	22.04	22.12	22.11	22.30
		75	0	21.89	21.87	21.95	21.93	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/25 45	40540/25 85	40940/26 25	41340/26 65	
20MHz	QPSK	1	0	23.40	23.42	23.55	23.58	24.30
		1	50	23.90	23.87	23.95	23.94	24.30
		1	99	23.63	23.82	23.66	23.72	24.30
		50	0	22.72	22.82	22.98	22.96	23.30
		50	25	22.78	22.89	22.93	22.95	23.30
		50	50	22.80	22.88	22.92	22.97	23.30
		100	0	22.86	22.83	22.90	23.00	23.30
	16QAM	1	0	22.65	22.61	22.67	22.70	23.30
		1	50	22.98	22.96	23.01	22.99	23.30
		1	99	22.91	22.85	22.92	22.92	23.30
		50	0	21.95	21.87	21.93	21.92	22.30
		50	25	21.96	21.92	21.99	22.00	22.30
		50	50	22.04	21.99	22.08	22.08	22.30
		100	0	21.87	21.83	21.92	21.91	22.30

LTE FDD Band 66	Maximum Output Power (dBm)	Tune-up
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Receiver on/off / Hotspot							Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				131979/1710. 7	132322/174 5	132665/1779. 3	
1.4MHz	QPSK	1	0	23.06	23.22	23.22	24.30
		1	2	23.50	23.58	23.55	24.30
		1	5	23.45	23.27	23.37	24.30
		3	0	23.38	23.58	23.52	24.30
		3	2	23.41	23.53	23.52	24.30
		3	3	23.45	23.50	23.56	24.30
		6	0	22.45	22.57	22.66	23.30
	16QAM	1	0	22.63	22.34	22.38	23.30
		1	2	22.61	22.64	22.63	23.30
		1	5	22.48	22.56	22.55	23.30
		3	0	22.42	22.47	22.46	23.30
		3	2	22.49	22.54	22.57	23.30
		3	3	22.55	22.68	22.64	23.30
		6	0	21.44	21.58	21.57	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				131987/1711. 5	132322/174 5	132657/1778. 5	
3MHz	QPSK	1	0	23.08	23.26	23.25	24.30
		1	7	23.48	23.61	23.59	24.30
		1	14	23.48	23.32	23.41	24.30
		8	0	22.48	22.70	22.65	23.30
		8	4	22.53	22.63	22.64	23.30
		8	7	22.55	22.61	22.66	23.30
		15	0	22.45	22.61	22.69	23.30
	16QAM	1	0	22.66	22.36	22.41	23.30
		1	7	22.64	22.64	22.67	23.30
		1	14	22.50	22.60	22.58	23.30
		8	0	21.53	21.60	21.58	22.30
		8	4	21.60	21.67	21.69	22.30
		8	7	21.65	21.80	21.77	22.30
		15	0	21.47	21.62	21.60	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				131997/1712. 5	132322/174 5	132647/1777. 5	
5MHz	QPSK	1	0	23.05	23.24	23.21	24.30
		1	13	23.46	23.57	23.56	24.30
		1	24	23.45	23.27	23.37	24.30
		12	0	22.45	22.65	22.61	23.30
		12	6	22.51	22.59	22.59	23.30



		12	13	22.53	22.59	22.62	23.30
		25	0	22.45	22.60	22.67	23.30
	16QAM	1	0	22.63	22.32	22.38	23.30
		1	13	22.61	22.62	22.64	23.30
		1	24	22.47	22.58	22.54	23.30
		12	0	21.51	21.56	21.55	22.30
		12	6	21.57	21.62	21.65	22.30
		12	13	21.62	21.75	21.73	22.30
		25	0	21.45	21.58	21.55	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132022/1715	132322/174 5	132622/1775	
10MHz	QPSK	1	0	23.07	23.25	23.24	24.30
		1	25	23.49	23.62	23.60	24.30
		1	49	23.47	23.31	23.40	24.30
		25	0	22.48	22.70	22.65	23.30
		25	13	22.54	22.64	22.63	23.30
		25	25	22.55	22.63	22.67	23.30
		50	0	22.49	22.62	22.71	23.30
	16QAM	1	0	22.65	22.35	22.40	23.30
		1	25	22.64	22.66	22.67	23.30
		1	49	22.50	22.60	22.57	23.30
		25	0	21.54	21.61	21.59	22.30
		25	13	21.59	21.66	21.68	22.30
		25	25	21.65	21.80	21.77	22.30
		50	0	21.48	21.63	21.59	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132047/1717. 5	132322/174 5	132597/1772. 5	
15MHz	QPSK	1	0	23.06	23.21	23.22	24.30
		1	38	23.47	23.61	23.57	24.30
		1	74	23.44	23.26	23.36	24.30
		36	0	22.46	22.66	22.62	23.30
		36	18	22.51	22.59	22.59	23.30
		36	39	22.52	22.60	22.63	23.30
		75	0	22.47	22.58	22.66	23.30
	16QAM	1	0	22.60	22.33	22.38	23.30
		1	38	22.62	22.63	22.65	23.30
		1	74	22.47	22.56	22.54	23.30
		36	0	21.51	21.59	21.56	22.30
		36	18	21.56	21.61	21.64	22.30
		36	39	21.63	21.76	21.74	22.30
		75	0	21.45	21.58	21.55	22.30



Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	23.03	23.17	23.19	24.30
		1	50	23.46	23.57	23.55	24.30
		1	99	23.42	23.25	23.33	24.30
		50	0	22.43	22.61	22.58	23.30
		50	25	22.49	22.55	22.56	23.30
		50	50	22.49	22.55	22.59	23.30
		100	0	22.44	22.53	22.62	23.30
	16QAM	1	0	22.56	22.29	22.33	23.30
		1	50	22.58	22.61	22.61	23.30
		1	99	22.45	22.53	22.52	23.30
		50	0	21.48	21.55	21.53	22.30
		50	25	21.53	21.59	21.61	22.30
		50	50	21.60	21.71	21.70	22.30
		100	0	21.43	21.54	21.52	22.30



Second - Antenna

LTE FDD Band 2 Receiver on/Hotsopt				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				18607/1850.7	18900/1880	19193/1909.3	
1.4MHz	QPSK	1	0	18.05	18.14	18.01	19.50
		1	2	18.53	18.48	18.41	19.50
		1	5	18.03	18.22	17.97	19.50
		3	0	18.44	18.37	18.41	19.50
		3	2	18.34	18.37	18.29	19.50
		3	3	18.28	18.17	18.20	19.50
		6	0	18.35	18.43	18.38	19.50
	16QAM	1	0	19.04	18.44	18.50	19.50
		1	2	19.02	19.00	19.04	19.50
		1	5	18.59	18.53	18.60	19.50
		3	0	18.77	18.81	18.70	19.50
		3	2	18.87	18.82	18.78	19.50
		3	3	18.74	18.71	18.77	19.50
		6	0	18.38	18.37	18.47	19.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	18.07	18.18	18.04	19.50
		1	7	18.51	18.51	18.45	19.50
		1	14	18.06	18.27	18.01	19.50
		8	0	18.54	18.49	18.54	19.50
		8	4	18.46	18.47	18.41	19.50
		8	7	18.38	18.28	18.30	19.50
		15	0	18.35	18.47	18.41	19.50
	16QAM	1	0	19.07	18.46	18.53	19.50
		1	7	19.05	19.00	19.08	19.50
		1	14	18.61	18.57	18.63	19.50
		8	0	18.59	18.51	18.57	19.50
		8	4	18.48	18.45	18.52	19.50
		8	7	18.34	18.33	18.40	19.50
		15	0	18.41	18.41	18.50	19.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	18.04	18.16	18.00	19.50
		1	13	18.49	18.47	18.42	19.50
		1	24	18.03	18.22	17.97	19.50
		12	0	18.51	18.44	18.50	19.50
		12	6	18.44	18.43	18.36	19.50
		12	13	18.36	18.26	18.26	19.50



		25	0	18.35	18.46	18.39	19.50
	16QAM	1	0	19.04	18.42	18.50	19.50
		1	13	19.02	18.98	19.05	19.50
		1	24	18.58	18.55	18.59	19.50
		12	0	18.57	18.47	18.54	19.50
		12	6	18.45	18.40	18.48	19.50
		12	13	18.31	18.28	18.36	19.50
		25	0	18.39	18.37	18.45	19.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	18.06	18.17	18.03	19.50
		1	25	18.52	18.52	18.46	19.50
		1	49	18.05	18.26	18.00	19.50
		25	0	18.54	18.49	18.54	19.50
		25	13	18.47	18.48	18.40	19.50
		25	25	18.38	18.30	18.31	19.50
		50	0	18.39	18.48	18.43	19.50
	16QAM	1	0	19.06	18.45	18.52	19.50
		1	25	19.05	19.02	19.08	19.50
		1	49	18.61	18.57	18.62	19.50
		25	0	18.60	18.52	18.58	19.50
		25	13	18.47	18.44	18.51	19.50
		25	25	18.34	18.33	18.40	19.50
		50	0	18.42	18.42	18.49	19.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	18.05	18.13	18.01	19.50
		1	38	18.50	18.51	18.43	19.50
		1	74	18.02	18.21	17.96	19.50
		36	0	18.62	18.45	18.51	19.50
		36	18	18.44	18.43	18.36	19.50
		36	39	18.35	18.27	18.27	19.50
		75	0	18.37	18.44	18.38	19.50
	16QAM	1	0	19.01	18.43	18.50	19.50
		1	38	19.03	18.99	19.06	19.50
		1	74	18.58	18.53	18.59	19.50
		36	0	18.57	18.50	18.55	19.50
		36	18	18.44	18.39	18.47	19.50
		36	39	18.32	18.29	18.37	19.50
		75	0	18.39	18.37	18.45	19.50
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	18.02	18.09	17.98	19.50



		1	50	18.59	18.47	18.41	19.50
		1	99	18.00	18.20	17.93	19.50
		50	0	18.87	18.64	18.44	19.50
		50	25	18.42	18.39	18.33	19.50
		50	50	18.32	18.22	18.23	19.50
		100	0	18.34	18.39	18.34	19.50
	16QAM	1	0	18.43	18.39	18.45	19.50
		1	50	18.99	18.97	19.02	19.50
		1	99	18.56	18.50	18.57	19.50
		50	0	18.54	18.46	18.52	19.50
		50	25	18.41	18.37	18.44	19.50
		50	50	18.29	18.24	18.33	19.50
		100	0	18.37	18.33	18.42	19.50

LTE FDD Band 2 Receiver off				Maximum Output 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	21.66	21.59	21.48	23.00
		1	2	22.03	21.98	21.91	23.00
		1	5	21.47	21.44	21.46	23.00
		3	0	21.86	21.82	21.80	23.00
		3	2	21.85	21.77	21.76	23.00
		3	3	21.78	21.73	21.81	23.00
		6	0	21.86	21.81	21.91	23.00
	16QAM	1	0	21.97	21.79	21.85	23.00
		1	2	21.95	21.93	21.97	23.00
		1	5	21.57	21.54	21.61	23.00
		3	0	21.76	21.70	21.77	23.00
		3	2	21.96	21.93	22.01	23.00
		3	3	21.84	21.81	21.87	23.00
		6	0	20.87	20.86	20.96	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18615/1851.5	18900/1880	19185/1908.5	
3MHz	QPSK	1	0	21.68	21.63	21.51	23.00
		1	7	22.01	22.01	21.95	23.00
		1	14	21.50	21.49	21.50	23.00
		8	0	21.96	21.94	21.93	23.00
		8	4	21.97	21.87	21.88	23.00
		8	7	21.88	21.84	21.91	23.00
		15	0	21.86	21.85	21.94	23.00
	16QAM	1	0	22.00	21.81	21.88	23.00
		1	7	21.98	21.93	22.01	23.00



		1	14	21.59	21.58	21.64	23.00
		8	0	20.87	20.83	20.89	22.00
		8	4	21.07	21.06	21.13	22.00
		8	7	20.94	20.93	21.00	22.00
		15	0	20.90	20.90	20.99	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18625/1852.5	18900/1880	19175/1907.5	
5MHz	QPSK	1	0	21.65	21.61	21.47	23.00
		1	13	21.99	21.97	21.92	23.00
		1	24	21.47	21.44	21.46	23.00
		12	0	21.93	21.89	21.89	23.00
		12	6	21.95	21.83	21.83	23.00
		12	13	21.86	21.82	21.87	23.00
		25	0	21.86	21.84	21.92	23.00
	16QAM	1	0	21.97	21.77	21.85	23.00
		1	13	21.95	21.91	21.98	23.00
		1	24	21.56	21.56	21.60	23.00
		12	0	20.85	20.79	20.86	22.00
		12	6	21.04	21.01	21.09	22.00
		12	13	20.91	20.88	20.96	22.00
		25	0	20.88	20.86	20.94	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18650/1855	18900/1880	19150/1905	
10MHz	QPSK	1	0	21.67	21.62	21.50	23.00
		1	25	22.02	22.02	21.96	23.00
		1	49	21.49	21.48	21.49	23.00
		25	0	21.96	21.94	21.93	23.00
		25	13	21.98	21.88	21.87	23.00
		25	25	21.88	21.86	21.92	23.00
		50	0	21.90	21.86	21.96	23.00
	16QAM	1	0	21.99	21.80	21.87	23.00
		1	25	21.98	21.95	22.01	23.00
		1	49	21.59	21.58	21.63	23.00
		25	0	20.88	20.84	20.90	22.00
		25	13	21.06	21.05	21.12	22.00
		25	25	20.94	20.93	21.00	22.00
		50	0	20.91	20.91	20.98	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18675/1857.5	18900/1880	19125/1902.5	
15MHz	QPSK	1	0	21.66	21.58	21.48	23.00
		1	38	22.00	22.01	21.93	23.00
		1	74	21.46	21.43	21.45	23.00
		36	0	21.94	21.90	21.90	23.00



		36	18	21.95	21.83	21.83	23.00
		36	39	21.85	21.83	21.88	23.00
		75	0	21.88	21.82	21.91	23.00
	16QAM	1	0	21.94	21.78	21.85	23.00
		1	38	21.96	21.92	21.99	23.00
		1	74	21.56	21.54	21.60	23.00
		36	0	20.85	20.82	20.87	22.00
		36	18	21.03	21.00	21.08	22.00
		36	39	20.92	20.89	20.97	22.00
		75	0	20.88	20.86	20.94	22.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				18700/1860	18900/1880	19100/1900	
20MHz	QPSK	1	0	21.63	21.54	21.45	23.00
		1	50	21.99	21.97	21.91	23.00
		1	99	21.44	21.42	21.42	23.00
		50	0	21.91	21.85	21.86	23.00
		50	25	21.93	21.79	21.80	23.00
		50	50	21.82	21.78	21.84	23.00
		100	0	21.85	21.77	21.87	23.00
	16QAM	1	0	21.78	21.74	21.80	23.00
		1	50	21.92	21.90	21.95	23.00
		1	99	21.54	21.51	21.58	23.00
		50	0	20.82	20.78	20.84	22.00
		50	25	21.00	20.98	21.05	22.00
		50	50	20.89	20.84	20.93	22.00
		100	0	20.86	20.82	20.91	22.00

LTE FDD Band 4 Receiver on/ Hotspot				Maximum Output 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	19.08	19.25	19.14	20.30
		1	2	19.39	19.42	19.42	20.30
		1	5	19.00	19.93	19.01	20.30
		3	0	19.80	19.95	19.91	20.30
		3	2	19.80	19.94	19.82	20.30
		3	3	19.89	19.86	19.73	20.30
		6	0	19.46	19.46	19.38	20.30
	16QAM	1	0	19.79	19.75	19.81	20.30
		1	2	19.77	19.75	19.79	20.30
		1	5	19.70	19.64	19.71	20.30
		3	0	19.78	19.68	19.75	20.30
		3	2	19.67	19.62	19.70	20.30



		3	3	19.77	19.74	19.80	20.30
		6	0	19.55	19.54	19.64	20.30
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	19.10	19.29	19.17	20.30
		1	7	19.37	19.45	19.46	20.30
		1	14	19.03	19.98	19.05	20.30
		8	0	19.40	19.57	19.54	20.30
		8	4	19.42	19.54	19.44	20.30
		8	7	19.53	19.47	19.33	20.30
		15	0	19.46	19.50	19.41	20.30
	16QAM	1	0	19.82	19.77	19.84	20.30
		1	7	19.80	19.75	19.83	20.30
		1	14	19.72	19.68	19.74	20.30
		8	0	19.59	19.51	19.57	20.30
		8	4	19.48	19.45	19.52	20.30
		8	7	19.57	19.56	19.63	20.30
		15	0	19.58	19.58	19.67	20.30
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	19.07	19.27	19.13	20.30
		1	13	19.35	19.41	19.43	20.30
		1	24	19.00	19.93	19.01	20.30
		12	0	19.37	19.52	19.50	20.30
		12	6	19.40	19.50	19.39	20.30
		12	13	19.51	19.45	19.29	20.30
		25	0	19.46	19.49	19.39	20.30
	16QAM	1	0	19.79	19.73	19.81	20.30
		1	13	19.77	19.73	19.80	20.30
		1	24	19.69	19.66	19.70	20.30
		12	0	19.57	19.47	19.54	20.30
		12	6	19.45	19.40	19.48	20.30
		12	13	19.54	19.51	19.59	20.30
		25	0	19.56	19.54	19.62	20.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	19.09	19.28	19.16	20.30
		1	25	19.38	19.46	19.47	20.30
		1	49	19.02	19.97	19.04	20.30
		25	0	19.40	19.57	19.54	20.30
		25	13	19.43	19.55	19.43	20.30
		25	25	19.53	19.49	19.34	20.30
		50	0	19.50	19.51	19.43	20.30



	16QAM	1	0	19.81	19.76	19.83	20.30
		1	25	19.80	19.77	19.83	20.30
		1	49	19.72	19.68	19.73	20.30
		25	0	19.60	19.52	19.58	20.30
		25	13	19.47	19.44	19.51	20.30
		25	25	19.57	19.56	19.63	20.30
		50	0	19.59	19.59	19.66	20.30
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	19.08	19.24	19.14	20.30
		1	38	19.36	19.45	19.44	20.30
		1	74	18.99	19.92	19.00	20.30
		36	0	19.38	19.53	19.51	20.30
		36	18	19.40	19.50	19.39	20.30
		36	39	19.50	19.46	19.30	20.30
		75	0	19.48	19.47	19.38	20.30
	16QAM	1	0	19.76	19.74	19.81	20.30
		1	38	19.78	19.74	19.81	20.30
		1	74	19.69	19.64	19.70	20.30
		36	0	19.57	19.50	19.55	20.30
		36	18	19.44	19.39	19.47	20.30
		36	39	19.55	19.52	19.60	20.30
		75	0	19.56	19.54	19.62	20.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	19.05	19.20	19.11	20.30
		1	50	19.35	19.41	19.42	20.30
		1	99	18.97	19.91	18.97	20.30
		50	0	19.35	19.48	19.47	20.30
		50	25	19.38	19.46	19.36	20.30
		50	50	19.47	19.41	19.26	20.30
		100	0	19.45	19.42	19.34	20.30
	16QAM	1	0	19.74	19.70	19.76	20.30
		1	50	19.74	19.72	19.77	20.30
		1	99	19.67	19.61	19.68	20.30
		50	0	19.54	19.46	19.52	20.30
		50	25	19.41	19.37	19.44	20.30
		50	50	19.52	19.47	19.56	20.30
		100	0	19.54	19.50	19.59	20.30

LTE FDD Band 4 Receiver off				Maximum Output 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	21.99	21.92	21.81	23.30
		1	2	22.26	22.33	22.24	23.30
		1	5	21.80	21.77	21.79	23.30
		3	0	22.40	22.43	22.33	23.30
		3	2	22.35	22.30	22.29	23.30
		3	3	22.31	22.26	22.34	23.30
		6	0	22.19	22.14	22.24	23.30
	16QAM	1	0	22.30	22.12	22.18	23.30
		1	2	22.28	22.26	22.30	23.30
		1	5	21.90	21.87	21.94	23.30
		3	0	21.39	21.33	21.40	22.30
		3	2	21.59	21.56	21.64	22.30
		3	3	21.47	21.44	21.50	22.30
		6	0	21.20	21.19	21.29	22.30
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	22.01	21.96	21.84	23.30
		1	7	22.24	22.36	22.28	23.30
		1	14	21.83	21.82	21.83	23.30
		8	0	22.30	22.35	22.26	23.30
		8	4	22.27	22.20	22.21	23.30
		8	7	22.21	22.17	22.24	23.30
		15	0	22.19	22.18	22.27	23.30
	16QAM	1	0	22.33	22.14	22.21	23.30
		1	7	22.31	22.26	22.34	23.30
		1	14	21.92	21.91	21.97	23.30
		8	0	21.20	21.16	21.22	22.30
		8	4	21.40	21.39	21.46	22.30
		8	7	21.27	21.26	21.33	22.30
		15	0	21.23	21.23	21.32	22.30
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	21.98	21.94	21.80	23.30
		1	13	22.22	22.32	22.25	23.30
		1	24	21.80	21.77	21.79	23.30
		12	0	22.27	22.30	22.22	23.30
		12	6	22.25	22.16	22.16	23.30
		12	13	22.19	22.15	22.20	23.30
		25	0	22.19	22.17	22.25	23.30
	16QAM	1	0	22.30	22.10	22.18	23.30
		1	13	22.28	22.24	22.31	23.30
		1	24	21.89	21.89	21.93	23.30



		12	0	21.18	21.12	21.19	22.30
		12	6	21.37	21.34	21.42	22.30
		12	13	21.24	21.21	21.29	22.30
		25	0	21.21	21.19	21.27	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20000/1715	20175/1732.5	20350/1750	
10MHz	QPSK	1	0	22.00	21.95	21.83	23.30
		1	25	22.25	22.37	22.29	23.30
		1	49	21.82	21.81	21.82	23.30
		25	0	22.30	22.35	22.26	23.30
		25	13	22.28	22.21	22.20	23.30
		25	25	22.21	22.19	22.25	23.30
		50	0	22.23	22.19	22.29	23.30
	16QAM	1	0	22.32	22.13	22.20	23.30
		1	25	22.31	22.28	22.34	23.30
		1	49	21.92	21.91	21.96	23.30
		25	0	21.21	21.17	21.23	22.30
		25	13	21.39	21.38	21.45	22.30
		25	25	21.27	21.26	21.33	22.30
		50	0	21.24	21.24	21.31	22.30
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	21.99	21.91	21.81	23.30
		1	38	22.23	22.36	22.26	23.30
		1	74	21.79	21.76	21.78	23.30
		36	0	22.28	22.31	22.23	23.30
		36	18	22.25	22.16	22.16	23.30
		36	39	22.18	22.16	22.21	23.30
		75	0	22.21	22.15	22.24	23.30
	16QAM	1	0	22.27	22.11	22.18	23.30
		1	38	22.29	22.25	22.32	23.30
		1	74	21.89	21.87	21.93	23.30
		36	0	21.18	21.15	21.20	22.30
		36	18	21.36	21.33	21.41	22.30
		36	39	21.25	21.22	21.30	22.30
		75	0	21.21	21.19	21.27	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20050/1720	20175/1732.5	20300/1745	
20MHz	QPSK	1	0	21.96	21.87	21.78	23.30
		1	50	22.22	22.32	22.24	23.30
		1	99	21.77	21.75	21.75	23.30
		50	0	22.25	22.26	22.19	23.30
		50	25	22.23	22.12	22.13	23.30



		50	50	22.15	22.11	22.17	23.30
		100	0	22.18	22.10	22.20	23.30
	16QAM	1	0	22.11	22.07	22.13	23.30
		1	50	22.25	22.23	22.28	23.30
		1	99	21.87	21.84	21.91	23.30
		50	0	21.15	21.11	21.17	22.30
		50	25	21.33	21.31	21.38	22.30
		50	50	21.22	21.17	21.26	22.30
		100	0	21.19	21.15	21.24	22.30

LTE FDD Band 5 Receiver on/off/Hotspot				Maximum Output 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	22.76	22.72	22.75	23.50
		1	2	23.96	23.88	23.82	25.00
		1	5	23.37	23.39	23.25	24.00
		3	0	24.35	24.37	24.27	25.00
		3	2	24.78	24.74	24.80	25.00
		3	3	23.62	23.62	23.64	25.00
		6	0	23.27	23.20	23.19	24.00
	16QAM	1	0	23.38	23.42	23.25	24.00
		1	2	23.43	23.42	23.25	24.00
		1	5	23.41	23.41	23.31	24.00
		3	0	22.00	22.06	22.13	24.00
		3	2	23.96	23.98	23.84	24.00
		3	3	23.33	23.33	23.37	24.00
		6	0	22.33	22.50	22.43	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20415/825.5	20525/836.5	20635/847.5	
3MHz	QPSK	1	0	22.78	22.76	22.78	23.50
		1	4	23.94	23.91	23.86	25.00
		1	7	24.38	24.42	24.31	25.00
		1	11	23.88	24.86	23.93	25.00
		1	14	23.74	23.72	23.76	25.00
		8	0	23.37	23.31	23.29	24.00
		8	4	23.38	23.46	23.28	24.00
		8	7	23.46	23.44	23.28	24.00
		15	0	23.44	23.41	23.35	24.00
	16QAM	1	0	22.02	22.10	22.16	22.50
		1	4	23.07	23.11	22.96	24.00
		1	7	23.44	23.46	23.49	24.00
		1	11	22.93	23.12	23.06	24.00



		1	14	23.00	23.34	23.20	24.00
		8	0	22.24	22.44	22.32	23.00
		8	4	22.34	22.31	22.32	23.00
		8	7	22.32	22.36	22.24	23.00
		15	0	22.38	22.41	22.29	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20425/826.5	20525/836.5	20625/846.5	
5MHz	QPSK	1	0	22.75	22.74	22.74	23.50
		1	6	23.92	23.87	23.83	25.00
		1	13	24.35	24.37	24.27	25.00
		1	18	23.85	24.81	23.89	25.00
		1	24	23.72	23.68	23.71	25.00
		12	0	23.35	23.29	23.25	24.00
		12	6	23.38	23.45	23.26	24.00
		12	13	23.43	23.40	23.25	24.00
		25	0	23.41	23.39	23.32	24.00
	16QAM	1	0	21.99	22.08	22.12	22.50
		1	6	23.05	23.07	22.93	24.00
		1	13	23.41	23.41	23.45	24.00
		1	18	22.90	23.07	23.02	24.00
		1	24	22.98	23.30	23.15	24.00
		12	0	22.21	22.44	22.29	23.00
		12	6	22.31	22.33	22.29	23.00
		12	13	22.33	22.34	22.20	23.00
		25	0	22.36	22.37	22.30	23.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20450/829	20525/836.5	20600/844	
10MHz	QPSK	1	0	22.73	22.67	22.72	23.50
		1	1	23.92	23.87	23.82	25.00
		1	25	24.32	24.35	24.23	25.00
		1	48	23.83	24.77	23.86	25.00
		1	49	22.70	22.64	22.68	23.50
		25	0	23.31	23.25	23.22	24.00
		25	13	23.37	23.38	23.21	24.00
		25	25	23.33	23.37	23.20	24.00
		50	0	23.38	23.38	23.29	24.00
	16QAM	1	0	21.97	22.03	22.10	22.50
		1	1	23.02	23.06	22.91	24.00
		1	25	23.37	23.38	23.41	24.00
		1	48	22.88	23.03	22.99	24.00
		1	49	21.96	22.26	22.12	22.50
		25	0	22.16	22.37	22.24	23.00
		25	13	22.28	22.28	22.26	23.00



		25	25	22.27	22.29	22.18	23.00
		50	0	22.33	22.36	22.24	23.00

LTE FDD Band 7 Receiver on/Hotspot				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				20775/2502.5	21100/2535	21425/2567.5	
5MHz	QPSK	1	0	15.23	15.49	15.54	17.00
		1	13	15.51	15.80	15.92	17.00
		1	24	15.42	15.56	15.83	17.00
		12	0	15.15	15.92	15.79	17.00
		12	6	15.38	15.81	15.82	17.00
		12	13	15.62	15.71	15.81	17.00
		25	0	15.35	15.85	15.78	17.00
	16QAM	1	0	15.88	15.67	15.51	17.00
		1	13	15.86	15.91	15.95	17.00
		1	24	15.83	15.89	15.94	17.00
		12	0	15.95	15.91	15.96	17.00
		12	6	15.93	15.84	15.93	17.00
		12	13	15.84	15.90	15.93	17.00
		25	0	15.82	15.76	15.95	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	15.25	15.50	15.57	17.00
		1	25	15.54	15.85	15.96	17.00
		1	49	15.44	15.60	15.86	17.00
		25	0	15.18	15.97	15.83	17.00
		25	13	15.41	15.86	15.86	17.00
		25	25	15.64	15.75	15.86	17.00
		50	0	15.39	15.87	15.82	17.00
	16QAM	1	0	15.90	15.70	15.53	17.00
		1	25	15.89	15.95	15.98	17.00
		1	49	15.86	15.91	15.97	17.00
		25	0	15.98	15.96	16.00	17.00
		25	13	15.95	15.88	15.96	17.00
		25	25	15.87	15.95	15.97	17.00
		50	0	15.85	15.81	15.99	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	15.24	15.46	15.55	17.00
		1	38	15.52	15.84	15.93	17.00
		1	74	15.41	15.55	15.82	17.00
		36	0	15.16	15.93	15.80	17.00



		36	18	15.38	15.81	15.82	17.00
		36	39	15.61	15.72	15.82	17.00
		75	0	15.37	15.83	15.77	17.00
	16QAM	1	0	15.85	15.68	15.51	17.00
		1	38	15.87	15.92	15.96	17.00
		1	74	15.83	15.87	15.94	17.00
		36	0	15.95	15.94	15.97	17.00
		36	18	15.92	15.83	15.92	17.00
		36	39	15.85	15.91	15.94	17.00
		75	0	15.82	15.76	15.95	17.00
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	15.21	15.42	15.52	17.00
		1	50	15.51	15.80	15.91	17.00
		1	99	15.39	15.54	15.79	17.00
		50	0	15.13	15.88	15.76	17.00
		50	25	15.36	15.77	15.79	17.00
		50	50	15.58	15.67	15.78	17.00
		100	0	15.34	15.78	15.73	17.00
	16QAM	1	0	15.54	15.64	15.46	17.00
		1	50	15.83	15.90	15.92	17.00
		1	99	15.81	15.84	15.92	17.00
		50	0	15.92	15.90	15.94	17.00
		50	25	15.89	15.81	15.89	17.00
		50	50	15.82	15.86	15.90	17.00
		100	0	15.80	15.72	15.92	17.00

LTE FDD Band 7 Receiver off				Maximum Output 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	21.62	21.90	21.97	23.30
		1	13	21.80	21.81	22.41	23.30
		1	24	21.86	22.31	22.16	23.30
		12	0	21.61	22.00	22.30	23.30
		12	6	21.76	22.15	22.28	23.30
		12	13	22.11	22.32	22.27	23.30
		25	0	21.86	22.22	22.21	23.30
	16QAM	1	0	22.23	22.24	22.24	23.30
		1	13	22.21	21.95	22.13	23.30
		1	24	22.28	22.40	22.25	23.30
		12	0	21.41	21.38	21.38	22.30
		12	6	21.46	21.49	21.34	22.30



		12	13	21.46	21.53	21.40	22.30
		25	0	21.48	21.52	21.42	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20800/2505	21100/2535	21400/2565	
10MHz	QPSK	1	0	21.64	21.91	22.00	23.30
		1	25	21.83	21.86	22.45	23.30
		1	49	21.88	22.35	22.19	23.30
		25	0	21.64	22.05	22.34	23.30
		25	13	21.79	22.20	22.32	23.30
		25	25	22.13	22.36	22.32	23.30
		50	0	21.90	22.24	22.25	23.30
	16QAM	1	0	22.25	22.27	22.26	23.30
		1	25	22.24	21.99	22.16	23.30
		1	49	22.31	22.42	22.28	23.30
		25	0	21.44	21.43	21.42	22.30
		25	13	21.48	21.53	21.37	22.30
		25	25	21.49	21.58	21.44	22.30
		50	0	21.51	21.57	21.46	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20825/2507.5	21100/2535	21375/2562.5	
15MHz	QPSK	1	0	21.63	21.87	21.98	23.30
		1	38	21.81	21.85	22.42	23.30
		1	74	21.85	22.30	22.15	23.30
		36	0	21.62	22.01	22.31	23.30
		36	18	21.76	22.15	22.28	23.30
		36	39	22.10	22.33	22.28	23.30
		75	0	21.88	22.20	22.20	23.30
	16QAM	1	0	22.20	22.25	22.24	23.30
		1	38	22.22	21.96	22.14	23.30
		1	74	22.28	22.38	22.25	23.30
		36	0	21.41	21.41	21.39	22.30
		36	18	21.45	21.48	21.33	22.30
		36	39	21.47	21.54	21.41	22.30
		75	0	21.48	21.52	21.42	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				20850/2510	21100/2535	21350/2560	
20MHz	QPSK	1	0	21.60	21.83	21.95	23.30
		1	50	21.80	21.81	22.40	23.30
		1	99	21.83	22.29	22.12	23.30
		50	0	21.59	21.96	22.27	23.30
		50	25	21.74	22.11	22.25	23.30
		50	50	22.07	22.28	22.24	23.30
		100	0	21.85	22.15	22.16	23.30



	16QAM	1	0	22.20	22.21	22.19	23.30
		1	50	22.18	21.94	22.10	23.30
		1	99	22.26	22.35	22.23	23.30
		50	0	21.38	21.37	21.36	22.30
		50	25	21.42	21.46	21.30	22.30
		50	50	21.44	21.49	21.37	22.30
		100	0	21.46	21.48	21.39	22.30

LTE TDD Band 38 Receiver on/Hotspot				Maximum Output 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	17.23	17.26	17.26	18.80
		1	13	17.64	17.67	17.75	18.80
		1	24	17.52	17.44	17.56	18.80
		12	0	17.49	17.67	17.84	18.80
		12	6	17.70	17.76	17.88	18.80
		12	13	17.71	17.82	17.83	18.80
		25	0	17.53	17.75	17.79	18.80
	16QAM	1	0	17.67	17.31	17.37	18.80
		1	13	17.65	17.71	17.78	18.80
		1	24	17.57	17.62	17.70	18.80
		12	0	17.76	17.79	17.82	18.80
		12	6	17.74	17.74	17.82	18.80
		12	13	17.71	17.77	17.74	18.80
		25	0	17.70	17.80	17.78	18.80
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	17.25	17.27	17.29	18.80
		1	25	17.67	17.72	17.79	18.80
		1	49	17.54	17.48	17.59	18.80
		25	0	17.52	17.72	17.88	18.80
		25	13	17.73	17.81	17.92	18.80
		25	25	17.73	17.86	17.88	18.80
		50	0	17.57	17.77	17.83	18.80
	16QAM	1	0	17.69	17.34	17.39	18.80
		1	25	17.68	17.75	17.81	18.80
		1	49	17.60	17.64	17.73	18.80
		25	0	17.79	17.84	17.86	18.80
		25	13	17.76	17.78	17.85	18.80
		25	25	17.74	17.82	17.78	18.80
		50	0	17.73	17.85	17.82	18.80
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up



				37825/2577.5	38000/2595	38175/2612.5	Limit
15MHz	QPSK	1	0	17.24	17.23	17.27	18.80
		1	38	17.65	17.71	17.76	18.80
		1	74	17.51	17.43	17.55	18.80
		36	0	17.50	17.68	17.85	18.80
		36	18	17.70	17.76	17.88	18.80
		36	39	17.70	17.83	17.84	18.80
		75	0	17.55	17.73	17.78	18.80
	16QAM	1	0	17.64	17.32	17.37	18.80
		1	38	17.66	17.72	17.79	18.80
		1	74	17.57	17.60	17.70	18.80
		36	0	17.76	17.82	17.83	18.80
		36	18	17.73	17.73	17.81	18.80
		36	39	17.72	17.78	17.75	18.80
		75	0	17.70	17.80	17.78	18.80
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	17.21	17.19	17.24	18.80
		1	50	17.64	17.67	17.74	18.80
		1	99	17.49	17.42	17.52	18.80
		50	0	17.47	17.63	17.81	18.80
		50	25	17.68	17.72	17.85	18.80
		50	50	17.67	17.78	17.80	18.80
		100	0	17.52	17.68	17.74	18.80
	16QAM	1	0	17.20	17.28	17.32	18.80
		1	50	17.62	17.70	17.75	18.80
		1	99	17.55	17.57	17.68	18.80
		50	0	17.73	17.78	17.80	18.80
		50	25	17.70	17.71	17.78	18.80
		50	50	17.69	17.73	17.71	18.80
		100	0	17.68	17.76	17.75	18.80

LTE TDD Band 38 Receiver off				Maximum Output 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	22.87	22.94	22.92	24.30
		1	13	23.22	23.31	23.35	24.30
		1	24	22.95	22.96	23.03	24.30
		12	0	22.13	22.13	22.22	23.30
		12	6	22.12	22.10	22.24	23.30
		12	13	22.12	22.18	22.18	23.30
		25	0	22.14	22.28	22.31	23.30



	16QAM	1	0	22.29	21.98	22.02	23.30
		1	13	22.27	22.27	22.32	23.30
		1	24	21.97	22.06	22.04	23.30
		12	0	21.21	21.27	21.26	22.30
		12	6	21.23	21.26	21.30	22.30
		12	13	21.17	21.24	21.27	22.30
		25	0	21.23	21.29	21.33	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37800/2575	38000/2595	38200/2615	
10MHz	QPSK	1	0	22.89	22.95	22.95	24.30
		1	25	23.25	23.36	23.39	24.30
		1	49	22.97	23.00	23.06	24.30
		25	0	22.16	22.18	22.26	23.30
		25	13	22.15	22.15	22.28	23.30
		25	25	22.14	22.22	22.23	23.30
		50	0	22.18	22.30	22.35	23.30
	16QAM	1	0	22.31	22.01	22.04	23.30
		1	25	22.30	22.31	22.35	23.30
		1	49	22.00	22.08	22.07	23.30
		25	0	21.24	21.32	21.30	22.30
		25	13	21.25	21.30	21.33	22.30
		25	25	21.20	21.29	21.31	22.30
		50	0	21.26	21.34	21.37	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37825/2577.5	38000/2595	38175/2612.5	
15MHz	QPSK	1	0	22.88	22.91	22.93	24.30
		1	38	23.23	23.35	23.36	24.30
		1	74	22.94	22.95	23.02	24.30
		36	0	22.14	22.14	22.23	23.30
		36	18	22.12	22.10	22.24	23.30
		36	39	22.11	22.19	22.19	23.30
		75	0	22.16	22.26	22.30	23.30
	16QAM	1	0	22.26	21.99	22.02	23.30
		1	38	22.28	22.28	22.33	23.30
		1	74	21.97	22.04	22.04	23.30
		36	0	21.21	21.30	21.27	22.30
		36	18	21.22	21.25	21.29	22.30
		36	39	21.18	21.25	21.28	22.30
		75	0	21.23	21.29	21.33	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				37850/2580	38000/2595	38150/2610	
20MHz	QPSK	1	0	22.85	22.87	22.90	24.30
		1	50	23.22	23.31	23.34	24.30



		1	99	22.92	22.94	22.99	24.30
		50	0	22.11	22.09	22.19	23.30
		50	25	22.10	22.06	22.21	23.30
		50	50	22.08	22.14	22.15	23.30
		100	0	22.13	22.21	22.26	23.30
	16QAM	1	0	21.91	21.95	21.97	23.30
		1	50	22.24	22.26	22.29	23.30
		1	99	21.95	22.01	22.02	23.30
		50	0	21.18	21.26	21.24	22.30
		50	25	21.19	21.23	21.26	22.30
		50	50	21.15	21.20	21.24	22.30
		100	0	21.21	21.25	21.30	22.30

LTE TDD Band 41 Receiver on/Hotspot				Maximum Output Power (dBm)				Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				
				40065/25 37.5	40515/25 82.5	40965/26 27.5	41415/26 72.5	
5MHz	QPSK	1	0	16.75	16.76	16.95	17.03	18.30
		1	13	17.10	17.17	17.52	17.54	18.30
		1	24	16.94	17.05	17.37	17.19	18.30
		12	0	17.14	17.22	17.07	17.29	18.30
		12	6	17.21	17.17	17.58	17.66	18.30
		12	13	17.24	17.23	17.51	17.48	18.30
		25	0	17.24	17.23	17.32	17.47	18.30
	16QAM	1	0	17.21	17.06	17.18	17.31	18.30
		1	13	17.19	17.27	17.22	17.33	18.30
		1	24	17.11	17.10	17.15	17.27	18.30
		12	0	17.14	17.18	17.18	17.24	18.30
		12	6	17.24	17.28	17.26	17.30	18.30
		12	13	17.28	17.34	17.31	17.34	18.30
		25	0	17.26	17.26	17.23	17.31	18.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/25 40	40523/25 83.3	40957/26 26.7	41390/26 70	
10MHz	QPSK	1	0	16.77	16.77	16.98	17.06	18.30
		1	25	17.13	17.22	17.56	17.58	18.30
		1	49	16.96	17.09	17.40	17.22	18.30
		25	0	17.17	17.27	17.11	17.33	18.30
		25	13	17.24	17.22	17.62	17.70	18.30
		25	25	17.26	17.27	17.56	17.53	18.30
		50	0	17.28	17.25	17.36	17.51	18.30
	16QAM	1	0	17.23	17.09	17.20	17.33	18.30



		1	25	17.22	17.31	17.25	17.36	18.30
		1	49	17.14	17.12	17.18	17.30	18.30
		25	0	17.17	17.23	17.22	17.28	18.30
		25	13	17.26	17.32	17.29	17.33	18.30
		25	25	17.31	17.39	17.35	17.38	18.30
		50	0	17.29	17.31	17.27	17.35	18.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40115/25 42.5	40532/25 84.2	40948/26 25.8	41365/26 67.5	
15MHz	QPSK	1	0	16.76	16.73	16.96	17.04	18.30
		1	38	17.11	17.21	17.53	17.55	18.30
		1	74	16.93	17.04	17.36	17.18	18.30
		36	0	17.15	17.23	17.08	17.30	18.30
		36	18	17.21	17.17	17.58	17.66	18.30
		36	39	17.23	17.24	17.52	17.49	18.30
		75	0	17.26	17.21	17.31	17.46	18.30
	16QAM	1	0	17.18	17.07	17.18	17.31	18.30
		1	38	17.20	17.28	17.23	17.34	18.30
		1	74	17.11	17.08	17.15	17.27	18.30
		36	0	17.14	17.21	17.19	17.25	18.30
		36	18	17.23	17.27	17.25	17.29	18.30
		36	39	17.29	17.35	17.32	17.35	18.30
		75	0	17.26	17.26	17.23	17.31	18.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/25 45	40540/25 85	40940/26 25	41340/26 65	
20MHz	QPSK	1	0	16.73	16.69	16.93	17.01	18.30
		1	50	17.10	17.17	17.51	17.53	18.30
		1	99	16.91	17.03	17.33	17.15	18.30
		50	0	17.12	17.18	17.04	17.26	18.30
		50	25	17.19	17.13	17.55	17.63	18.30
		50	50	17.20	17.19	17.48	17.45	18.30
		100	0	17.23	17.16	17.27	17.42	18.30
	16QAM	1	0	17.10	17.03	17.13	17.26	18.30
		1	50	17.16	17.26	17.19	17.30	18.30
		1	99	17.09	17.05	17.13	17.25	18.30
		50	0	17.11	17.17	17.16	17.22	18.30
		50	25	17.20	17.25	17.22	17.26	18.30
		50	50	17.26	17.30	17.28	17.31	18.30
		100	0	17.24	17.22	17.20	17.28	18.30

LTE TDD Band 41 Receiver off	Maximum Output Power (dBm)	Tune-up Limit
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Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				
				40065/25 37.5	40515/25 82.5	40965/26 27.5	41415/26 72.5	
5MHz	QPSK	1	0	22.84	22.97	22.95	23.09	24.30
		1	13	23.24	23.26	23.39	23.43	24.30
		1	24	23.06	23.23	23.15	23.17	24.30
		12	0	22.17	22.32	22.40	22.47	23.30
		12	6	22.27	22.34	22.46	22.46	23.30
		12	13	22.26	22.32	22.44	22.52	23.30
		25	0	22.21	22.37	22.49	22.47	23.30
	16QAM	1	0	22.32	22.26	22.30	22.29	23.30
		1	13	22.30	22.27	22.32	22.27	23.30
		1	24	22.37	22.38	22.36	22.29	23.30
		12	0	21.35	21.49	21.48	21.43	22.30
		12	6	21.41	21.49	21.53	21.46	22.30
		12	13	21.42	21.45	21.48	21.38	22.30
		25	0	21.49	21.51	21.55	21.45	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40090/25 40	40523/25 83.3	40957/26 26.7	41390/26 70	
10MHz	QPSK	1	0	22.86	22.98	22.98	23.11	24.30
		1	25	23.27	23.31	23.43	23.46	24.30
		1	49	23.08	23.27	23.18	23.19	24.30
		25	0	22.20	22.37	22.44	22.50	23.30
		25	13	22.30	22.39	22.50	22.49	23.30
		25	25	22.28	22.36	22.49	22.54	23.30
		50	0	22.25	22.39	22.53	22.51	23.30
	16QAM	1	0	22.34	22.29	22.32	22.31	23.30
		1	25	22.33	22.31	22.35	22.30	23.30
		1	49	22.40	22.40	22.39	22.32	23.30
		25	0	21.38	21.54	21.52	21.46	22.30
		25	13	21.43	21.53	21.56	21.48	22.30
		25	25	21.45	21.50	21.52	21.41	22.30
		50	0	21.52	21.56	21.59	21.48	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40115/25 42.5	40532/25 84.2	40948/26 25.8	41365/26 67.5	
15MHz	QPSK	1	0	22.85	22.94	22.96	23.10	24.30
		1	38	23.25	23.30	23.40	23.44	24.30
		1	74	23.05	23.22	23.14	23.16	24.30
		36	0	22.18	22.33	22.41	22.48	23.30
		36	18	22.27	22.34	22.46	22.46	23.30
		36	39	22.25	22.33	22.45	22.51	23.30



	16QAM	75	0	22.23	22.35	22.48	22.49	23.30
		1	0	22.29	22.27	22.30	22.26	23.30
		1	38	22.31	22.28	22.33	22.28	23.30
		1	74	22.37	22.36	22.36	22.29	23.30
		36	0	21.35	21.52	21.49	21.43	22.30
		36	18	21.40	21.48	21.52	21.45	22.30
		36	39	21.43	21.46	21.49	21.39	22.30
		75	0	21.49	21.51	21.55	21.45	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)				Tune-up Limit
				40140/25 45	40540/25 85	40940/26 25	41340/26 65	
20MHz	QPSK	1	0	22.82	22.90	22.93	23.07	24.30
		1	50	23.24	23.26	23.38	23.43	24.30
		1	99	23.03	23.21	23.11	23.14	24.30
		50	0	22.15	22.28	22.37	22.45	23.30
		50	25	22.25	22.30	22.43	22.44	23.30
		50	50	22.22	22.28	22.41	22.48	23.30
		100	0	22.20	22.30	22.44	22.46	23.30
	16QAM	1	0	22.24	22.23	22.25	22.19	23.30
		1	50	22.27	22.26	22.29	22.24	23.30
		1	99	22.35	22.33	22.34	22.27	23.30
		50	0	21.32	21.48	21.46	21.40	22.30
		50	25	21.37	21.46	21.49	21.42	22.30
		50	50	21.40	21.41	21.45	21.36	22.30
		100	0	21.47	21.47	21.52	21.43	22.30

LTE FDD Band 66 Receiver on / Hotspot				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				131979/1710. 7	132322/174 5	132665/1779. 3	
1.4MHz	QPSK	1	0	19.28	19.36	19.27	20.30
		1	2	19.18	19.18	19.11	20.30
		1	5	19.22	19.24	19.21	20.30
		3	0	19.05	19.11	19.02	20.30
		3	2	19.12	19.21	19.12	20.30
		3	3	19.04	19.07	19.02	20.30
		6	0	19.17	19.24	19.17	20.30
	16QAM	1	0	19.21	19.40	19.33	20.30
		1	2	19.19	19.22	19.15	20.30
		1	5	19.28	19.31	19.26	20.30
		3	0	19.16	19.14	19.09	20.30
		3	2	19.20	19.22	19.16	20.30



		3	3	19.08	19.14	19.04	20.30
		6	0	19.21	19.28	19.22	20.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				1319871711. 5	132322/174 5	132657/1778. 5	
3MHz	QPSK	1	0	19.30	19.40	19.30	20.30
		1	7	19.16	19.21	19.15	20.30
		1	14	19.25	19.29	19.25	20.30
		8	0	19.15	19.23	19.15	20.30
		8	4	19.24	19.31	19.24	20.30
		8	7	19.14	19.18	19.12	20.30
		15	0	19.17	19.28	19.20	20.30
	16QAM	1	0	19.24	19.42	19.36	20.30
		1	7	19.22	19.22	19.19	20.30
		1	14	19.30	19.35	19.29	20.30
		8	0	19.27	19.27	19.21	20.30
		8	4	19.31	19.35	19.28	20.30
		8	7	19.18	19.26	19.17	20.30
		15	0	19.24	19.32	19.25	20.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				131997/1712. 5	132322/174 5	132647/1777. 5	
5MHz	QPSK	1	0	19.27	19.38	19.26	20.30
		1	13	19.14	19.17	19.12	20.30
		1	24	19.22	19.24	19.21	20.30
		12	0	19.12	19.18	19.11	20.30
		12	6	19.22	19.27	19.19	20.30
		12	13	19.12	19.16	19.08	20.30
		25	0	19.17	19.27	19.18	20.30
	16QAM	1	0	19.21	19.38	19.33	20.30
		1	13	19.19	19.20	19.16	20.30
		1	24	19.27	19.33	19.25	20.30
		12	0	19.25	19.23	19.18	20.30
		12	6	19.28	19.30	19.24	20.30
		12	13	19.15	19.21	19.13	20.30
		25	0	19.22	19.28	19.20	20.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132022/1715 5	132322/174 5	132622/1775 5	
10MHz	QPSK	1	0	19.29	19.39	19.29	20.30
		1	25	19.17	19.22	19.16	20.30
		1	49	19.24	19.28	19.24	20.30
		25	0	19.15	19.23	19.15	20.30



		25	13	19.25	19.32	19.23	20.30
		25	25	19.14	19.20	19.13	20.30
		50	0	19.21	19.29	19.22	20.30
	16QAM	1	0	19.23	19.41	19.35	20.30
		1	25	19.22	19.24	19.19	20.30
		1	49	19.30	19.35	19.28	20.30
		25	0	19.28	19.28	19.22	20.30
		25	13	19.30	19.34	19.27	20.30
		25	25	19.18	19.26	19.17	20.30
		50	0	19.25	19.33	19.24	20.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132047/1717.5	132322/1745	132597/1772.5	
15MHz	QPSK	1	0	19.28	19.35	19.27	20.30
		1	38	19.15	19.21	19.13	20.30
		1	74	19.21	19.23	19.20	20.30
		36	0	19.13	19.19	19.12	20.30
		36	18	19.22	19.27	19.19	20.30
		36	39	19.11	19.17	19.09	20.30
		75	0	19.19	19.25	19.17	20.30
	16QAM	1	0	19.18	19.39	19.33	20.30
		1	38	19.20	19.21	19.17	20.30
		1	74	19.27	19.31	19.25	20.30
		36	0	19.25	19.26	19.19	20.30
		36	18	19.27	19.29	19.23	20.30
		36	39	19.16	19.22	19.14	20.30
		75	0	19.22	19.28	19.20	20.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132072/1720	132322/1745	132572/1770	
20MHz	QPSK	1	0	19.25	19.31	19.24	20.30
		1	50	19.14	19.17	19.11	20.30
		1	99	19.19	19.22	19.17	20.30
		50	0	19.10	19.14	19.08	20.30
		50	25	19.20	19.23	19.16	20.30
		50	50	19.08	19.12	19.05	20.30
		100	0	19.16	19.20	19.13	20.30
	16QAM	1	0	19.33	19.35	19.28	20.30
		1	50	19.16	19.19	19.13	20.30
		1	99	19.25	19.28	19.23	20.30
		50	0	19.22	19.22	19.16	20.30
		50	25	19.24	19.27	19.20	20.30
		50	50	19.13	19.17	19.10	20.30



		100	0	19.20	19.24	19.17	20.30
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LTE FDD Band 66 Receiver off				Maximum Output Power (dBm)			Tune-up Limit
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			
				131979/1710. 7	132322/174 5	132665/1779. 3	
1.4MHz	QPSK	1	0	22.03	22.07	21.96	23.30
		1	2	22.14	22.16	21.97	23.30
		1	5	22.01	21.98	21.93	23.30
		3	0	22.17	22.25	22.10	23.30
		3	2	22.17	22.21	22.15	23.30
		3	3	22.17	22.22	22.20	23.30
		6	0	21.96	22.09	22.00	23.30
	16QAM	1	0	21.95	21.98	21.94	23.30
		1	2	21.93	21.90	21.87	23.30
		1	5	22.07	22.06	22.00	23.30
		3	0	21.99	21.99	21.92	23.30
		3	2	21.97	21.93	21.90	23.30
		3	3	22.00	21.98	21.90	23.30
		6	0	21.09	21.07	21.04	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				131987/1711. 5	132322/174 5	132657/1778. 5	
3MHz	QPSK	1	0	22.05	22.11	21.99	23.30
		1	7	22.12	22.19	22.01	23.30
		1	14	22.04	22.03	21.97	23.30
		8	0	21.97	22.07	21.93	23.30
		8	4	21.99	22.01	21.97	23.30
		8	7	21.97	22.03	22.00	23.30
		15	0	21.96	22.13	22.03	23.30
	16QAM	1	0	21.98	22.00	21.97	23.30
		1	7	21.96	21.90	21.91	23.30
		1	14	22.09	22.10	22.03	23.30
		8	0	21.10	21.12	21.04	22.30
		8	4	21.08	21.06	21.02	22.30
		8	7	21.10	21.10	21.03	22.30
		15	0	21.12	21.11	21.07	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				131997/1712. 5	132322/174 5	132647/1777. 5	



				5	5	5	
5MHz	QPSK	1	0	22.02	22.09	21.95	23.30
		1	13	22.10	22.15	21.98	23.30
		1	24	22.01	21.98	21.93	23.30
		12	0	21.94	22.02	21.89	23.30
		12	6	21.97	21.97	21.92	23.30
		12	13	21.95	22.01	21.96	23.30
		25	0	21.96	22.12	22.01	23.30
	16QAM	1	0	21.95	21.96	21.94	23.30
		1	13	21.93	21.88	21.88	23.30
		1	24	22.06	22.08	21.99	23.30
		12	0	21.08	21.08	21.01	22.30
		12	6	21.05	21.01	20.98	22.30
		12	13	21.07	21.05	20.99	22.30
		25	0	21.10	21.07	21.02	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132022/1715	132322/174 5	132622/1775	
10MHz	QPSK	1	0	22.04	22.10	21.98	23.30
		1	25	22.13	22.20	22.02	23.30
		1	49	22.03	22.02	21.96	23.30
		25	0	21.97	22.07	21.93	23.30
		25	13	22.00	22.02	21.96	23.30
		25	25	21.97	22.05	22.01	23.30
		50	0	22.00	22.14	22.05	23.30
	16QAM	1	0	21.97	21.99	21.96	23.30
		1	25	21.96	21.92	21.91	23.30
		1	49	22.09	22.10	22.02	23.30
		25	0	21.11	21.13	21.05	22.30
		25	13	21.07	21.05	21.01	22.30
		25	25	21.10	21.10	21.03	22.30
		50	0	21.13	21.12	21.06	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132047/1717. 5	132322/174 5	132597/1772. 5	
15MHz	QPSK	1	0	22.03	22.06	21.96	23.30
		1	38	22.11	22.19	21.99	23.30
		1	74	22.00	21.97	21.92	23.30
		36	0	21.95	22.03	21.90	23.30
		36	18	21.97	21.97	21.92	23.30
		36	39	21.94	22.02	21.97	23.30
		75	0	21.98	22.10	22.00	23.30
	16QAM	1	0	21.92	21.97	21.94	23.30



		1	38	21.94	21.89	21.89	23.30
		1	74	22.06	22.06	21.99	23.30
		36	0	21.08	21.11	21.02	22.30
		36	18	21.04	21.00	20.97	22.30
		36	39	21.08	21.06	21.00	22.30
		75	0	21.10	21.07	21.02	22.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency (MHz)			Tune-up Limit
				132072/1720	132322/174 5	132572/1770	
20MHz	QPSK	1	0	22.00	22.02	21.93	23.30
		1	50	22.10	22.15	21.97	23.30
		1	99	21.98	21.96	21.89	23.30
		50	0	21.92	21.98	21.86	23.30
		50	25	21.95	21.93	21.89	23.30
		50	50	21.91	21.97	21.93	23.30
		100	0	21.95	22.05	21.96	23.30
	16QAM	1	0	21.95	21.93	21.89	23.30
		1	50	21.90	21.87	21.85	23.30
		1	99	22.04	22.03	21.97	23.30
		50	0	21.05	21.07	20.99	22.30
		50	25	21.01	20.98	20.94	22.30
		50	50	21.05	21.01	20.96	22.30
		100	0	21.08	21.03	20.99	22.30

9.4 WLAN Mode

Wi-Fi 2.4G	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Receiver on			
802.11b (1M)	1/2412	12.00	11.29
	6/2437	12.00	11.51
	11/2462	12.00	11.45
802.11g (6M)	1/2412	10.00	9.11
	2/2417	12.00	11.13
	3/2422	12.00	11.20
	4/2427	12.00	11.21
	6/2437	12.00	11.16
	8/2447	12.00	11.15
	9/2452	12.00	11.01
	10/2457	12.00	11.38
	11/2462	10.00	9.39
802.11n-HT20 (MCS0)	1/2412	10.00	9.06
	2/2417	12.00	10.93
	3/2422	12.00	11.01
	9/2452	12.00	10.90
	10/2457	12.00	11.25
	11/2462	10.00	9.35
802.11n-HT40 (MCS0)	3/2422	8.00	7.33
	4/2427	10.00	9.11
	5/2432	12.00	11.04
	6/2437	12.00	11.22
	7/2442	12.00	11.11
	8/2447	10.00	9.18
	9/2452	8.00	7.32

Note: Initial test configuration is 802.11b mode.

Wi-Fi 2.4G	Channel /Frequency(MHz)	Maximum Output Power (dBm)	
		Tune-up	Meas.
Receiver off			
802.11b (1M)	1/2412	19.50	18.48
	6/2437	19.50	18.74
	11/2462	19.50	18.63



802.11g (6M)	1/2412	10.00	9.06
	2/2417	15.00	14.05
	3/2422	17.00	15.80
	4/2427	19.00	17.90
	6/2437	19.00	17.77
	8/2447	19.00	17.85
	9/2452	17.00	15.84
	10/2457	15.00	14.16
	11/2462	10.00	9.39
802.11n-HT20 (MCS0)	1/2412	10.00	9.06
	2/2417	15.00	13.82
	3/2422	17.00	15.89
	9/2452	17.00	15.66
	10/2457	15.00	14.06
	11/2462	10.00	9.35
802.11n-HT40 (MCS0)	3/2422	8.00	7.33
	4/2427	10.00	9.11
	5/2432	13.00	11.99
	6/2437	13.00	12.12
	7/2442	13.00	12.07
	8/2447	10.00	9.25
	9/2452	8.00	7.32
Note: Initial test configuration is 802.11b mode.			

9.5 Bluetooth Mode

BT	Maximum Output Power (dBm)			Tune-up Limit (dBm)
	Channel/Frequency(MHz)			
	Ch 0/2402 MHz	Ch 39/2441 MHz	Ch 78/2480 MHz	
GFSK	11.12	11.04	11.06	13.00
π/4DQPSK	10.30	10.22	10.85	11.00
8DPSK	10.24	10.17	10.80	11.00
BLE	Ch 0/2402 MHz	Ch 19/2440 MHz	Ch 39/2480 MHz	Tune-up Limit (dBm)
GFSK(1M)	6.58	6.85	6.63	9.00
GFSK(2M)	4.63	4.65	4.67	9.00

10 Measured and Reported (Scaled) SAR Results

10.1 EUT Antenna Locations

The Detailed Antenna Locations refer to *Antenna Locations*.

Overall (Length x Width): 165 mm x 76 mm						
Overall Diagonal: 176 mm/Display Diagonal: 163mm						
Distance of the Antenna to the EUT surface/edge						
Antenna	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Down Antenna	<25mm	<25mm	<25mm	<25mm	>25mm	<25mm
Up Antenna	<25mm	<25mm	<25mm	>25mm	<25mm	>25mm
BT/Wi-Fi Antenna	<25mm	<25mm	>25mm	<25mm	<25mm	>25mm
Hotspot mode, Positions for SAR tests						
Mode	Back Side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
Down Antenna	Yes	Yes	Yes	Yes	N/A	Yes
Up Antenna	Yes	Yes	Yes	N/A	Yes	N/A
BT/Wi-Fi Antenna	Yes	Yes	/A	Yes	Yes	/A



10.2 Measured SAR Results

Table 15: GSM 850 (Down Antenna)

Test Position	Cover Type	Time slot	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	GSM	1:8.3	190/836.6	33.80	33.27	0.127	0.000	1.13	0.143	/
Left Tilt	standard	GSM	1:8.3	190/836.6	33.80	33.27	0.088	0.090	1.13	0.099	/
Right Cheek	standard	GSM	1:8.3	190/836.6	33.80	33.27	0.072	-0.100	1.13	0.081	/
Right Tilt	standard	GSM	1:8.3	190/836.6	33.80	33.27	0.042	-0.030	1.13	0.047	/
Left Cheek	Battery2	GSM	1:8.3	190/836.6	33.80	33.27	0.149	0.020	1.13	0.168	/
Left Cheek	Battery3	GSM	1:8.3	190/836.6	33.80	33.27	0.173	-0.064	1.13	0.195	15
Left Cheek	Battery4	GSM	1:8.3	190/836.6	33.80	33.27	0.115	0.010	1.13	0.130	/
Left Cheek	Battery5	GSM	1:8.3	190/836.6	33.80	33.27	0.106	0.099	1.13	0.120	/
Left Cheek	Battery6	GSM	1:8.3	190/836.6	33.80	33.27	0.112	0.035	1.13	0.127	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	GSM	1:8.3	190/836.6	33.80	33.27	0.235	-0.020	1.13	0.266	15
Front Side	standard	GSM	1:8.3	190/836.6	33.80	33.27	0.132	0.102	1.13	0.149	/
Back Side	Battery2	GSM	1:8.3	190/836.6	33.80	33.27	0.168	0.032	1.13	0.190	/
Back Side	Battery3	GSM	1:8.3	190/836.6	33.80	33.27	0.192	-0.060	1.13	0.217	/
Back Side	Battery4	GSM	1:8.3	190/836.6	33.80	33.27	0.214	-0.071	1.13	0.242	/
Back Side	Battery5	GSM	1:8.3	190/836.6	33.80	33.27	0.228	0.040	1.13	0.258	/
Back Side	Battery6	GSM	1:8.3	190/836.6	33.80	33.27	0.198	0.035	1.13	0.224	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	4Txslots	1:2.07	190/836.6	27.80	27.38	0.286	-0.160	1.10	0.315	15
Front Side	standard	4Txslots	1:2.07	190/836.6	27.80	27.38	0.132	0.113	1.10	0.145	/
Left Edge	standard	4Txslots	1:2.07	190/836.6	27.80	27.38	0.048	0.036	1.10	0.053	/
Right Edge	standard	4Txslots	1:2.07	190/836.6	27.80	27.38	0.130	0.060	1.10	0.143	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	4Txslots	1:2.07	190/836.6	27.80	27.38	0.108	0.105	1.10	0.119	/
Back Side	Battery2	4Txslots	1:2.07	190/836.6	27.80	27.38	0.259	0.033	1.10	0.285	/
Back Side	Battery3	4Txslots	1:2.07	190/836.6	27.80	27.38	0.275	-0.09	1.10	0.303	/
Back Side	Battery4	4Txslots	1:2.07	190/836.6	27.80	27.38	0.238	0.024	1.10	0.262	/
Back Side	Battery5	4Txslots	1:2.07	190/836.6	27.80	27.38	0.236	-0.014	1.10	0.260	/
Back Side	Battery6	4Txslots	1:2.07	190/836.6	27.80	27.38	0.245	0.019	1.10	0.270	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.											
2.When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.											



Table 16: GSM 1900 (Down Antenna)

Test Position	Cover Type	Time slot	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	GSM	1:8.3	661/1880	30.50	30.30	0.020	0.107	1.05	0.021	15
Left Tilt	standard	GSM	1:8.3	661/1880	30.50	30.30	0.008	0.057	1.05	0.008	/
Right Cheek	standard	GSM	1:8.3	661/1880	30.50	30.30	0.011	0.030	1.05	0.012	/
Right Tilt	standard	GSM	1:8.3	661/1880	30.50	30.30	0.011	0.024	1.05	0.011	/
Left Cheek	Battery2	GSM	1:8.3	661/1880	30.50	30.30	0.016	-0.099	1.05	0.017	/
Left Cheek	Battery3	GSM	1:8.3	661/1880	30.50	30.30	0.014	0.032	1.05	0.015	/
Left Cheek	Battery4	GSM	1:8.3	661/1880	30.50	30.30	0.018	0.080	1.05	0.019	/
Left Cheek	Battery5	GSM	1:8.3	661/1880	30.50	30.30	0.015	0.042	1.05	0.016	/
Left Cheek	Battery6	GSM	1:8.3	661/1880	30.50	30.30	0.018	0.070	1.05	0.019	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	GSM	1:8.3	661/1880	30.50	30.30	0.286	0.045	1.05	0.299	15
Front Side	standard	GSM	1:8.3	661/1880	30.50	30.30	0.134	0.087	1.05	0.140	/
Back Side	Battery2	GSM	1:8.3	661/1880	30.50	30.30	0.215	0.026	1.05	0.225	/
Back Side	Battery3	GSM	1:8.3	661/1880	30.50	30.30	0.226	-0.071	1.05	0.237	/
Back Side	Battery4	GSM	1:8.3	661/1880	30.50	30.30	0.253	-0.038	1.05	0.265	/
Back Side	Battery5	GSM	1:8.3	661/1880	30.50	30.30	0.271	0.030	1.05	0.284	/
Back Side	Battery6	GSM	1:8.3	661/1880	30.50	30.30	0.256	0.010	1.05	0.268	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	4Txslots	1:2.07	661/1880	20.50	20.18	0.229	-0.036	1.08	0.247	/
Front Side	standard	4Txslots	1:2.07	661/1880	20.50	20.18	0.114	0.024	1.08	0.123	/
Left Edge	standard	4Txslots	1:2.07	661/1880	20.50	20.18	0.001	0.000	1.08	0.001	/
Right Edge	standard	4Txslots	1:2.07	661/1880	20.50	20.18	0.001	0.000	1.08	0.001	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	4Txslots	1:2.07	661/1880	20.50	20.18	0.421	0.020	1.08	0.453	/
Bottom Edge	Battery2	4Txslots	1:2.07	661/1880	20.50	20.18	0.416	0.013	1.08	0.448	/
Bottom Edge	Battery3	4Txslots	1:2.07	661/1880	20.50	20.18	0.442	0.062	1.08	0.476	/
Bottom Edge	Battery4	4Txslots	1:2.07	661/1880	20.50	20.18	0.479	-0.070	1.08	0.516	15
Bottom Edge	Battery5	4Txslots	1:2.07	661/1880	20.50	20.18	0.385	0.032	1.08	0.414	/
Bottom Edge	Battery6	4Txslots	1:2.07	661/1880	20.50	20.18	0.425	0.039	1.08	0.457	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.											
2.When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.											



MAX Adjusted SAR								
Test Position	Cover Type	Channel/ Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	661/1880	24.50	20.50	0.229	2.51	0.575	No
Front Side	standard	661/1880	24.50	20.50	0.114	2.51	0.286	No
Left Edge	standard	661/1880	24.50	20.50	0.001	2.51	0.003	No
Right Edge	standard	661/1880	24.50	20.50	0.001	2.51	0.003	No
Bottom Edge	standard	661/1880	24.50	20.50	0.421	2.51	1.058	No
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 10-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.								



Table 17: UMTS Band II (Down Antenna)

Test Position	Cover Type	Channel Type	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.015	0.026	1.12	0.017	/
Left Tilt	standard	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.007	0.030	1.12	0.008	/
Right Cheek	standard	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.016	0.151	1.12	0.018	15
Right Tilt	standard	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.009	0.173	1.12	0.010	/
Right Cheek	Battery2	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.013	0.000	1.12	0.015	/
Right Cheek	Battery3	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.015	0.035	1.12	0.017	/
Right Cheek	Battery4	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.015	0.060	1.12	0.017	/
Right Cheek	Battery5	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.010	-0.070	1.12	0.011	/
Right Cheek	Battery6	RMC 12.2K	1:1	9400/1880	24.00	23.52	0.012	0.025	1.12	0.013	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.305	0.070	1.12	0.341	15
Front Side	standard	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.143	0.021	1.12	0.160	/
Back Side	Battery2	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.281	0.042	1.12	0.315	/
Back Side	Battery3	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.249	-0.050	1.12	0.279	/
Back Side	Battery4	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.295	0.162	1.12	0.330	/
Back Side	Battery5	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.301	0.180	1.12	0.337	/
Back Side	Battery6	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.274	0.027	1.12	0.307	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.401	0.083	1.23	0.493	/
Front Side	standard	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.281	0.022	1.23	0.346	/
Left Edge	standard	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.005	0.106	1.23	0.006	/
Right Edge	standard	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.013	0.035	1.23	0.016	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.573	0.048	1.23	0.705	/
Bottom Edge	Battery2	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.582	0.016	1.23	0.716	/
Bottom Edge	Battery3	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.615	-0.010	1.23	0.757	15
Bottom Edge	Battery4	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.539	-0.057	1.23	0.663	/
Bottom Edge	Battery5	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.528	0.035	1.23	0.650	/
Bottom Edge	Battery6	RMC 12.2K	1:1	9400/1880	19.00	18.10	0.557	0.060	1.23	0.685	/
Test Position	Cover Type	Channel Type	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 4 W/kg (mW/g)				Plot No.
							Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	
Product Specific 10-g SAR (Distance 0mm)											
Bottom Edge	standard	RMC 12.2K	1:1	9400/1880	21.50	21.01	1.060	0.060	1.12	1.187	15
Bottom Edge	Battery2	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.974	0.030	1.12	1.090	/



SAR Test Report

Report No.: R2101A0067-S1

Bottom Edge	Battery3	RMC 12.2K	1:1	9400/1880	21.50	21.01	1.020	0.021	1.12	1.142	/
Bottom Edge	Battery4	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.942	-0.034	1.12	1.055	/
Bottom Edge	Battery5	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.982	0.015	1.12	1.099	/
Bottom Edge	Battery6	RMC 12.2K	1:1	9400/1880	21.50	21.01	0.991	0.120	1.12	1.109	/

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

2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

MAX Adjusted SAR								
Test Position	Cover Type	Channel/ Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	9400/1880	21.50	19.00	0.493	1.78	0.877	No
Front Side	standard	9400/1880	21.50	19.00	0.346	1.78	0.615	No
Left Edge	standard	9400/1880	21.50	19.00	0.006	1.78	0.011	No
Right Edge	standard	9400/1880	21.50	19.00	0.016	1.78	0.028	No
Bottom Edge	standard	9400/1880	21.50	19.00	0.705	1.78	1.254	Yes

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



Table 18: UMTS Band IV (Down Antenna)

Test Position	Cover Type	Channel Type	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.004	0.025	1.16	0.005	/
Left Tilt	standard	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.006	0.054	1.16	0.007	15
Right Cheek	standard	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.002	0.100	1.16	0.002	/
Right Tilt	standard	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.001	0.100	1.16	0.001	/
Left Tilt	Battery2	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.001	0.000	1.16	0.001	/
Left Tilt	Battery3	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.003	0.099	1.16	0.003	/
Left Tilt	Battery4	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.005	0.000	1.16	0.006	/
Left Tilt	Battery5	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.002	0.092	1.16	0.002	/
Left Tilt	Battery6	RMC 12.2K	1:1	1413/1732.6	24.30	23.67	0.006	0.160	1.16	0.007	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	RMC 12.2K	1:1	1413/1732.6	21.80	21.18	0.070	0.107	1.15	0.081	15
Front Side	standard	RMC 12.2K	1:1	1413/1732.6	21.80	21.18	0.012	0.022	1.15	0.014	/
Back Side	Battery2	RMC 12.2K	1:1	1413/1732.6	21.80	21.18	0.053	-0.100	1.15	0.061	/
Back Side	Battery3	RMC 12.2K	1:1	1413/1732.6	21.80	21.18	0.068	0.035	1.15	0.078	/
Back Side	Battery4	RMC 12.2K	1:1	1413/1732.6	21.80	21.18	0.065	-0.090	1.15	0.075	/
Back Side	Battery5	RMC 12.2K	1:1	1413/1732.6	21.80	21.18	0.059	-0.012	1.15	0.068	/
Back Side	Battery6	RMC 12.2K	1:1	1413/1732.6	21.80	21.18	0.060	0.040	1.15	0.069	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.076	0.034	1.23	0.093	/
Front Side	standard	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.001	0.016	1.23	0.001	/
Left Edge	standard	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.001	0.099	1.23	0.001	/
Right Edge	standard	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.001	0.000	1.23	0.001	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.142	0.047	1.23	0.174	15
Bottom Edge	Battery2	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.116	0.033	1.23	0.142	/
Bottom Edge	Battery3	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.132	0.061	1.23	0.162	/
Bottom Edge	Battery4	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.124	-0.080	1.23	0.152	/
Bottom Edge	Battery5	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.108	0.077	1.23	0.133	/
Bottom Edge	Battery6	RMC 12.2K	1:1	1413/1732.6	19.30	18.41	0.097	0.040	1.23	0.119	/

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

2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.



MAX Adjusted SAR

Test Position	Cover Type	Channel/ Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1413/1732.6	21.80	19.30	0.093	1.78	0.166	No
Front Side	standard	1413/1732.6	21.80	19.30	0.001	1.78	0.002	No
Left Edge	standard	1413/1732.6	21.80	19.30	0.001	1.78	0.002	No
Right Edge	standard	1413/1732.6	21.80	19.30	0.001	1.78	0.002	No
Bottom Edge	N/A	1413/1732.6	21.80	19.30	0.174	1.78	0.310	No

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



Table 19: UMTS Band V (Down Antenna)

Test Position	Cover Type	Channel Type	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.122	0.020	1.14	0.139	15
Left Tilt	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.070	0.020	1.14	0.080	/
Right Cheek	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.110	0.148	1.14	0.126	/
Right Tilt	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.051	0.053	1.20	0.062	/
Left Cheek	Battery2	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.116	0.041	1.14	0.133	/
Left Cheek	Battery3	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.091	-0.025	1.14	0.104	/
Left Cheek	Battery4	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.103	0.061	1.14	0.118	/
Left Cheek	Battery5	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.116	0.027	1.14	0.133	/
Left Cheek	Battery6	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.085	0.010	1.14	0.097	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.277	-0.060	1.14	0.317	15
Front Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.193	0.052	1.14	0.221	/
Back Side	Battery2	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.246	-0.036	1.14	0.281	/
Back Side	Battery3	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.238	0.082	1.14	0.272	/
Back Side	Battery4	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.274	0.049	1.14	0.313	/
Back Side	Battery5	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.183	-0.020	1.14	0.209	/
Back Side	Battery6	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.176	0.011	1.14	0.201	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.374	-0.060	1.14	0.427	15
Front Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.143	0.010	1.14	0.163	/
Left Edge	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.059	-0.160	1.14	0.067	/
Right Edge	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.082	0.052	1.14	0.094	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.102	0.160	1.14	0.117	/
Back Side	Battery2	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.352	0.018	1.14	0.402	/
Back Side	Battery3	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.369	-0.040	1.14	0.422	/
Back Side	Battery4	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.264	0.033	1.14	0.302	/
Back Side	Battery5	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.293	0.020	1.14	0.335	/
Back Side	Battery6	RMC 12.2K	1:1	4183/836.6	25.00	24.42	0.324	-0.014	1.14	0.370	/

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

2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.



Table 20: LTE Band 2 (20MHz, Down Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	50	18900/1880	24.00	23.48	0.044	0.022	1.13	0.050	15
Left Tilt	standard	1:1	1	50	18900/1880	24.00	23.48	0.010	0.027	1.13	0.011	/
Right Cheek	standard	1:1	1	50	18900/1880	24.00	23.48	0.026	0.093	1.13	0.029	/
Right Tilt	standard	1:1	1	50	18900/1880	24.00	23.48	0.022	0.155	1.13	0.025	/
Left Cheek	standard	1:1	50%	25	18900/1880	23.00	22.49	0.034	0.028	1.12	0.038	/
Left Tilt	standard	1:1	50%	25	18900/1880	23.00	22.49	0.013	0.105	1.12	0.015	/
Right Cheek	standard	1:1	50%	25	18900/1880	23.00	22.49	0.019	0.057	1.12	0.021	/
Right Tilt	standard	1:1	50%	25	18900/1880	23.00	22.49	0.017	0.022	1.12	0.019	/
Left Cheek	Battery2	1:1	1	50	18900/1880	24.00	23.48	0.035	-0.060	1.13	0.039	/
Left Cheek	Battery3	1:1	1	50	18900/1880	24.00	23.48	0.039	0.027	1.13	0.044	/
Left Cheek	Battery4	1:1	1	50	18900/1880	24.00	23.48	0.040	0.080	1.13	0.045	/
Left Cheek	Battery5	1:1	1	50	18900/1880	24.00	23.48	0.032	0.021	1.13	0.036	/
Left Cheek	Battery6	1:1	1	50	18900/1880	24.00	23.48	0.038	0.090	1.13	0.043	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	50	18900/1880	22.50	21.89	0.354	0.094	1.15	0.407	15
Front Side	standard	1:1	1	50	18900/1880	22.50	21.89	0.162	0.041	1.15	0.186	/
Back Side	standard	1:1	50%	25	19100/1900	22.50	21.93	0.315	0.046	1.14	0.359	/
Front Side	standard	1:1	50%	25	19100/1900	22.50	21.93	0.163	0.055	1.14	0.186	/
Back Side	Battery2	1:1	1	50	18900/1880	22.50	21.89	0.351	-0.011	1.15	0.404	/
Back Side	Battery3	1:1	1	50	18900/1880	22.50	21.89	0.326	0.035	1.15	0.375	/
Back Side	Battery4	1:1	1	50	18900/1880	22.50	21.89	0.312	0.026	1.15	0.359	/
Back Side	Battery5	1:1	1	50	18900/1880	22.50	21.89	0.309	0.017	1.15	0.356	/
Back Side	Battery6	1:1	1	50	18900/1880	22.50	21.89	0.276	0.010	1.15	0.318	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	50	18700/1860	20.00	19.22	0.489	0.030	1.20	0.585	/
Front Side	standard	1:1	1	50	18700/1860	20.00	19.22	0.308	0.054	1.20	0.369	/
Left Edge	standard	1:1	1	50	18700/1860	20.00	19.22	0.001	0.000	1.20	0.001	/
Right Edge	standard	1:1	1	50	18700/1860	20.00	19.22	0.018	-0.020	1.20	0.022	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	1:1	1	50	18700/1860	20.00	19.22	0.647	0.056	1.20	0.774	/
Back Side	standard	1:1	50%	0	18700/1860	20.00	19.28	0.527	0.110	1.18	0.622	/
Front Side	standard	1:1	50%	0	18700/1860	20.00	19.28	0.323	0.010	1.18	0.381	/
Left Edge	standard	1:1	50%	0	18700/1860	20.00	19.28	0.001	0.000	1.18	0.001	/
Right Edge	standard	1:1	50%	0	18700/1860	20.00	19.28	0.010	0.000	1.18	0.012	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Bottom Edge	standard	1:1	50%	0	18700/1860	20.00	19.28	0.647	0.041	1.18	0.764	15
Bottom Edge	Battery2	1:1	1	50	18700/1860	20.00	19.22	0.532	0.012	1.20	0.637	/
Bottom Edge	Battery3	1:1	1	50	18700/1860	20.00	19.22	0.581	-0.080	1.20	0.695	/
Bottom Edge	Battery4	1:1	1	50	18700/1860	20.00	19.22	0.552	0.042	1.20	0.661	/
Bottom Edge	Battery5	1:1	1	50	18700/1860	20.00	19.22	0.543	0.160	1.20	0.650	/
Bottom Edge	Battery6	1:1	1	50	18700/1860	20.00	19.22	0.576	0.030	1.20	0.689	/
Test Position	Cover Type	Duty Cycle	RB alloc ation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 4W/kg (mW/g)				Plot No.
								Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	
Product Specific 10-g SAR (Distance 0mm)												
Bottom Edge	standard	1:1	1	50	18900/1880	22.50	21.89	1.240	0.056	1.15	1.427	/
Bottom Edge	standard	1:1	50%	25	19100/1900	22.50	21.93	1.290	0.043	1.14	1.471	15
Note: 1.The value with blue color is the maximum SAR Value of each test band.												
2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are≥ 50% limit(1g).												

MAX Adjusted SAR									
Test Position	Cover Type	RB allocation	offset	Channel/Frequency (MHz)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	50	18700/1860	22.50	20.00	1.78	1.041	No
Front Side	standard	1	50	18700/1860	22.50	20.00	1.78	0.655	No
Left Edge	standard	1	50	18700/1860	22.50	20.00	1.78	0.002	No
Right Edge	standard	1	50	18700/1860	22.50	20.00	1.78	0.038	No
Bottom Edge	standard	1	50	18700/1860	22.50	20.00	1.78	1.377	Yes
Back Side	standard	50%	0	18700/1860	22.50	20.00	1.78	1.106	No
Front Side	standard	50%	0	18700/1860	22.50	20.00	1.78	0.678	No
Left Edge	standard	50%	0	18700/1860	22.50	20.00	1.78	0.002	No
Right Edge	standard	50%	0	18700/1860	22.50	20.00	1.78	0.021	No
Bottom Edge	standard	50%	0	18700/1860	22.50	20.00	1.78	1.358	Yes
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 10-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.									



Table 21: LTE Band 4 (20MHz, Down Antenna)

Test Position	Cover Type	Duty Cycle	RB alloc ation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	50	20175/1732.5	24.30	23.82	0.010	-0.050	1.12	0.011	15
Left Tilt	standard	1:1	1	50	20175/1732.5	24.30	23.82	0.004	0.025	1.12	0.005	/
Right Cheek	standard	1:1	1	50	20175/1732.5	24.30	23.82	0.006	0.130	1.12	0.007	/
Right Tilt	standard	1:1	1	50	20175/1732.5	24.30	23.82	0.005	0.048	1.12	0.005	/
Left Cheek	standard	1:1	50%	0	20175/1732.5	23.30	22.79	0.007	-0.099	1.12	0.008	/
Left Tilt	standard	1:1	50%	0	20175/1732.5	23.30	22.79	0.001	0.119	1.12	0.001	/
Right Cheek	standard	1:1	50%	0	20175/1732.5	23.30	22.79	0.001	0.000	1.12	0.001	/
Right Tilt	standard	1:1	50%	0	20175/1732.5	23.30	22.79	0.001	0.073	1.12	0.001	/
Left Cheek	Battery2	1:1	1	50	20175/1732.5	24.30	23.82	0.008	0.061	1.12	0.009	/
Left Cheek	Battery3	1:1	1	50	20175/1732.5	24.30	23.82	0.005	-0.080	1.12	0.006	/
Left Cheek	Battery4	1:1	1	50	20175/1732.5	24.30	23.82	0.004	0.000	1.12	0.004	/
Left Cheek	Battery5	1:1	1	50	20175/1732.5	24.30	23.82	0.007	0.010	1.12	0.008	/
Left Cheek	Battery6	1:1	1	50	20175/1732.5	24.30	23.82	0.003	0.168	1.12	0.003	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	50	20175/1732.5	22.30	21.70	0.057	0.022	1.15	0.065	15
Front Side	standard	1:1	1	50	20175/1732.5	22.30	21.70	0.009	0.000	1.15	0.010	/
Back Side	standard	1:1	50%	0	20175/1732.5	22.30	21.63	0.052	0.045	1.17	0.061	/
Front Side	standard	1:1	50%	0	20175/1732.5	22.30	21.63	0.001	0.000	1.17	0.001	/
Back Side	Battery2	1:1	1	50	20175/1732.5	22.30	21.70	0.052	-0.060	1.15	0.060	/
Back Side	Battery3	1:1	1	50	20175/1732.5	22.30	21.70	0.042	0.043	1.15	0.048	/
Back Side	Battery4	1:1	1	50	20175/1732.5	22.30	21.70	0.048	0.012	1.15	0.055	/
Back Side	Battery5	1:1	1	50	20175/1732.5	22.30	21.70	0.055	-0.089	1.15	0.063	/
Back Side	Battery6	1:1	1	50	20175/1732.5	22.30	21.70	0.051	0.047	1.15	0.059	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	50	20175/1732.5	22.30	21.70	0.186	0.021	1.15	0.214	/
Front Side	standard	1:1	1	50	20175/1732.5	22.30	21.70	0.157	0.036	1.15	0.180	/
Left Edge	standard	1:1	1	50	20175/1732.5	22.30	21.70	0.001	0.020	1.15	0.001	/
Right Edge	standard	1:1	1	50	20175/1732.5	22.30	21.70	0.001	0.130	1.15	0.001	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	1:1	1	50	20175/1732.5	22.30	21.70	0.242	0.035	1.15	0.278	/
Back Side	standard	1:1	50%	0	20175/1732.5	22.30	21.63	0.125	0.011	1.17	0.146	/
Front Side	standard	1:1	50%	0	20175/1732.5	22.30	21.63	0.051	0.022	1.17	0.060	/
Left Edge	standard	1:1	50%	0	20175/1732.5	22.30	21.63	0.001	0.000	1.17	0.001	/
Right Edge	standard	1:1	50%	0	20175/1732.5	22.30	21.63	0.001	0.000	1.17	0.001	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**SAR Test Report****Report No.: R2101A0067-S1**

Bottom Edge	standard	1:1	50%	0	20175/1732.5	22.30	21.63	0.265	0.120	1.17	0.309	15
Bottom Edge	Battery2	1:1	50%	0	20175/1732.5	22.30	21.63	0.237	-0.031	1.17	0.277	/
Bottom Edge	Battery3	1:1	50%	0	20175/1732.5	22.30	21.63	0.172	0.048	1.17	0.201	/
Bottom Edge	Battery4	1:1	50%	0	20175/1732.5	22.30	21.63	0.254	0.015	1.17	0.296	/
Bottom Edge	Battery5	1:1	50%	0	20175/1732.5	22.30	21.63	0.229	0.010	1.17	0.267	/
Bottom Edge	Battery6	1:1	50%	0	20175/1732.5	22.30	21.63	0.238	0.027	1.17	0.278	/

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

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



Table 22: LTE Band 5 (10MHz, Down Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	25	20450/829	25.00	24.37	0.109	0.150	1.16	0.126	/
Left Tilt	standard	1:1	1	25	20450/829	25.00	24.37	0.063	0.030	1.16	0.072	/
Right Cheek	standard	1:1	1	25	20450/829	25.00	24.37	0.119	-0.078	1.16	0.138	15
Right Tilt	standard	1:1	1	25	20450/829	25.00	24.37	0.063	0.037	1.16	0.072	/
Left Cheek	standard	1:1	50%	13	20450/829	24.00	23.39	0.086	0.159	1.15	0.099	/
Left Tilt	standard	1:1	50%	13	20450/829	24.00	23.39	0.049	0.052	1.15	0.057	/
Right Cheek	standard	1:1	50%	13	20450/829	24.00	23.39	0.092	0.093	1.15	0.106	/
Right Tilt	standard	1:1	50%	13	20450/829	24.00	23.39	0.048	0.170	1.15	0.055	/
Right Cheek	Battery2	1:1	1	25	20450/829	25.00	24.37	0.103	0.012	1.16	0.119	/
Right Cheek	Battery3	1:1	1	25	20450/829	25.00	24.37	0.108	0.032	1.16	0.125	/
Right Cheek	Battery4	1:1	1	25	20450/829	25.00	24.37	0.085	0.050	1.16	0.098	/
Right Cheek	Battery5	1:1	1	25	20450/829	25.00	24.37	0.112	-0.180	1.16	0.129	/
Right Cheek	Battery6	1:1	1	25	20450/829	25.00	24.37	0.105	0.054	1.16	0.121	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	25	20450/829	25.00	24.37	0.291	0.000	1.16	0.336	15
Front Side	standard	1:1	1	25	20450/829	25.00	24.37	0.153	0.010	1.16	0.177	/
Back Side	standard	1:1	50%	13	20450/829	24.00	23.39	0.233	0.112	1.15	0.268	/
Front Side	standard	1:1	50%	13	20450/829	24.00	23.39	0.125	0.036	1.15	0.144	/
Back Side	Battery2	1:1	1	25	20450/829	25.00	24.37	0.236	0.022	1.16	0.273	/
Back Side	Battery3	1:1	1	25	20450/829	25.00	24.37	0.285	0.060	1.16	0.329	/
Back Side	Battery4	1:1	1	25	20450/829	25.00	24.37	0.224	0.033	1.16	0.259	/
Back Side	Battery5	1:1	1	25	20450/829	25.00	24.37	0.274	0.024	1.16	0.317	/
Back Side	Battery6	1:1	1	25	20450/829	25.00	24.37	0.216	-0.087	1.16	0.250	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	25	20450/829	25.00	24.37	0.303	0.080	1.16	0.350	15
Front Side	standard	1:1	1	25	20450/829	25.00	24.37	0.155	0.024	1.16	0.179	/
Left Edge	standard	1:1	1	25	20450/829	25.00	24.37	0.043	0.012	1.16	0.050	/
Right Edge	standard	1:1	1	25	20450/829	25.00	24.37	0.100	0.000	1.16	0.116	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	1:1	1	25	20450/829	25.00	24.37	0.123	0.033	1.16	0.142	/
Back Side	standard	1:1	50%	13	20450/829	24.00	23.39	0.283	0.104	1.15	0.326	/
Front Side	standard	1:1	50%	13	20450/829	24.00	23.39	0.120	0.010	1.15	0.138	/
Left Edge	standard	1:1	50%	13	20450/829	24.00	23.39	0.000	0.045	1.15	0.000	/
Right Edge	standard	1:1	50%	13	20450/829	24.00	23.39	0.102	0.063	1.15	0.117	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**SAR Test Report****Report No.: R2101A0067-S1**

Bottom Edge	standard	1:1	50%	13	20450/829	24.00	23.39	0.113	0.033	1.15	0.130	/
Back Side	Battery2	1:1	1	25	20450/829	25.00	24.37	0.295	0.100	1.16	0.341	/
Back Side	Battery3	1:1	1	25	20450/829	25.00	24.37	0.264	0.012	1.16	0.305	/
Back Side	Battery4	1:1	1	25	20450/829	25.00	24.37	0.281	-0.054	1.16	0.325	/
Back Side	Battery5	1:1	1	25	20450/829	25.00	24.37	0.246	0.021	1.16	0.284	/
Back Side	Battery6	1:1	1	25	20450/829	25.00	24.37	0.302	0.090	1.16	0.349	/

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

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



Table 23: LTE Band 7 (20MHz, Down Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	50	21100/2535	24.50	24.13	0.099	-0.099	1.09	0.108	15
Left Tilt	standard	1:1	1	50	21100/2535	24.50	24.13	0.057	0.031	1.09	0.062	/
Right Cheek	standard	1:1	1	50	21100/2535	24.50	24.13	0.073	0.000	1.09	0.080	/
Right Tilt	standard	1:1	1	50	21100/2535	24.50	24.13	0.048	-0.046	1.09	0.052	/
Left Cheek	standard	1:1	50%	25	21100/2535	23.50	23.08	0.053	0.091	1.10	0.058	/
Left Tilt	standard	1:1	50%	25	21100/2535	23.50	23.08	0.052	0.022	1.10	0.057	/
Right Cheek	standard	1:1	50%	25	21100/2535	23.50	23.08	0.060	0.085	1.10	0.066	/
Right Tilt	standard	1:1	50%	25	21100/2535	23.50	23.08	0.042	0.087	1.10	0.046	/
Left Cheek	Battery2	1:1	1	50	21100/2535	24.50	24.13	0.083	-0.025	1.09	0.090	/
Left Cheek	Battery3	1:1	1	50	21100/2535	24.50	24.13	0.092	0.110	1.09	0.100	/
Left Cheek	Battery4	1:1	1	50	21100/2535	24.50	24.13	0.076	-0.132	1.09	0.083	/
Left Cheek	Battery5	1:1	1	50	21100/2535	24.50	24.13	0.085	0.050	1.09	0.093	/
Left Cheek	Battery6	1:1	1	50	21100/2535	24.50	24.13	0.081	0.132	1.09	0.088	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	50	21100/2535	23.50	23.03	0.167	0.061	1.11	0.186	/
Front Side	standard	1:1	1	50	21100/2535	23.50	23.03	0.136	0.033	1.11	0.152	/
Back Side	standard	1:1	50%	25	21100/2535	23.50	22.99	0.186	0.015	1.12	0.209	/
Front Side	standard	1:1	50%	25	21100/2535	23.50	22.99	0.132	0.066	1.12	0.148	/
Back Side	Battery2	1:1	50%	25	21100/2535	23.50	22.99	0.201	0.039	1.12	0.226	/
Back Side	Battery3	1:1	50%	25	21100/2535	23.50	22.99	0.214	0.015	1.12	0.241	/
Back Side	Battery4	1:1	50%	25	21100/2535	23.50	22.99	0.205	0.035	1.12	0.231	/
Back Side	Battery5	1:1	50%	25	21100/2535	23.50	22.99	0.210	0.053	1.12	0.236	15
Back Side	Battery6	1:1	50%	25	21100/2535	23.50	22.99	0.209	0.113	1.12	0.235	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	50	21100/2535	23.50	23.03	0.385	0.059	1.11	0.429	/
Front Side	standard	1:1	1	50	21100/2535	23.50	23.03	0.300	0.118	1.11	0.334	/
Left Edge	standard	1:1	1	50	21100/2535	23.50	23.03	0.135	0.023	1.11	0.150	/
Right Edge	standard	1:1	1	50	21100/2535	23.50	23.03	0.129	0.116	1.11	0.144	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	1:1	1	50	21100/2535	23.50	23.03	0.328	0.106	1.11	0.365	/
Back Side	standard	1:1	50%	25	21100/2535	23.50	22.99	0.367	0.031	1.12	0.413	/
Front Side	standard	1:1	50%	25	21100/2535	23.50	22.99	0.253	0.042	1.12	0.285	/
Left Edge	standard	1:1	50%	25	21100/2535	23.50	22.99	0.113	0.056	1.12	0.127	/
Right Edge	standard	1:1	50%	25	21100/2535	23.50	22.99	0.124	0.024	1.12	0.139	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**SAR Test Report****Report No.: R2101A0067-S1**

Bottom Edge	standard	1:1	50%	25	21100/2535	23.50	22.99	0.359	0.058	1.12	0.404	/
Back Side	Battery2	1:1	1	50	21100/2535	23.50	23.03	0.357	-0.130	1.11	0.398	/
Back Side	Battery3	1:1	1	50	21100/2535	23.50	23.03	0.364	0.097	1.11	0.406	/
Back Side	Battery4	1:1	1	50	21100/2535	23.50	23.03	0.372	0.063	1.11	0.415	/
Back Side	Battery5	1:1	1	50	21100/2535	23.50	23.03	0.359	-0.028	1.11	0.400	/
Back Side	Battery6	1:1	1	50	21100/2535	23.50	23.03	0.351	0.056	1.11	0.391	15

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

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



Table 27: LTE Band 38 (20MHz, Down Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.056	-0.024	1.16	0.065	15
Left Tilt	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.038	0.028	1.16	0.044	/
Right Cheek	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.030	-0.034	1.16	0.035	/
Right Tilt	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.033	0.077	1.16	0.038	/
Left Cheek	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.043	-0.022	1.19	0.052	/
Left Tilt	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.024	0.049	1.19	0.029	/
Right Cheek	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.019	-0.042	1.19	0.023	/
Right Tilt	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.025	0.054	1.19	0.030	/
Left Cheek	Battery2	1:1.58	1	50	38150/2610	24.30	23.64	0.048	0.072	1.16	0.056	/
Left Cheek	Battery3	1:1.58	1	50	38150/2610	24.30	23.64	0.042	0.069	1.16	0.049	/
Left Cheek	Battery4	1:1.58	1	50	38150/2610	24.30	23.64	0.046	0.063	1.16	0.054	/
Left Cheek	Battery5	1:1.58	1	50	38150/2610	24.30	23.64	0.040	0.050	1.16	0.047	/
Left Cheek	Battery6	1:1.58	1	50	38150/2610	24.30	23.64	0.052	-0.010	1.16	0.061	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.174	-0.099	1.16	0.203	15
Front Side	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.062	0.025	1.16	0.072	/
Back Side	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.088	0.033	1.19	0.105	/
Front Side	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.043	0.016	1.19	0.051	/
Back Side	Battery2	1:1.58	1	50	38150/2610	24.30	23.64	0.099	0.094	1.16	0.115	/
Back Side	Battery3	1:1.58	1	50	38150/2610	24.30	23.64	0.149	-0.067	1.16	0.173	/
Back Side	Battery4	1:1.58	1	50	38150/2610	24.30	23.64	0.118	0.091	1.16	0.137	/
Back Side	Battery5	1:1.58	1	50	38150/2610	24.30	23.64	0.164	0.050	1.16	0.191	/
Back Side	Battery6	1:1.58	1	50	38150/2610	24.30	23.64	0.138	0.035	1.16	0.161	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.292	0.105	1.16	0.340	/
Front Side	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.123	0.031	1.16	0.143	/
Left Edge	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.075	0.044	1.16	0.087	/
Right Edge	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.084	0.025	1.16	0.098	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	1:1.58	1	50	38150/2610	24.30	23.64	0.156	0.112	1.16	0.182	/
Back Side	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.211	0.106	1.19	0.252	/
Front Side	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.097	0.045	1.19	0.116	/
Left Edge	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.071	0.031	1.19	0.085	/
Right Edge	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.088	0.027	1.19	0.105	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**SAR Test Report****Report No.: R2101A0067-S1**

Bottom Edge	standard	1:1.58	50%	25	38150/2610	23.30	22.53	0.154	0.110	1.19	0.184	/
Back Side	Battery2	1:1.58	1	50	38150/2610	24.30	23.64	0.344	-0.140	1.16	0.400	/
Back Side	Battery3	1:1.58	1	50	38150/2610	24.30	23.64	0.312	0.023	1.16	0.363	/
Back Side	Battery4	1:1.58	1	50	38150/2610	24.30	23.64	0.332	0.058	1.16	0.386	/
Back Side	Battery5	1:1.58	1	50	38150/2610	24.30	23.64	0.354	-0.064	1.16	0.412	15
Back Side	Battery6	1:1.58	1	50	38150/2610	24.30	23.64	0.321	0.058	1.16	0.374	/

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

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



Table 28: LTE Band 41 (20MHz, Down Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.063	0.050	1.08	0.068	15
Left Tilt	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.040	0.190	1.08	0.043	/
Right Cheek	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.016	0.188	1.08	0.017	/
Right Tilt	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.016	0.050	1.08	0.017	/
Left Cheek	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.045	-0.145	1.08	0.048	/
Left Tilt	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.037	0.131	1.08	0.040	/
Right Cheek	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.001	-0.101	1.08	0.001	/
Right Tilt	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.001	0.000	1.08	0.001	/
Left Cheek	Battery2	1:1.58	1	50	40940/2625	24.30	23.95	0.054	-0.190	1.08	0.059	/
Left Cheek	Battery3	1:1.58	1	50	40940/2625	24.30	23.95	0.057	-0.130	1.08	0.062	/
Left Cheek	Battery4	1:1.58	1	50	40940/2625	24.30	23.95	0.062	-0.160	1.08	0.067	/
Left Cheek	Battery5	1:1.58	1	50	40940/2625	24.30	23.95	0.049	0.120	1.08	0.053	/
Left Cheek	Battery6	1:1.58	1	50	40940/2625	24.30	23.95	0.055	-0.183	1.08	0.060	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.258	-0.040	1.08	0.280	70
Front Side	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.084	0.065	1.08	0.091	/
Back Side	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.210	0.044	1.08	0.226	/
Front Side	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.079	0.078	1.08	0.085	/
Back Side	Battery2	1:1.58	1	50	40940/2625	24.30	23.95	0.234	0.010	1.08	0.254	/
Back Side	Battery3	1:1.58	1	50	40940/2625	24.30	23.95	0.251	-0.070	1.08	0.272	/
Back Side	Battery4	1:1.58	1	50	40940/2625	24.30	23.95	0.217	0.040	1.08	0.235	/
Back Side	Battery5	1:1.58	1	50	40940/2625	24.30	23.95	0.244	-0.038	1.08	0.264	/
Back Side	Battery6	1:1.58	1	50	40940/2625	24.30	23.95	0.242	0.160	1.08	0.262	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.467	0.035	1.08	0.506	71
Front Side	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.151	0.025	1.08	0.164	/
Left Edge	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.075	0.042	1.08	0.081	/
Right Edge	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.090	0.074	1.08	0.098	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	1:1.58	1	50	40940/2625	24.30	23.95	0.262	0.116	1.08	0.284	/
Back Side	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.356	0.024	1.08	0.383	/
Front Side	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.103	0.065	1.08	0.111	/
Left Edge	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.075	0.113	1.08	0.081	/
Right Edge	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.081	0.115	1.08	0.087	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**SAR Test Report****Report No.: R2101A0067-S1**

Bottom Edge	standard	1:1.58	50%	0	40940/2625	23.30	22.98	0.202	0.021	1.08	0.217	/
Back Side	Battery2	1:1.58	1	50	40940/2625	24.30	23.95	0.457	-0.012	1.08	0.495	/
Back Side	Battery3	1:1.58	1	50	40940/2625	24.30	23.95	0.460	-0.061	1.08	0.499	/
Back Side	Battery4	1:1.58	1	50	40940/2625	24.30	23.95	0.444	-0.111	1.08	0.481	/
Back Side	Battery5	1:1.58	1	50	40940/2625	24.30	23.95	0.447	0.025	1.08	0.485	/
Back Side	Battery6	1:1.58	1	50	40940/2625	24.30	23.95	0.457	0.074	1.08	0.495	/

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

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



Table 28: LTE Band 66 (20MHz, Down Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	50	132322/1745	24.30	23.57	0.094	0.056	1.18	0.111	15
Left Tilt	standard	1:1	1	50	132322/1745	24.30	23.57	0.009	0.030	1.18	0.011	/
Right Cheek	standard	1:1	1	50	132322/1745	24.30	23.57	0.006	0.125	1.18	0.007	/
Right Tilt	standard	1:1	1	50	132322/1745	24.30	23.57	0.001	0.020	1.18	0.002	/
Left Cheek	standard	1:1	50%	0	132322/1745	23.30	22.61	0.008	0.032	1.17	0.009	/
Left Tilt	standard	1:1	50%	0	132322/1745	23.30	22.61	0.010	0.020	1.17	0.011	/
Right Cheek	standard	1:1	50%	0	132322/1745	23.30	22.61	0.003	0.031	1.17	0.004	/
Right Tilt	standard	1:1	50%	0	132322/1745	23.30	22.61	0.005	0.028	1.17	0.005	/
Left Cheek	Battery2	1:1	1	50	132322/1745	24.30	23.57	0.082	0.037	1.18	0.097	/
Left Cheek	Battery3	1:1	1	50	132322/1745	24.30	23.57	0.086	0.120	1.18	0.102	/
Left Cheek	Battery4	1:1	1	50	132322/1745	24.30	23.57	0.091	0.140	1.18	0.108	/
Left Cheek	Battery5	1:1	1	50	132322/1745	24.30	23.57	0.078	0.042	1.18	0.092	/
Left Cheek	Battery6	1:1	1	50	132322/1745	24.30	23.57	0.088	0.050	1.18	0.104	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	50	132322/1745	22.30	21.43	0.099	0.180	1.22	0.120	15
Front Side	standard	1:1	1	50	132322/1745	22.30	21.43	0.072	0.052	1.22	0.088	/
Back Side	standard	1:1	50%	50	132322/1745	22.30	21.35	0.088	0.032	1.24	0.110	/
Front Side	standard	1:1	50%	51	132322/1745	22.30	21.35	0.078	0.140	1.24	0.097	/
Back Side	Battery2	1:1	1	50	132322/1745	22.30	21.43	0.092	0.032	1.22	0.112	/
Back Side	Battery3	1:1	1	50	132322/1745	22.30	21.43	0.086	-0.035	1.22	0.105	/
Back Side	Battery4	1:1	1	50	132322/1745	22.30	21.43	0.082	0.024	1.22	0.100	/
Back Side	Battery5	1:1	1	50	132322/1745	22.30	21.43	0.085	0.120	1.22	0.104	/
Back Side	Battery6	1:1	1	50	132322/1745	22.30	21.43	0.091	-0.140	1.22	0.111	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	50	132572/1770	21.30	20.37	0.143	0.024	1.24	0.177	/
Front Side	standard	1:1	1	50	132572/1770	21.30	20.37	0.082	0.140	1.24	0.102	/
Left Edge	standard	1:1	1	50	132572/1770	21.30	20.37	0.001	0.000	1.24	0.001	/
Right Edge	standard	1:1	1	50	132572/1770	21.30	20.37	0.001	0.000	1.24	0.001	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bottom Edge	standard	1:1	1	50	132572/1770	21.30	20.37	0.292	0.022	1.24	0.362	15
Back Side	standard	1:1	50%	50	132572/1770	21.30	20.35	0.115	0.094	1.24	0.143	/
Front Side	standard	1:1	50%	50	132572/1770	21.30	20.35	0.061	0.057	1.24	0.076	/
Left Edge	standard	1:1	50%	50	132572/1770	21.30	20.35	0.001	0.000	1.24	0.001	/
Right Edge	standard	1:1	50%	50	132572/1770	21.30	20.35	0.001	0.000	1.24	0.001	/
Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Bottom Edge	standard	1:1	50%	50	132572/1770	21.30	20.35	0.276	0.044	1.24	0.343	/
Bottom Edge	Battery2	1:1	1	50	132572/1770	21.30	20.37	0.284	-0.040	1.24	0.352	/
Bottom Edge	Battery3	1:1	1	50	132572/1770	21.30	20.37	0.280	0.080	1.24	0.347	/
Bottom Edge	Battery4	1:1	1	50	132572/1770	21.30	20.37	0.289	-0.040	1.24	0.358	/
Bottom Edge	Battery5	1:1	1	50	132572/1770	21.30	20.37	0.274	-0.040	1.24	0.339	/
Bottom Edge	Battery6	1:1	1	50	132572/1770	21.30	20.37	0.277	-0.030	1.24	0.343	/

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

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

MAX Adjusted SAR									
Test Position	Cover Type	RB allocation	offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	50	132572/1770	22.30	21.30	1.26	0.223	No
Front Side	standard	1	50	132572/1770	22.30	21.30	1.26	0.128	No
Left Edge	standard	1	50	132572/1770	22.30	21.30	1.26	0.002	No
Right Edge	standard	1	50	132572/1770	22.30	21.30	1.26	0.002	No
Bottom Edge	standard	1	50	132572/1770	22.30	21.30	1.26	0.455	No
Back Side	standard	50%	50	132572/1770	22.30	21.30	1.26	0.180	No
Front Side	standard	50%	50	132572/1770	22.30	21.30	1.26	0.096	No
Left Edge	standard	50%	50	132572/1770	22.30	21.30	1.26	0.002	No
Right Edge	standard	50%	50	132572/1770	22.30	21.30	1.26	0.002	No
Bottom Edge	standard	50%	50	132572/1770	22.30	21.30	1.26	0.432	No

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



Table 1: GSM 850 (Up Antenna)

Test Position	Cover Type	Time slot	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	GSM	1:8.3	190/836.6	33.80	33.04	0.268	-0.030	1.19	0.319	/
Left Tilt	standard	GSM	1:8.3	190/836.6	33.80	33.04	0.215	0.030	1.19	0.256	/
Right Cheek	standard	GSM	1:8.3	190/836.6	33.80	33.04	0.347	0.010	1.19	0.413	/
Right Tilt	standard	GSM	1:8.3	190/836.6	33.80	33.04	0.356	0.030	1.19	0.424	15
Right Tilt	Battery2	GSM	1:8.3	190/836.6	33.80	33.04	0.314	-0.012	1.19	0.374	/
Right Tilt	Battery3	GSM	1:8.3	190/836.6	33.80	33.04	0.354	0.015	1.19	0.422	/
Right Tilt	Battery4	GSM	1:8.3	190/836.6	33.80	33.04	0.287	0.018	1.19	0.342	/
Right Tilt	Battery5	GSM	1:8.3	190/836.6	33.80	33.04	0.302	0.019	1.19	0.360	/
Right Tilt	Battery6	GSM	1:8.3	190/836.6	33.80	33.04	0.311	0.016	1.19	0.370	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	GSM	1:8.3	190/836.6	33.80	33.04	0.128	0.080	1.19	0.152	/
Front Side	standard	GSM	1:8.3	190/836.6	33.80	33.04	0.075	0.032	1.19	0.089	/
Back Side	Battery2	GSM	1:8.3	190/836.6	33.80	33.04	0.148	0.010	1.19	0.176	/
Back Side	Battery3	GSM	1:8.3	190/836.6	33.80	33.04	0.152	-0.024	1.19	0.181	15
Back Side	Battery4	GSM	1:8.3	190/836.6	33.80	33.04	0.116	0.032	1.19	0.138	/
Back Side	Battery5	GSM	1:8.3	190/836.6	33.80	33.04	0.115	0.018	1.19	0.137	/
Back Side	Battery6	GSM	1:8.3	190/836.6	33.80	33.04	0.124	0.100	1.19	0.148	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	4Txslots	1:2.07	190/836.6	27.80	27.08	0.213	-0.040	1.18	0.251	/
Front Side	standard	4Txslots	1:2.07	190/836.6	27.80	27.08	0.122	0.033	1.18	0.144	/
Left Edge	standard	4Txslots	1:2.07	190/836.6	27.80	27.08	0.098	0.031	1.18	0.116	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	4Txslots	1:2.07	190/836.6	27.80	27.08	0.115	0.010	1.18	0.136	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	Battery2	4Txslots	1:2.07	190/836.6	27.80	27.08	0.235	0.035	1.18	0.277	/
Back Side	Battery3	4Txslots	1:2.07	190/836.6	27.80	27.08	0.267	-0.090	1.18	0.315	/
Back Side	Battery4	4Txslots	1:2.07	190/836.6	27.80	27.08	0.284	0.032	1.18	0.335	15
Back Side	Battery5	4Txslots	1:2.07	190/836.6	27.80	27.08	0.223	0.040	1.18	0.263	/
Back Side	Battery6	4Txslots	1:2.07	190/836.6	27.80	27.08	0.237	-0.028	1.18	0.280	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.											
2.When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.											



Table 2: GSM 1900(Up Antenna)

Test Position	Cover Type	Time slot	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	GSM	1:8.3	661/1880	28.50	28.23	0.459	0.020	1.06	0.488	/
Left Tilt	standard	GSM	1:8.3	661/1880	28.50	28.23	0.616	0.020	1.06	0.656	/
Right Cheek	standard	GSM	1:8.3	661/1880	28.50	28.23	0.696	0.140	1.06	0.741	15
Right Tilt	standard	GSM	1:8.3	661/1880	28.50	28.23	0.695	-0.030	1.06	0.740	/
Right Cheek	Battery2	GSM	1:8.3	661/1880	28.50	28.23	0.635	-0.037	1.06	0.676	/
Right Cheek	Battery3	GSM	1:8.3	661/1880	28.50	28.23	0.628	-0.041	1.06	0.668	/
Right Cheek	Battery4	GSM	1:8.3	661/1880	28.50	28.23	0.652	-0.090	1.06	0.694	/
Right Cheek	Battery5	GSM	1:8.3	661/1880	28.50	28.23	0.618	-0.032	1.06	0.658	/
Right Cheek	Battery6	GSM	1:8.3	661/1880	28.50	28.23	0.687	0.172	1.06	0.731	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	GSM	1:8.3	661/1880	30.50	29.98	0.228	0.080	1.13	0.257	15
Front Side	standard	GSM	1:8.3	661/1880	30.50	29.98	0.113	0.053	1.13	0.127	/
Back Side	Battery2	GSM	1:8.3	661/1880	28.50	28.23	0.149	0.021	1.06	0.159	/
Back Side	Battery3	GSM	1:8.3	661/1880	28.50	28.23	0.167	-0.064	1.06	0.178	/
Back Side	Battery4	GSM	1:8.3	661/1880	28.50	28.23	0.195	0.035	1.06	0.208	/
Back Side	Battery5	GSM	1:8.3	661/1880	28.50	28.23	0.181	0.080	1.06	0.193	/
Back Side	Battery6	GSM	1:8.3	661/1880	28.50	28.23	0.184	0.033	1.06	0.196	/
Hotspot SARSAR (Distance 10mm)											
Back Side	standard	4Txslots	1:2.07	661/1880	22.00	21.41	0.287	0.024	1.15	0.329	/
Front Side	standard	4Txslots	1:2.07	661/1880	22.00	21.41	0.162	0.106	1.15	0.186	/
Left Edge	standard	4Txslots	1:2.07	661/1880	22.00	21.41	0.045	-0.110	1.15	0.052	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	4Txslots	1:2.07	661/1880	22.00	21.41	0.334	0.022	1.15	0.383	15
Bottom Edge	N/A	N/A	1:2.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	Battery2	4Txslots	1:2.07	661/1880	22.00	21.41	0.331	0.014	1.15	0.379	/
Top Edge	Battery3	4Txslots	1:2.07	661/1880	22.00	21.41	0.319	-0.060	1.15	0.365	/
Top Edge	Battery4	4Txslots	1:2.07	661/1880	22.00	21.41	0.287	0.060	1.15	0.329	/
Top Edge	Battery5	4Txslots	1:2.07	661/1880	22.00	21.41	0.321	0.035	1.15	0.368	/
Top Edge	Battery6	4Txslots	1:2.07	661/1880	22.00	21.41	0.269	-0.018	1.15	0.308	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.											
2.When multiple slots are used, SAR should be tested to account for the maximum source-based time-averaged output power.											

MAX Adjusted SAR									
Test Position	Cover Type	Channel/Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR	

**SAR Test Report****Report No.: R2101A0067-S1**

Back Side	standard	661/1880	24.50	22.00	0.329	1.78	0.585	No
Front Side	standard	661/1880	24.50	22.00	0.186	1.78	0.330	No
Left Edge	standard	661/1880	24.50	22.00	0.052	1.78	0.092	No
Top Edge	standard	661/1880	24.50	22.00	0.383	1.78	0.680	No

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



Table 3: UMTS Band II (Up Antenna)

Test Position	Cover Type	Channel Type	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.470	0.080	1.21	0.569	/
Left Tilt	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.622	0.033	1.21	0.753	/
Right Cheek	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.654	0.070	1.21	0.792	/
Right Tilt	standard	RMC 12.2K	1:1	9262/1852.4	19.00	17.95	0.625	0.140	1.27	0.796	/
	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.708	0.030	1.21	0.857	15
	standard	RMC 12.2K	1:1	9538/1907.6	19.00	17.90	0.672	0.010	1.29	0.866	/
Right Tilt	Battery2	RMC 12.2K	1:1	9538/1907.6	19.00	17.90	0.635	0.026	1.29	0.818	/
Right Tilt	Battery3	RMC 12.2K	1:1	9538/1907.6	19.00	17.90	0.619	-0.019	1.29	0.797	/
Right Tilt	Battery4	RMC 12.2K	1:1	9538/1907.6	19.00	17.90	0.605	0.047	1.29	0.779	/
Right Tilt	Battery5	RMC 12.2K	1:1	9538/1907.6	19.00	17.90	0.628	0.022	1.29	0.809	/
Right Tilt	Battery6	RMC 12.2K	1:1	9538/1907.6	19.00	17.90	0.657	-0.040	1.29	0.846	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	RMC 12.2K	1:1	9400/1880	22.50	21.45	0.330	0.150	1.27	0.420	15
Front Side	standard	RMC 12.2K	1:1	9400/1880	22.50	21.45	0.219	0.151	1.27	0.279	/
Back Side	Battery2	RMC 12.2K	1:1	9400/1880	22.50	21.45	0.319	0.049	1.27	0.406	/
Back Side	Battery3	RMC 12.2K	1:1	9400/1880	22.50	21.45	0.275	-0.032	1.27	0.350	/
Back Side	Battery4	RMC 12.2K	1:1	9400/1880	22.50	21.45	0.268	0.018	1.27	0.341	/
Back Side	Battery5	RMC 12.2K	1:1	9400/1880	22.50	21.45	0.324	0.040	1.27	0.413	/
Back Side	Battery6	RMC 12.2K	1:1	9400/1880	22.50	21.45	0.301	-0.082	1.27	0.383	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.288	0.060	1.21	0.349	15
Front Side	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.173	0.046	1.21	0.209	/
Left Edge	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.106	0.021	1.21	0.128	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.187	0.016	1.21	0.226	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	Battery2	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.261	-0.032	1.21	0.316	/
Back Side	Battery3	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.254	-0.040	1.21	0.307	/
Back Side	Battery4	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.228	0.028	1.21	0.276	/
Back Side	Battery5	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.257	0.019	1.21	0.311	/
Back Side	Battery6	RMC 12.2K	1:1	9400/1880	19.00	18.17	0.219	0.041	1.21	0.265	/
Note: 1.The value with blue color is the maximum SAR Value of each test band.											
2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the											



secondary mode.

MAX Adjusted SAR

Test Position	Cover Type	Channel/ Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	9400/1880	22.50	19.00	0.349	2.24	0.781	No
Front Side	standard	9400/1880	22.50	19.00	0.209	2.24	0.469	No
Left Edge	standard	9400/1880	22.50	19.00	0.128	2.24	0.287	No
Top Edge	standard	9400/1880	22.50	19.00	0.226	2.24	0.507	No

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



Table 4: UMTS Band IV(Up Antenna)

Test Position	Cover Type	Channel Type	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.378	0.050	1.23	0.466	/
Left Tilt	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.532	0.010	1.23	0.656	/
Right Cheek	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.520	-0.010	1.23	0.641	/
Right Tilt	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.535	0.010	1.23	0.660	15
Right Tilt	Battery2	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.492	-0.012	1.23	0.607	/
Right Tilt	Battery3	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.512	0.035	1.23	0.631	/
Right Tilt	Battery4	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.476	0.087	1.23	0.587	/
Right Tilt	Battery5	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.503	0.040	1.23	0.620	/
Right Tilt	Battery6	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.495	0.062	1.23	0.610	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	RMC 12.2K	1:1	1413/1732.6	22.30	21.56	0.289	0.060	1.19	0.343	15
Front Side	standard	RMC 12.2K	1:1	1413/1732.6	22.30	21.56	0.172	0.026	1.19	0.204	/
Back Side	Battery2	RMC 12.2K	1:1	1413/1732.6	22.30	21.56	0.235	-0.041	1.19	0.279	/
Back Side	Battery3	RMC 12.2K	1:1	1413/1732.6	22.30	21.56	0.217	0.032	1.19	0.257	/
Back Side	Battery4	RMC 12.2K	1:1	1413/1732.6	22.30	21.56	0.248	0.019	1.19	0.294	/
Back Side	Battery5	RMC 12.2K	1:1	1413/1732.6	22.30	21.56	0.281	0.040	1.19	0.333	/
Back Side	Battery6	RMC 12.2K	1:1	1413/1732.6	22.30	21.56	0.264	-0.020	1.19	0.313	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.278	0.033	1.23	0.343	/
Front Side	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.143	0.025	1.23	0.176	/
Left Edge	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.111	0.122	1.23	0.137	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.324	0.180	1.23	0.400	15
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	Battery2	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.315	0.030	1.23	0.388	/
Top Edge	Battery3	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.284	-0.042	1.23	0.350	/
Top Edge	Battery4	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.276	0.038	1.23	0.340	/
Top Edge	Battery5	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.319	0.016	1.23	0.393	/
Top Edge	Battery6	RMC 12.2K	1:1	1413/1732.6	18.80	17.89	0.285	0.047	1.23	0.351	/

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

2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.



MAX Adjusted SAR

Test Position	Cover Type	Channel/ Frequency (MHz)	Full power (dBm)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1413/1732.6	22.30	18.80	0.343	2.24	0.767	No
Front Side	standard	1413/1732.6	22.30	18.80	0.176	2.24	0.395	No
Left Edge	standard	1413/1732.6	22.30	18.80	0.137	2.24	0.306	No
Top Edge	standard	1413/1732.6	22.30	18.80	0.400	2.24	0.894	No

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



Table 5: UMTS Band V(Up Antenna)

Test Position	Cover Type	Channel Type	Duty Cycle	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR											
Left Cheek	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.329	-0.160	1.20	0.395	/
Left Tilt	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.281	-0.020	1.20	0.337	/
Right Cheek	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.235	-0.030	1.20	0.282	/
Right Tilt	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.179	0.070	1.20	0.215	/
Left Cheek	Battery2	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.357	0.035	1.20	0.428	/
Left Cheek	Battery3	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.384	0.011	1.20	0.461	15
Left Cheek	Battery4	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.269	-0.041	1.20	0.323	/
Left Cheek	Battery5	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.251	0.036	1.20	0.301	/
Left Cheek	Battery6	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.337	0.052	1.20	0.404	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.126	0.020	1.20	0.151	15
Front Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.111	0.026	1.20	0.133	/
Back Side	Battery2	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.124	-0.020	1.20	0.149	/
Back Side	Battery3	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.113	0.014	1.20	0.136	/
Back Side	Battery4	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.092	0.048	1.20	0.110	/
Back Side	Battery5	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.108	0.091	1.20	0.130	/
Back Side	Battery6	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.115	0.075	1.20	0.138	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.195	-0.120	1.20	0.234	15
Front Side	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.132	-0.036	1.20	0.158	/
Left Edge	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.156	0.105	1.20	0.187	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.106	0.023	1.20	0.127	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	Battery2	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.156	0.024	1.20	0.187	/
Back Side	Battery3	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.119	-0.080	1.20	0.143	/
Back Side	Battery4	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.146	-0.060	1.20	0.175	/
Back Side	Battery5	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.182	0.012	1.20	0.218	/
Back Side	Battery6	RMC 12.2K	1:1	4183/836.6	25.00	24.21	0.147	0.070	1.20	0.176	/

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

2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.



Table 6: LTE Band 2 (20MHz, Up Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	50	18700/1860	19.50	18.59	0.447	0.050	1.23	0.551	/
Left Tilt	standard	1:1	1	50	18700/1860	19.50	18.59	0.585	0.090	1.23	0.721	/
Right Cheek	standard	1:1	1	50	18700/1860	19.50	18.59	0.641	0.080	1.23	0.790	/
Right Tilt	standard	1:1	1	50	18700/1860	19.50	18.59	0.691	0.010	1.23	0.852	15
	standard	1:1	1	50	18900/1880	19.50	18.47	0.653	0.023	1.27	0.828	/
	standard	1:1	1	50	19100/1900	19.50	18.41	0.638	-0.019	1.29	0.820	/
Left Cheek	standard	1:1	50%	0	18700/1860	19.50	18.87	0.445	0.060	1.16	0.514	/
Left Tilt	standard	1:1	50%	0	18700/1860	19.50	18.87	0.580	0.010	1.16	0.671	/
Right Cheek	standard	1:1	50%	0	18700/1860	19.50	18.87	0.598	0.060	1.16	0.691	/
Right Tilt	standard	1:1	50%	0	18700/1860	19.50	18.87	0.689	0.060	1.16	0.797	/
Right Tilt	standard	1:1	100%	0	18900/1880	19.50	18.39	0.605	0.012	1.29	0.781	/
Right Tilt	Battery2	1:1	1	50	18700/1860	19.50	18.59	0.634	0.021	1.23	0.782	/
Right Tilt	Battery3	1:1	1	50	18700/1860	19.50	18.59	0.662	-0.038	1.23	0.816	/
Right Tilt	Battery4	1:1	1	50	18700/1860	19.50	18.59	0.629	0.049	1.23	0.776	/
Right Tilt	Battery5	1:1	1	50	18700/1860	19.50	18.59	0.572	0.011	1.23	0.705	/
Right Tilt	Battery6	1:1	1	50	18700/1860	19.50	18.59	0.589	0.060	1.23	0.726	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	50	18700/1860	23.00	21.99	0.270	0.100	1.26	0.341	15
Front Side	standard	1:1	1	50	18700/1860	23.00	21.99	0.217	0.154	1.26	0.274	/
Back Side	standard	1:1	50%	25	18700/1860	23.00	21.93	0.232	0.036	1.28	0.297	/
Front Side	standard	1:1	50%	25	18700/1860	23.00	21.93	0.210	0.115	1.28	0.269	/
Back Side	Battery2	1:1	1	50	18700/1860	23.00	21.99	0.238	0.043	1.26	0.300	
Back Side	Battery3	1:1	1	50	18700/1860	23.00	21.99	0.216	-0.032	1.26	0.273	
Back Side	Battery4	1:1	1	50	18700/1860	23.00	21.99	0.257	0.090	1.26	0.324	
Back Side	Battery5	1:1	1	50	18700/1860	23.00	21.99	0.225	0.041	1.26	0.284	
Back Side	Battery6	1:1	1	50	18700/1860	23.00	21.99	0.269	0.070	1.26	0.339	
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	50	18700/1860	19.50	18.49	0.301	0.069	1.26	0.380	/
Front Side	standard	1:1	1	50	18700/1860	19.50	18.49	0.174	0.025	1.26	0.220	/
Left Edge	standard	1:1	1	50	18700/1860	19.50	18.49	0.121	0.115	1.26	0.153	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	1	50	18700/1860	19.50	18.49	0.357	0.036	1.26	0.450	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	standard	1:1	50%	0	18700/1860	19.50	18.47	0.283	0.110	1.27	0.359	/



SAR Test Report

Report No.: R2101A0067-S1

Front Side	standard	1:1	50%	0	18700/1860	19.50	18.47	0.175	-0.020	1.27	0.222	/
Left Edge	standard	1:1	50%	0	18700/1860	19.50	18.47	0.118	0.060	1.27	0.150	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	50%	0	18700/1860	19.50	18.47	0.374	0.160	1.27	0.474	15
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	Battery2	1:1	50%	0	18700/1860	19.50	18.47	0.369	-0.062	1.27	0.468	/
Top Edge	Battery3	1:1	50%	0	18700/1860	19.50	18.47	0.338	0.087	1.27	0.428	/
Top Edge	Battery4	1:1	50%	0	18700/1860	19.50	18.47	0.317	0.043	1.27	0.402	/
Top Edge	Battery5	1:1	50%	0	18700/1860	19.50	18.47	0.325	0.010	1.27	0.412	/
Top Edge	Battery6	1:1	50%	0	18700/1860	19.50	18.47	0.351	0.011	1.27	0.445	/

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

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

MAX Adjusted SAR									
Test Position	Cover Type	RB allocation	offset	Channel/Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	50	18700/1860	23.00	19.50	2.24	0.850	No
Front Side	standard	1	50	18700/1860	23.00	19.50	2.24	0.492	No
Left Edge	standard	1	50	18700/1860	23.00	19.50	2.24	0.342	No
Top Edge	standard	1	50	18700/1860	23.00	19.50	2.24	1.008	No
Back Side	standard	50%	0	18700/1860	23.00	19.50	2.24	0.803	No
Front Side	standard	50%	0	18700/1860	23.00	19.50	2.24	0.497	No
Left Edge	standard	50%	0	18700/1860	23.00	19.50	2.24	0.335	No
Top Edge	standard	50%	0	18700/1860	23.00	19.50	2.24	1.061	No

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



Table 7: LTE Band 4 (20MHz, Up Antenna)

Test Position	Cover Type	Duty Cycle	RB alloc ation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.382	0.090	1.09	0.418	/
Left Tilt	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.505	0.030	1.09	0.552	/
Right Cheek	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.567	0.060	1.09	0.620	/
Right Tilt	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.656	0.030	1.09	0.718	/
Left Cheek	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.420	-0.010	1.21	0.507	/
Left Tilt	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.512	0.060	1.21	0.618	/
Right Cheek	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.556	0.040	1.21	0.672	/
Right Tilt	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.649	0.030	1.21	0.784	/
Right Tilt	Battery2	1:1	50%	0	20175/1732.5	20.30	19.48	0.655	0.020	1.21	0.791	/
Right Tilt	Battery3	1:1	50%	0	20175/1732.5	20.30	19.48	0.619	0.190	1.21	0.748	/
Right Tilt	Battery4	1:1	50%	0	20175/1732.5	20.30	19.48	0.671	-0.040	1.21	0.810	15
Right Tilt	Battery5	1:1	50%	0	20175/1732.5	20.30	19.48	0.568	0.035	1.21	0.686	/
Right Tilt	Battery6	1:1	50%	0	20175/1732.5	20.30	19.48	0.594	0.084	1.21	0.717	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	50	20175/1732.5	23.30	22.32	0.292	0.070	1.25	0.366	15
Front Side	standard	1:1	1	50	20175/1732.5	23.30	22.32	0.197	0.102	1.25	0.247	/
Back Side	standard	1:1	50%	0	20175/1732.5	23.30	22.36	0.277	0.113	1.24	0.344	/
Front Side	standard	1:1	50%	0	20175/1732.5	23.30	22.36	0.184	0.065	1.24	0.228	/
Back Side	Battery2	1:1	1	50	20175/1732.5	23.30	22.32	0.251	0.040	1.25	0.315	/
Back Side	Battery3	1:1	1	50	20175/1732.5	23.30	22.32	0.218	0.031	1.25	0.273	/
Back Side	Battery4	1:1	1	50	20175/1732.5	23.30	22.32	0.235	-0.062	1.25	0.294	/
Back Side	Battery5	1:1	1	50	20175/1732.5	23.30	22.32	0.276	0.080	1.25	0.346	/
Back Side	Battery6	1:1	1	50	20175/1732.5	23.30	22.32	0.234	-0.013	1.25	0.293	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.327	0.033	1.09	0.358	/
Front Side	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.169	0.115	1.09	0.185	/
Left Edge	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.150	0.010	1.09	0.164	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	1	99	20175/1732.5	20.30	19.91	0.384	0.025	1.09	0.420	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.338	0.036	1.21	0.408	/
Front Side	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.168	0.011	1.21	0.203	/
Left Edge	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.142	0.025	1.21	0.172	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	50%	0	20175/1732.5	20.30	19.48	0.407	0.160	1.21	0.492	15



SAR Test Report

Report No.: R2101A0067-S1

Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	Battery2	1:1	50%	0	20175/1732.5	20.30	19.48	0.401	-0.010	1.21	0.484	/
Top Edge	Battery3	1:1	50%	0	20175/1732.5	20.30	19.48	0.327	0.032	1.21	0.395	/
Top Edge	Battery4	1:1	50%	0	20175/1732.5	20.30	19.48	0.395	0.090	1.21	0.477	/
Top Edge	Battery5	1:1	50%	0	20175/1732.5	20.30	19.48	0.342	0.027	1.21	0.413	/
Top Edge	Battery6	1:1	50%	0	20175/1732.5	20.30	19.48	0.361	0.010	1.21	0.436	/

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

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

MAX Adjusted SAR										
Test Position	Cover Type	RB allocation	offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	99	20175/1732.5	23.30	20.30	0.358	2.00	0.714	No
Front Side	standard	1	99	20175/1732.5	23.30	20.30	0.185	2.00	0.369	No
Left Edge	standard	1	99	20175/1732.5	23.30	20.30	0.164	2.00	0.327	No
Top Edge	standard	1	99	20175/1732.5	23.30	20.30	0.420	2.00	0.838	No
Back Side	standard	50%	0	20175/1732.5	23.30	20.30	0.408	2.00	0.815	No
Front Side	standard	50%	0	20175/1732.5	23.30	20.30	0.203	2.00	0.405	No
Left Edge	standard	50%	0	20175/1732.5	23.30	20.30	0.172	2.00	0.342	No
Top Edge	standard	50%	0	20175/1732.5	23.30	20.30	0.492	2.00	0.981	No

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



Table 8: LTE Band 5 (10MHz, Up Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	48	20525/836.5	25.00	24.77	0.281	-0.160	1.05	0.296	/
Left Tilt	standard	1:1	1	48	20525/836.5	25.00	24.77	0.209	0.050	1.05	0.220	/
Right Cheek	standard	1:1	1	48	20525/836.5	25.00	24.77	0.361	-0.020	1.05	0.381	15
Right Tilt	standard	1:1	1	48	20525/836.5	25.00	24.77	0.290	0.040	1.05	0.306	/
Left Cheek	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.226	-0.060	1.15	0.261	/
Left Tilt	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.168	0.060	1.15	0.194	/
Right Cheek	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.295	0.070	1.15	0.340	/
Right Tilt	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.232	0.040	1.15	0.268	/
Right Cheek	Battery2	1:1	1	48	20525/836.5	25.00	24.77	0.352	-0.032	1.05	0.371	/
Right Cheek	Battery3	1:1	1	48	20525/836.5	25.00	24.77	0.281	0.061	1.05	0.296	/
Right Cheek	Battery4	1:1	1	48	20525/836.5	25.00	24.77	0.294	0.052	1.05	0.310	/
Right Cheek	Battery5	1:1	1	48	20525/836.5	25.00	24.77	0.332	0.090	1.05	0.350	/
Right Cheek	Battery6	1:1	1	48	20525/836.5	25.00	24.77	0.284	0.012	1.05	0.299	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	48	20525/836.5	25.00	24.77	0.126	0.000	1.05	0.133	15
Front Side	standard	1:1	1	48	20525/836.5	25.00	24.77	0.076	0.113	1.05	0.080	/
Back Side	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.098	0.106	1.15	0.113	/
Front Side	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.076	0.050	1.15	0.088	/
Back Side	Battery2	1:1	1	48	20525/836.5	25.00	24.77	0.113	-0.013	1.05	0.119	/
Back Side	Battery3	1:1	1	48	20525/836.5	25.00	24.77	0.095	0.034	1.05	0.100	/
Back Side	Battery4	1:1	1	48	20525/836.5	25.00	24.77	0.124	0.028	1.05	0.131	/
Back Side	Battery5	1:1	1	48	20525/836.5	25.00	24.77	0.115	0.060	1.05	0.121	/
Back Side	Battery6	1:1	1	48	20525/836.5	25.00	24.77	0.119	0.015	1.05	0.125	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	48	20525/836.5	25.00	24.77	0.211	0.050	1.05	0.222	15
Front Side	standard	1:1	1	48	20525/836.5	25.00	24.77	0.159	0.106	1.05	0.168	/
Left Edge	standard	1:1	1	48	20525/836.5	25.00	24.77	0.163	0.030	1.05	0.172	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	1	48	20525/836.5	25.00	24.77	0.154	0.110	1.05	0.162	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.188	0.023	1.15	0.217	/
Front Side	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.147	0.104	1.15	0.170	/
Left Edge	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.172	0.050	1.15	0.198	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	50%	13	20525/836.5	24.00	23.38	0.142	0.100	1.15	0.164	/

**SAR Test Report****Report No.: R2101A0067-S1**

Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	Battery2	1:1	1	48	20525/836.5	25.00	24.77	0.168	-0.051	1.05	0.177	/
Back Side	Battery3	1:1	1	48	20525/836.5	25.00	24.77	0.192	0.060	1.05	0.202	/
Back Side	Battery4	1:1	1	48	20525/836.5	25.00	24.77	0.203	0.032	1.05	0.214	/
Back Side	Battery5	1:1	1	48	20525/836.5	25.00	24.77	0.185	0.071	1.05	0.195	/
Back Side	Battery6	1:1	1	48	20525/836.5	25.00	24.77	0.151	0.080	1.05	0.159	/

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

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



Table 9: LTE Band 7 (20MHz, Up Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1	1	50	21350/2560	17.00	15.91	0.514	0.043	1.29	0.661	/
Left Tilt	standard	1:1	1	50	21350/2560	17.00	15.91	0.531	-0.020	1.29	0.682	78
Right Cheek	standard	1:1	1	50	21350/2560	17.00	15.91	0.483	0.052	1.29	0.621	/
Right Tilt	standard	1:1	1	50	21350/2560	17.00	15.91	0.503	-0.190	1.29	0.646	/
Left Cheek	standard	1:1	50%	0	21100/2535	17.00	15.88	0.466	0.180	1.29	0.603	/
Left Tilt	standard	1:1	50%	0	21100/2535	17.00	15.88	0.487	0.080	1.29	0.630	/
Right Cheek	standard	1:1	50%	0	21100/2535	17.00	15.88	0.451	-0.130	1.29	0.584	/
Right Tilt	standard	1:1	50%	0	21100/2535	17.00	15.88	0.475	-0.130	1.29	0.615	/
Left Tilt	Battery2	1:1	1	50	21350/2560	17.00	15.91	0.519	0.034	1.29	0.667	/
Left Tilt	Battery3	1:1	1	50	21350/2560	17.00	15.91	0.523	-0.090	1.29	0.672	/
Left Tilt	Battery4	1:1	1	50	21350/2560	17.00	15.91	0.467	0.018	1.29	0.600	/
Left Tilt	Battery5	1:1	1	50	21350/2560	17.00	15.91	0.428	0.043	1.29	0.550	/
Left Tilt	Battery6	1:1	1	50	21350/2560	17.00	15.91	0.481	0.028	1.29	0.618	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1	1	50	21100/2535	24.00	23.30	0.430	-0.073	1.17	0.505	78
Front Side	standard	1:1	1	50	21100/2535	24.00	23.30	0.365	0.106	1.17	0.429	/
Back Side	standard	1:1	50%	25	21100/2535	23.00	22.35	0.378	0.031	1.16	0.439	/
Front Side	standard	1:1	50%	25	21100/2535	23.00	22.35	0.326	0.024	1.16	0.379	/
Back Side	Battery2	1:1	1	50	21100/2535	24.00	23.30	0.358	0.032	1.17	0.421	/
Back Side	Battery3	1:1	1	50	21100/2535	24.00	23.30	0.394	0.060	1.17	0.463	/
Back Side	Battery4	1:1	1	50	21100/2535	24.00	23.30	0.364	0.040	1.17	0.428	/
Back Side	Battery5	1:1	1	50	21100/2535	24.00	23.30	0.412	0.012	1.17	0.484	/
Back Side	Battery6	1:1	1	50	21100/2535	24.00	23.30	0.409	-0.092	1.17	0.481	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1	1	50	21350/2560	20.00	19.04	0.264	0.063	1.25	0.329	/
Front Side	standard	1:1	1	50	21350/2560	20.00	19.04	0.220	0.115	1.25	0.274	/
Left Edge	standard	1:1	1	50	21350/2560	20.00	19.04	0.092	0.106	1.25	0.115	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	1	50	21350/2560	20.00	19.04	0.488	-0.110	1.25	0.609	78
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	standard	1:1	50%	25	21100/2535	20.00	18.99	0.257	0.054	1.26	0.324	/
Front Side	standard	1:1	50%	25	21100/2535	20.00	18.99	0.213	0.108	1.26	0.269	/
Left Edge	standard	1:1	50%	25	21100/2535	20.00	18.99	0.096	0.113	1.26	0.121	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1	50%	25	21100/2535	20.00	18.99	0.404	0.021	1.26	0.510	/



Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	Battery2	1:1	1	50	21350/2560	20.00	19.04	0.435	-0.035	1.25	0.543	/
Top Edge	Battery3	1:1	1	50	21350/2560	20.00	19.04	0.419	0.042	1.25	0.523	/
Top Edge	Battery4	1:1	1	50	21350/2560	20.00	19.04	0.432	0.068	1.25	0.539	/
Top Edge	Battery5	1:1	1	50	21350/2560	20.00	19.04	0.374	0.032	1.25	0.467	/
Top Edge	Battery6	1:1	1	50	21350/2560	20.00	19.04	0.442	0.018	1.25	0.551	/
Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 4 W/kg (mW/g)				Plot No.
								Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10 g	
Product Specific 10-g SAR (Distance 0mm)												
Top Edge	standard	1:1	1	50	21100/2535	24.00	23.30	1.700	0.022	1.17	1.997	78
Top Edge	Battery2	1:1	1	50	21100/2535	24.00	23.30	1.620	0.064	1.17	1.903	/
Top Edge	Battery3	1:1	1	50	21100/2535	24.00	23.30	1.570	0.140	1.17	1.845	/
Top Edge	Battery4	1:1	1	50	21100/2535	24.00	23.30	1.510	0.032	1.17	1.774	/
Top Edge	Battery5	1:1	1	50	21100/2535	24.00	23.30	1.660	-0.078	1.17	1.950	/
Top Edge	Battery6	1:1	1	50	21100/2535	24.00	23.30	1.550	0.046	1.17	1.821	/
Note: 1.The value with blue color is the maximum SAR Value of each test band. 2.For QPSK with 100% RB allocation, SAR is required when and the highest reported SAR for 1 RB and 50% RB allocation in are $\geq 50\%$ limit(1g).												

MAX Adjusted SAR										
Test Position	Cover Type	RB allocation	offset	Channel/Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	50	21350/2560	24.00	20.00	0.329	2.51	0.827	No
Front Side	standard	1	50	21350/2560	24.00	20.00	0.274	2.51	0.689	No
Left Edge	standard	1	50	21350/2560	24.00	20.00	0.115	2.51	0.288	No
Top Edge	standard	1	50	21350/2560	24.00	20.00	0.609	2.51	1.529	Yes
Back Side	standard	50%	25	21100/2535	23.00	20.00	0.324	2.00	0.647	No
Front Side	standard	50%	25	21100/2535	23.00	20.00	0.269	2.00	0.536	No
Left Edge	standard	50%	25	21100/2535	23.00	20.00	0.121	2.00	0.242	No
Top Edge	standard	50%	25	21100/2535	23.00	20.00	0.510	2.00	1.017	No
Note: According to 648474 D04 Handset SAR v01r03, For Phablet, Since hotspot mode 10-g reported SAR < 1.2 W/kg, Product Specific 10-g SAR is not required.										



Table 13: LTE Band 38 (20MHz, Up Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1.58	1	50	38150/2610	18.80	17.74	0.527	0.070	1.28	0.673	/
Left Tilt	standard	1:1.58	1	50	38150/2610	18.80	17.74	0.584	0.035	1.28	0.745	78
Right Cheek	standard	1:1.58	1	50	38150/2610	18.80	17.74	0.504	-0.022	1.28	0.643	/
Right Tilt	standard	1:1.58	1	50	38150/2610	18.80	17.74	0.514	-0.100	1.28	0.656	/
Left Cheek	standard	1:1.58	50%	25	38150/2610	18.80	17.85	0.520	0.100	1.24	0.647	/
Left Tilt	standard	1:1.58	50%	25	38150/2610	18.80	17.85	0.571	0.110	1.24	0.711	/
Right Cheek	standard	1:1.58	50%	25	38150/2610	18.80	17.85	0.488	-0.028	1.24	0.607	/
Right Tilt	standard	1:1.58	50%	25	38150/2610	18.80	17.85	0.506	-0.070	1.24	0.630	/
Left Tilt	Battery2	1:1.58	1	50	38150/2610	18.80	17.74	0.531	-0.072	1.28	0.678	/
Left Tilt	Battery3	1:1.58	1	50	38150/2610	18.80	17.74	0.542	-0.123	1.28	0.692	/
Left Tilt	Battery4	1:1.58	1	50	38150/2610	18.80	17.74	0.501	0.074	1.28	0.639	/
Left Tilt	Battery5	1:1.58	1	50	38150/2610	18.80	17.74	0.496	0.021	1.28	0.633	/
Left Tilt	Battery6	1:1.58	1	50	38150/2610	18.80	17.74	0.571	0.053	1.28	0.729	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1.58	1	50	38150/2610	24.30	23.34	0.400	-0.073	1.25	0.499	78
Front Side	standard	1:1.58	1	50	38150/2610	24.30	23.34	0.373	0.032	1.25	0.465	/
Back Side	standard	1:1.58	50%	25	38150/2610	23.30	22.21	0.387	0.054	1.29	0.497	/
Front Side	standard	1:1.58	50%	25	38150/2610	23.30	22.21	0.331	0.112	1.29	0.425	/
Back Side	Battery2	1:1.58	1	50	38150/2610	24.30	23.34	0.382	0.174	1.25	0.477	/
Back Side	Battery3	1:1.58	1	50	38150/2610	24.30	23.34	0.374	0.105	1.25	0.467	/
Back Side	Battery4	1:1.58	1	50	38150/2610	24.30	23.34	0.384	0.136	1.25	0.479	/
Back Side	Battery5	1:1.58	1	50	38150/2610	24.30	23.34	0.354	0.038	1.25	0.442	/
Back Side	Battery6	1:1.58	1	50	38150/2610	24.30	23.34	0.359	-0.010	1.25	0.448	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1.58	1	50	38150/2610	21.80	20.90	0.369	0.098	1.23	0.454	/
Front Side	standard	1:1.58	1	50	38150/2610	21.80	20.90	0.338	0.056	1.23	0.416	/
Left Edge	standard	1:1.58	1	50	38150/2610	21.80	20.90	0.091	0.034	1.23	0.112	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1.58	1	50	38150/2610	21.80	20.90	0.622	0.115	1.23	0.765	78
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	standard	1:1.58	50%	25	38150/2610	21.80	20.81	0.273	0.060	1.26	0.343	/
Front Side	standard	1:1.58	50%	25	38150/2610	21.80	20.81	0.251	0.041	1.26	0.315	/
Left Edge	standard	1:1.58	50%	25	38150/2610	21.80	20.81	0.096	0.033	1.26	0.121	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1.58	50%	25	38150/2610	21.80	20.81	0.522	0.014	1.26	0.656	/



Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	SIM	1:1.58	1	50	38150/2610	21.80	20.90	0.615	0.013	1.23	0.757	/
Top Edge	Battery2	1:1.58	1	50	38150/2610	21.80	20.90	0.610	0.099	1.23	0.750	/
Top Edge	Battery3	1:1.58	1	50	38150/2610	21.80	20.90	0.579	0.101	1.23	0.712	/
Top Edge	Battery4	1:1.58	1	50	38150/2610	21.80	20.90	0.604	0.174	1.23	0.743	/
Top Edge	Battery5	1:1.58	1	50	38150/2610	21.80	20.90	0.611	0.059	1.23	0.752	/
Top Edge	Battery6	1:1.58	1	50	38150/2610	21.80	20.90	0.613	0.035	1.23	0.754	/
Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 4 W/kg (mW/g)				Plot No.
								Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	

Product Specific 10-g SAR (Distance 0mm)

Top Edge	standard	1:1.58	1	50	38150/2610	24.30	23.34	1.220	0.022	1.25	1.522	78
Top Edge	Battery2	1:1.58	1	50	38150/2610	24.30	23.34	1.200	0.079	1.25	1.497	/
Top Edge	Battery3	1:1.58	1	50	38150/2610	24.30	23.34	1.120	0.046	1.25	1.397	/
Top Edge	Battery4	1:1.58	1	50	38150/2610	24.30	23.34	1.180	0.064	1.25	1.472	/
Top Edge	Battery5	1:1.58	1	50	38150/2610	24.30	23.34	1.050	0.040	1.25	1.310	/
Top Edge	Battery6	1:1.58	1	50	38150/2610	24.30	23.34	1.100	-0.030	1.25	1.372	/

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

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

MAX Adjusted SAR										
Test Position	Cover Type	RB allocation	offset	Channel/Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	50	38150/2610	24.30	21.80	0.454	1.78	0.807	No
Front Side	standard	1	50	38150/2610	24.30	21.80	0.416	1.78	0.739	No
Left Edge	standard	1	50	38150/2610	24.30	21.80	0.112	1.78	0.199	No
Top Edge	standard	1	50	38150/2610	24.30	21.80	0.765	1.78	1.361	Yes
Back Side	standard	50%	25	38150/2610	23.30	21.80	0.343	1.41	0.484	No
Front Side	standard	50%	25	38150/2610	23.30	21.80	0.315	1.41	0.445	No
Left Edge	standard	50%	25	38150/2610	23.30	21.80	0.121	1.41	0.170	No
Top Edge	standard	50%	25	38150/2610	23.30	21.80	0.656	1.41	0.926	No

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



Table 14: LTE Band 41 (20MHz, Up Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1.58	1	50	41340/2665	18.30	17.53	0.605	0.029	1.19	0.722	78
Left Tilt	standard	1:1.58	1	50	41340/2665	18.30	17.53	0.604	-0.028	1.19	0.721	/
Right Cheek	standard	1:1.58	1	50	41340/2665	18.30	17.53	0.490	-0.030	1.19	0.585	/
Right Tilt	standard	1:1.58	1	50	41340/2665	18.30	17.53	0.511	-0.170	1.19	0.610	/
Left Cheek	standard	1:1.58	50%	25	41340/2665	18.30	17.63	0.584	-0.130	1.17	0.681	/
Left Tilt	standard	1:1.58	50%	25	41340/2665	18.30	17.63	0.591	-0.021	1.17	0.690	/
Right Cheek	standard	1:1.58	50%	25	41340/2665	18.30	17.63	0.501	-0.140	1.17	0.585	/
Right Tilt	standard	1:1.58	50%	25	41340/2665	18.30	17.63	0.505	-0.024	1.17	0.589	/
Left Cheek	Battery2	1:1.58	1	50	41340/2665	18.30	17.53	0.594	-0.110	1.19	0.709	/
Left Cheek	Battery3	1:1.58	1	50	41340/2665	18.30	17.53	0.526	-0.039	1.19	0.628	/
Left Cheek	Battery4	1:1.58	1	50	41340/2665	18.30	17.53	0.547	-0.097	1.19	0.653	/
Left Cheek	Battery5	1:1.58	1	50	41340/2665	18.30	17.53	0.508	0.030	1.19	0.607	/
Left Cheek	Battery6	1:1.58	1	50	41340/2665	18.30	17.53	0.597	0.010	1.19	0.713	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1.58	1	50	41340/2665	24.30	23.43	0.478	-0.048	1.22	0.584	78
Front Side	standard	1:1.58	1	50	41340/2665	24.30	23.43	0.396	0.106	1.22	0.484	/
Back Side	standard	1:1.58	50%	50	41340/2665	23.30	22.48	0.399	0.031	1.21	0.482	/
Front Side	standard	1:1.58	50%	50	41340/2665	23.30	22.48	0.368	0.025	1.21	0.444	/
Back Side	SIM	1:1.58	1	50	41340/2665	24.30	23.43	0.467	-0.040	1.22	0.571	/
Back Side	Battery2	1:1.58	1	50	41340/2665	24.30	23.43	0.436	0.027	1.22	0.533	/
Back Side	Battery3	1:1.58	1	50	41340/2665	24.30	23.43	0.418	0.021	1.22	0.511	/
Back Side	Battery4	1:1.58	1	50	41340/2665	24.30	23.43	0.464	0.089	1.22	0.567	/
Back Side	Battery5	1:1.58	1	50	41340/2665	24.30	23.43	0.394	-0.077	1.22	0.481	/
Back Side	Battery6	1:1.58	1	50	41340/2665	24.30	23.43	0.470	0.020	1.22	0.574	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1.58	1	50	41340/2665	21.30	20.52	0.390	0.110	1.20	0.467	/
Front Side	standard	1:1.58	1	50	41340/2665	21.30	20.52	0.361	0.020	1.20	0.432	/
Left Edge	standard	1:1.58	1	50	41340/2665	21.30	20.52	0.074	0.044	1.20	0.089	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1.58	1	50	41340/2665	21.30	20.52	0.611	-0.140	1.20	0.731	78
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	standard	1:1.58	50%	25	41340/2665	21.30	20.46	0.381	0.085	1.21	0.462	/
Front Side	standard	1:1.58	50%	25	41340/2665	21.30	20.46	0.360	0.074	1.21	0.437	/
Left Edge	standard	1:1.58	50%	25	41340/2665	21.30	20.46	0.072	0.069	1.21	0.087	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Top Edge	standard	1:1.58	50%	25	41340/2665	21.30	20.46	0.589	0.052	1.21	0.715	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	Battery2	1:1.58	1	50	41340/2665	21.30	20.52	0.605	0.025	1.20	0.724	/
Top Edge	Battery3	1:1.58	1	50	41340/2665	21.30	20.52	0.574	0.104	1.20	0.687	/
Top Edge	Battery4	1:1.58	1	50	41340/2665	21.30	20.52	0.583	0.040	1.20	0.698	/
Top Edge	Battery5	1:1.58	1	50	41340/2665	21.30	20.52	0.591	0.049	1.20	0.707	/
Top Edge	Battery6	1:1.58	1	50	41340/2665	21.30	20.52	0.582	0.047	1.20	0.697	/
Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 4 W/kg (mW/g)				Plot No.
								Measured SAR10g	Power Drift (dB)	Scaling Factor	Report SAR10g	

Product Specific 10-g SAR (Distance 0mm)

Top Edge	standard	1:1.58	1	50	41340/2665	24.30	23.43	1.290	0.023	1.22	1.576	78
Top Edge	Battery2	1:1.58	1	50	41340/2665	24.30	23.43	1.080	0.060	1.22	1.320	/
Top Edge	Battery3	1:1.58	1	50	41340/2665	24.30	23.43	1.110	0.013	1.22	1.356	/
Top Edge	Battery4	1:1.58	1	50	41340/2665	24.30	23.43	1.090	-0.070	1.22	1.332	/
Top Edge	Battery5	1:1.58	1	50	41340/2665	24.30	23.43	1.150	0.061	1.22	1.405	/
Top Edge	Battery6	1:1.58	1	50	41340/2665	24.30	23.43	1.240	0.056	1.22	1.515	/

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

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

MAX Adjusted SAR

Test Position	Cover Type	RB allocation	offset	Channel/Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	50	41340/2665	24.30	21.30	0.467	2.00	0.931	No
Front Side	standard	1	50	41340/2665	24.30	21.30	0.432	2.00	0.862	No
Left Edge	standard	1	50	41340/2665	24.30	21.30	0.089	2.00	0.177	No
Top Edge	standard	1	50	41340/2665	24.30	21.30	0.731	2.00	1.459	Yes
Back Side	standard	50%	25	41340/2665	23.30	21.30	0.462	1.58	0.733	No
Front Side	standard	50%	25	41340/2665	23.30	21.30	0.437	1.58	0.692	No
Left Edge	standard	50%	25	41340/2665	23.30	21.30	0.087	1.58	0.138	No
Top Edge	standard	50%	25	41340/2665	23.30	21.30	0.715	1.58	1.133	No

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



Table 14: LTE Band 66 (20MHz, Up Antenna)

Test Position	Cover Type	Duty Cycle	RB allocation	RB offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
								Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR1g	
Head SAR (QPSK)												
Left Cheek	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.382	0.050	1.26	0.480	/
Left Tilt	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.450	0.040	1.26	0.565	/
Right Cheek	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.497	0.050	1.26	0.624	/
Right Tilt	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.595	0.060	1.26	0.747	/
Left Cheek	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.425	0.040	1.28	0.544	/
Left Tilt	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.502	0.020	1.28	0.642	/
Right Cheek	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.562	0.060	1.28	0.719	/
Right Tilt	standard	1:1.58	50%	25	132072/1720	20.30	19.20	0.588	0.110	1.29	0.757	/
	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.647	0.050	1.28	0.828	/
	standard	1:1.58	50%	25	132572/1770	20.30	19.16	0.601	0.020	1.30	0.781	/
Right Tilt	standard	1:1.58	100%	0	132322/1745	20.30	19.20	0.592	0.070	1.29	0.763	/
Right Tilt	Battery2	1:1.58	50%	25	132322/1745	20.30	19.23	0.604	0.041	1.28	0.773	/
Right Tilt	Battery3	1:1.58	50%	25	132322/1745	20.30	19.23	0.594	0.027	1.28	0.760	/
Right Tilt	Battery4	1:1.58	50%	25	132322/1745	20.30	19.23	0.587	0.059	1.28	0.751	/
Right Tilt	Battery5	1:1.58	50%	25	132072/1720	20.30	19.20	0.618	0.100	1.29	0.796	/
		1:1.58	50%	25	132322/1745	20.30	19.23	0.659	0.040	1.28	0.843	15
		1:1.58	50%	25	132572/1770	20.30	19.16	0.612	0.049	1.30	0.796	/
Right Tilt	Battery6	1:1.58	50%	25	132322/1745	20.30	19.23	0.624	0.024	1.28	0.798	/
Body-worn SAR (QPSK, Distance 15mm)												
Back Side	standard	1:1.58	1	50	132322/1745	23.30	22.15	0.376	0.110	1.30	0.490	15
Front Side	standard	1:1.58	1	50	132322/1745	23.30	22.15	0.191	0.034	1.30	0.249	/
Back Side	standard	1:1.58	50%	0	132322/1745	23.30	21.98	0.325	0.114	1.36	0.440	/
Front Side	standard	1:1.58	50%	0	132322/1745	23.30	21.98	0.187	0.028	1.36	0.253	/
Back Side	Battery2	1:1.58	1	50	132322/1745	23.30	22.15	0.356	0.027	1.30	0.464	/
Back Side	Battery3	1:1.58	1	50	132322/1745	23.30	22.15	0.342	0.180	1.30	0.446	/
Back Side	Battery4	1:1.58	1	50	132322/1745	23.30	22.15	0.264	0.010	1.30	0.344	/
Back Side	Battery5	1:1.58	1	50	132322/1745	23.30	22.15	0.352	0.170	1.30	0.459	/
Back Side	Battery6	1:1.58	1	50	132322/1745	23.30	22.15	0.362	-0.040	1.30	0.472	/
Hotspot SAR(QPSK, Distance 10mm)												
Back Side	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.315	0.033	1.26	0.396	/
Front Side	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.153	0.015	1.26	0.192	/
Left Edge	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.129	0.114	1.26	0.162	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1.58	1	0	132322/1745	20.30	19.31	0.369	0.024	1.26	0.463	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



SAR Test Report

Report No.: R2101A0067-S1

Back Side	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.330	0.030	1.28	0.422	/
Front Side	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.177	0.010	1.28	0.226	/
Left Edge	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.125	0.112	1.28	0.160	/
Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	standard	1:1.58	50%	25	132322/1745	20.30	19.23	0.372	0.010	1.28	0.476	15
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Top Edge	Battery2	1:1.58	50%	25	132322/1745	20.30	19.23	0.362	0.140	1.28	0.463	/
Top Edge	Battery3	1:1.58	50%	25	132322/1745	20.30	19.23	0.354	-0.030	1.28	0.453	/
Top Edge	Battery4	1:1.58	50%	25	132322/1745	20.30	19.23	0.364	0.050	1.28	0.466	/
Top Edge	Battery5	1:1.58	50%	25	132322/1745	20.30	19.23	0.366	0.020	1.28	0.468	/
Top Edge	Battery6	1:1.58	50%	25	132322/1745	20.30	19.23	0.351	0.026	1.28	0.449	/

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

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

MAX Adjusted SAR									
Test Position	Cover Type	RB allocation	offset	Channel/ Frequency (MHz)	Tune-up (dBm)	Report SAR10g (mW/g)	Scaling Factor	Full power Report SAR10g (mW/g)	0mm SAR
Back Side	standard	1	0	132322/1745	23.30	20.30	2.00	0.789	No
Front Side	standard	1	0	132322/1745	23.30	20.30	2.00	0.383	No
Left Edge	standard	1	0	132322/1745	23.30	20.30	2.00	0.323	No
Top Edge	standard	1	0	132322/1745	23.30	20.30	2.00	0.925	No
Back Side	standard	50%	25	132322/1745	23.30	20.30	2.00	0.842	No
Front Side	standard	50%	25	132322/1745	23.30	20.30	2.00	0.452	No
Left Edge	standard	50%	25	132322/1745	23.30	20.30	2.00	0.319	No
Top Edge	standard	50%	25	132322/1745	23.30	20.30	2.00	0.950	No

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



Table 29: Wi-Fi (2.4G)

Test Position	Cover Type	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR 1g	
Head SAR											
Left Cheek	standard	802.11b	100.0%	6/2437	12.00	11.51	0.162	0.036	1.12	0.181	15
Left Tilt	standard	802.11b	100.0%	6/2437	12.00	11.51	0.148	-0.110	1.12	0.166	/
Right Cheek	standard	802.11b	100.0%	6/2437	12.00	11.51	0.066	0.051	1.12	0.073	/
Right Tilt	standard	802.11b	100.0%	6/2437	12.00	11.51	0.076	0.050	1.12	0.085	/
Left Cheek	Battery2	802.11b	100.0%	6/2437	12.00	11.51	0.154	-0.040	1.12	0.172	/
Left Cheek	Battery3	802.11b	100.0%	6/2437	12.00	11.51	0.159	-0.040	1.12	0.178	/
Left Cheek	Battery4	802.11b	100.0%	6/2437	12.00	11.51	0.151	-0.020	1.12	0.169	/
Left Cheek	Battery5	802.11b	100.0%	6/2437	12.00	11.51	0.150	-0.050	1.12	0.168	/
Left Cheek	Battery6	802.11b	100.0%	6/2437	12.00	11.51	0.153	-0.030	1.12	0.171	/
Body-worn SAR (Distance 15mm)											
Back Side	standard	802.11b	100.0%	6/2437	19.50	18.74	0.120	0.022	1.19	0.143	/
Front Side	standard	802.11b	100.0%	6/2437	19.50	18.74	0.107	0.069	1.19	0.127	/
Back Side	Battery2	802.11b	100.0%	6/2437	19.50	18.74	0.146	-0.020	1.19	0.174	/
Back Side	Battery3	802.11b	100.0%	6/2437	19.50	18.74	0.168	-0.041	1.19	0.200	15
Back Side	Battery4	802.11b	100.0%	6/2437	19.50	18.74	0.158	0.010	1.19	0.188	/
Back Side	Battery5	802.11b	100.0%	6/2437	19.50	18.74	0.151	-0.040	1.19	0.180	/
Back Side	Battery6	802.11b	100.0%	6/2437	19.50	18.74	0.162	-0.010	1.19	0.193	/
Hotspot SAR(Distance 10mm)											
Back Side	standard	802.11b	100.0%	6/2437	19.50	18.74	0.255	-0.045	1.19	0.304	77
Front Side	standard	802.11b	100.0%	6/2437	19.50	18.74	0.206	0.066	1.19	0.245	/
Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Right Edge	standard	802.11b	100.0%	6/2437	19.50	18.74	0.155	0.042	1.19	0.185	/
Top Edge	standard	802.11b	100.0%	6/2437	19.50	18.74	0.125	0.054	1.19	0.149	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	Battery2	802.11b	100.0%	6/2437	19.50	18.74	0.231	-0.130	1.19	0.275	/
Back Side	Battery3	802.11b	100.0%	6/2437	19.50	18.74	0.246	0.036	1.19	0.293	/
Back Side	Battery4	802.11b	100.0%	6/2437	19.50	18.74	0.227	0.000	1.19	0.270	/
Back Side	Battery5	802.11b	100.0%	6/2437	19.50	18.74	0.253	0.090	1.19	0.301	/
Back Side	Battery6	802.11b	100.0%	6/2437	19.50	18.74	0.248	-0.070	1.19	0.295	/
Note: 1. The value with blue color is the maximum SAR Value of each test band.											

MAX Adjusted SAR							
Mode	Test Position	Channel/ Frequency	MAX Reported SAR _{1g}	802.11b Tune-up	Tune-up limit	Scaling Factor	Adjusted SAR _{1g}



		(MHz)	(W/kg)	limit (dBm)	(dBm)		(W/kg)
802.11g	Back Side	6/2437	0.255	19.50	19.00	0.89	0.227
802.11n HT20	Back Side	6/2437	0.255	19.50	17.00	0.56	0.143
802.11n HT40	Back Side	6/2437	0.255	19.50	13.00	0.22	0.057

Note: SAR is not required for OFDM when the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.



Table 34: BT

Test Position	Cover Type	Mode	Duty Cycle	Channel/ Frequency (MHz)	Tune-up dBm)	Measured power (dBm)	Limit of SAR 1.6 W/kg (mW/g)				Plot No.
							Measured SAR1g	Power Drift (dB)	Scaling Factor	Report SAR 1g	
Head SAR											
Left Cheek	standard	DH5	77.0%	0/2402	13.00	11.12	0.072	0.050	2.00	0.143	/
Left Tilt	standard	DH5	77.0%	0/2402	13.00	11.04	0.059	-0.010	2.04	0.120	/
Right Cheek	standard	DH5	77.0%	0/2402	13.00	11.04	0.023	0.092	2.04	0.047	/
Right Tilt	standard	DH5	77.0%	0/2402	13.00	11.04	0.021	0.040	2.04	0.043	/
Left Cheek	Battery2	DH5	77.0%	0/2402	13.00	11.12	0.071	0.021	2.00	0.142	/
Left Cheek	Battery3	DH5	77.0%	0/2402	13.00	11.12	0.074	0.070	2.00	0.148	/
Left Cheek	Battery4	DH5	77.0%	0/2402	13.00	11.12	0.081	0.012	2.00	0.162	78
Left Cheek	Battery5	DH5	77.0%	0/2402	13.00	11.12	0.076	0.131	2.00	0.152	/
Left Cheek	Battery6	DH5	77.0%	0/2402	13.00	11.12	0.080	-0.160	2.00	0.160	/
Body SAR (Distance 10mm)											
Back Side	standard	DH5	77.0%	0/2402	13.00	11.12	0.056	0.120	2.00	0.112	88
Front Side	standard	DH5	77.0%	0/2402	13.00	11.12	0.032	0.110	2.00	0.063	/
Left Edge	standard	DH5	77.0%	0/2402	13.00	11.12	0.006	0.022	2.00	0.012	/
Right Edge	standard	DH5	77.0%	0/2402	13.00	11.12	0.004	0.023	2.00	0.008	/
Top Edge	standard	DH5	77.0%	0/2402	13.00	11.12	0.043	0.024	2.00	0.086	/
Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Back Side	Battery2	DH5	77.0%	0/2402	13.00	11.12	0.051	-0.010	2.00	0.102	/
Back Side	Battery3	DH5	77.0%	0/2402	13.00	11.12	0.054	0.030	2.00	0.108	/
Back Side	Battery4	DH5	77.0%	0/2402	13.00	11.12	0.049	0.180	2.00	0.098	/
Back Side	Battery5	DH5	77.0%	0/2402	13.00	11.12	0.050	0.144	2.00	0.100	/
Back Side	Battery6	DH5	77.0%	0/2402	13.00	11.12	0.047	-0.120	2.00	0.094	/
Note: 1. The value with blue color is the maximum SAR Value of each test band.											

10.3 Simultaneous Transmission Analysis

	Simultaneous TX Combination	Head	Body	Limbs
1	GSM Voice(Ant 1) + BT	Yes	Yes	Yes
2	GSM DATA(Ant 1) + BT	N/A	Yes	Yes
3	GSM Voice(Ant 2) + BT	Yes	Yes	Yes
4	GSM DATA (Ant 2)+ BT	N/A	Yes	Yes
5	GSM Voice(Ant 1) + WiFi2.4G	Yes	Yes	Yes
6	GSM DATA(Ant 1) + WiFi2.4G	N/A	Yes	Yes
7	GSM Voice(Ant 2) + WiFi2.4G	Yes	Yes	Yes
8	GSM DATA(Ant 2) + WiFi2.4G	N/A	Yes	Yes
9	UMTS (Ant 1) + BT	Yes	Yes	Yes
10	UMTS (Ant 2) + BT	Yes	Yes	Yes
11	UMTS (Ant 1) + WiFi2.4G	Yes	Yes	Yes
12	UMTS (Ant 2) + WiFi2.4G	Yes	Yes	Yes
13	LTE (Ant 1) + WiFi2.4G	Yes*	Yes*	Yes*
14	LTE (Ant 1) + BT	Yes	Yes*	Yes*
15	LTE (Ant 2) + WiFi2.4G	Yes*	Yes*	Yes*
16	LTE (Ant 2) + BT	Yes	Yes*	Yes*

General Note:

- The Scaled SAR summation is calculated based on the same configuration and test position.
- Per KDB 447498 D01, simultaneous transmission SAR is compliant if,
 - Scalar SAR summation $< 1.6\text{W/kg}$, simultaneously transmission SAR measurement is not necessary.
 - $\text{SPLSR} = (\text{SAR1} + \text{SAR2})^{1.5} / (\text{min. separation distance, mm})$, and the peak separation distance is determined from the square root of $[(x1-x2)^2 + (y1-y2)^2 + (z1-z2)^2]$, where $(x1, y1, z1)$ and $(x2, y2, z2)$ are the coordinates of the extrapolated peak SAR locations in the zoom scan.
 - If $\text{SPLSR} \leq 0.04$, simultaneously transmission SAR measurement is not necessary.

**The maximum SAR_{1g/10g} Value for Down Antenna**

SAR _{1g/10g} (W/kg)		GSM 850	GSM 1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE 2	LTE 4	LTE 5	LTE 7	LTE 38	LTE 41	LTE 66	MAX. SAR _{1g/10g}
Test Position														
Head	Left Cheek	0.195	0.021	0.017	0.005	0.139	0.050	0.011	0.126	0.108	0.065	0.068	0.111	0.195
	Left Tilt	0.099	0.008	0.008	0.007	0.080	0.015	0.005	0.072	0.062	0.044	0.043	0.011	0.099
	Right Cheek	0.081	0.012	0.018	0.002	0.126	0.029	0.007	0.138	0.080	0.035	0.017	0.007	0.138
	Right Tilt	0.047	0.011	0.010	0.001	0.062	0.025	0.005	0.072	0.052	0.038	0.017	0.005	0.072
Body worn	Back Side	0.266	0.299	0.341	0.081	0.317	0.407	0.065	0.336	0.241	0.203	0.280	0.120	0.407
	Front Side	0.149	0.140	0.160	0.014	0.221	0.186	0.010	0.177	0.152	0.072	0.091	0.097	0.221
Hotspot	Back Side	0.315	0.247	0.493	0.093	0.427	0.622	0.214	0.350	0.429	0.412	0.506	0.177	0.622
	Front Side	0.145	0.123	0.346	0.001	0.163	0.381	0.180	0.179	0.334	0.143	0.164	0.102	0.381
	Left Edge	0.053	0.001	0.006	0.001	0.067	0.001	0.001	0.050	0.150	0.087	0.081	0.001	0.150
	Right Edge	0.143	0.001	0.016	0.001	0.094	0.022	0.001	0.116	0.144	0.105	0.098	0.001	0.144
	Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Bottom Edge	0.119	0.516	0.757	0.174	0.117	0.774	0.309	0.142	0.404	0.184	0.284	0.362	0.774
Product Specific 10-g SAR	Back Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Front Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Bottom Edge	N/A	N/A	1.187	N/A	N/A	1.471	N/A	N/A	N/A	N/A	N/A	N/A	1.471

The maximum SAR_{1g} Value for Up Antenna

SAR _{1g/10g} (W/kg)		GSM 850	GSM 1900	WCDMA Band II	WCDMA Band IV	WCDMA Band V	LTE 2	LTE 4	LTE 5	LTE 7	LTE 38	LTE 41	LTE 66	MAX. SAR _{1g/10g}
Test Position														
Head	Left Cheek	0.319	0.488	0.569	0.466	0.461	0.551	0.507	0.296	0.661	0.673	0.722	0.544	0.722
	Left Tilt	0.256	0.656	0.753	0.656	0.337	0.721	0.618	0.220	0.682	0.745	0.721	0.642	0.753
	Right Cheek	0.413	0.741	0.792	0.641	0.282	0.790	0.672	0.381	0.621	0.643	0.585	0.719	0.792
	Right Tilt	0.424	0.740	0.866	0.660	0.215	0.852	0.810	0.306	0.646	0.656	0.610	0.843	0.866
Body worn	Back Side	0.181	0.257	0.420	0.343	0.151	0.341	0.366	0.133	0.505	0.499	0.584	0.490	0.584
	Front Side	0.089	0.127	0.279	0.204	0.133	0.274	0.247	0.088	0.429	0.465	0.484	0.253	0.484
Hotspot	Back Side	0.335	0.329	0.349	0.343	0.234	0.380	0.408	0.222	0.329	0.454	0.467	0.422	0.467
	Front Side	0.144	0.186	0.209	0.176	0.158	0.222	0.203	0.170	0.274	0.416	0.437	0.226	0.437
	Left Edge	0.116	0.052	0.128	0.137	0.187	0.153	0.172	0.198	0.115	0.121	0.089	0.162	0.198
	Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Top Edge	0.136	0.383	0.226	0.400	0.127	0.474	0.492	0.164	0.609	0.765	0.731	0.476	0.765
	Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Product	Back Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Specific c 10-g SAR	Front Side	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Left Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Top Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.997	1.522	1.576	N/A	1.997
	Bottom Edge	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



About BT and Down Antenna

SAR _{1g} (W/kg)		Down Antenna	BT	MAX. Σ SAR _{1g}
Test Position				
Head	Left, Cheek	0.195	0.162	0.357
	Left, Tilt	0.099	0.120	0.219
	Right, Cheek	0.138	0.047	0.185
	Right, Tilt	0.072	0.043	0.115
Body worn	Back Side	0.407	0.112	0.519
	Front Side	0.221	0.063	0.284
Hotspot	Back Side	0.622	0.112	0.734
	Front Side	0.381	0.063	0.444
	Left Edge	0.150	0.012	0.162
	Right Edge	0.144	0.008	0.152
	Top Edge	N/A	0.086	0.086
	Bottom Edge	0.774	N/A	0.774
Product Specific 10-g SAR	Back Side	N/A	N/A	N/A
	Front Side	N/A	N/A	N/A
	Left Edge	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A
	Top Edge	N/A	N/A	N/A
	Bottom Edge	1.471	N/A	1.471

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

MAX. Σ SAR_{1g} =0.774W/kg<1.6W/kg and MAX. Σ SAR_{10g} = 1.471W/kg<4 W/kg, so the Simultaneous transimition SAR with volum scan are not required for BT and Down Antenna.

About Wi-Fi and Down Antenna

SAR _{1g/10g} (W/kg)		Down Antenna	Wi-Fi 2.4G	MAX. Σ SAR _{1g/10g}
Test Position				
Head	Left, Cheek	0.195	0.181	0.376
	Left, Tilt	0.099	0.166	0.265
	Right, Cheek	0.138	0.073	0.211
	Right, Tilt	0.072	0.085	0.157
Body worn	Back Side	0.407	0.200	0.607
	Front Side	0.221	0.127	0.348
Hotspot	Back Side	0.622	0.304	0.926
	Front Side	0.381	0.245	0.626
	Left Edge	0.150	N/A	0.150
	Right Edge	0.144	0.185	0.329
	Top Edge	N/A	0.149	0.149
	Bottom Edge	0.774	N/A	0.774
Product	Back Side	N/A	N/A	N/A



Specific 10-g SAR	Front Side	N/A	N/A	N/A
	Left Edge	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A
	Top Edge	N/A	N/A	N/A
	Bottom Edge	1.471	N/A	1.471
Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value. 2.MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}				

MAX. $\Sigma SAR_{1g} = 0.926W/kg < 1.6W/kg$ and MAX. $\Sigma SAR_{10g} = 1.471W/kg < 4W/kg$, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi and Down Antenna.



About BT and Up Antenna

SAR _{1g/10g} (W/kg)		Second- Antenna	BT	MAX. Σ SAR _{1g/10g}
Test Position				
Head	Left, Cheek	0.722	0.162	0.884
	Left, Tilt	0.753	0.120	0.873
	Right, Cheek	0.792	0.047	0.839
	Right, Tilt	0.866	0.043	0.909
Body worn	Back Side	0.584	0.112	0.696
	Front Side	0.484	0.063	0.547
Hotspot	Back Side	0.467	0.112	0.579
	Front Side	0.437	0.063	0.500
	Left Edge	0.198	0.012	0.210
	Right Edge	N/A	0.008	0.008
	Top Edge	0.765	0.086	0.851
	Bottom Edge	N/A	N/A	N/A
Product Specific 10-g SAR	Back Side	N/A	N/A	N/A
	Front Side	N/A	N/A	N/A
	Left Edge	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A
	Top Edge	1.997	N/A	1.997
	Bottom Edge	N/A	N/A	N/A

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

MAX. Σ SAR_{1g} =0.909W/kg<1.6W/kg and MAX. Σ SAR_{10g} = 1.997W/kg<4 W/kg, so the Simultaneous transimition SAR with volum scan are not required for BT and Up Antenna.

About Wi-Fi and Up Antenna

SAR _{1g/10g} (W/kg)		Second- Antenna	Wi-Fi 2.4G	MAX. Σ SAR _{1g/10g}
Test Position				
Head	Left, Cheek	0.722	0.181	0.903
	Left, Tilt	0.753	0.166	0.919
	Right, Cheek	0.792	0.073	0.865
	Right, Tilt	0.866	0.085	0.951
Body worn	Back Side	0.584	0.200	0.784
	Front Side	0.484	0.127	0.611
Hotspot	Back Side	0.467	0.304	0.771
	Front Side	0.437	0.245	0.682
	Left Edge	0.198	N/A	0.198
	Right Edge	N/A	0.185	0.185
	Top Edge	0.765	0.149	0.914
	Bottom Edge	N/A	N/A	N/A
Product	Back Side	N/A	N/A	N/A



Specific 10-g SAR	Front Side	N/A	N/A	N/A
	Left Edge	N/A	N/A	N/A
	Right Edge	N/A	N/A	N/A
	Top Edge	1.997	N/A	1.997
	Bottom Edge	N/A	N/A	N/A
Note: 1.The value with blue color is the maximum $\Sigma SAR_{1g/10g}$ Value. 2.MAX. $\Sigma SAR_{1g/10g}$ =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}				

MAX. $\Sigma SAR_{1g} = 0.951W/kg < 1.6W/kg$ and MAX. $\Sigma SAR_{10g} = 1.997W/kg < 4W/kg$, so the Simultaneous transimition SAR with volum scan are not required for Wi-Fi and Up 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

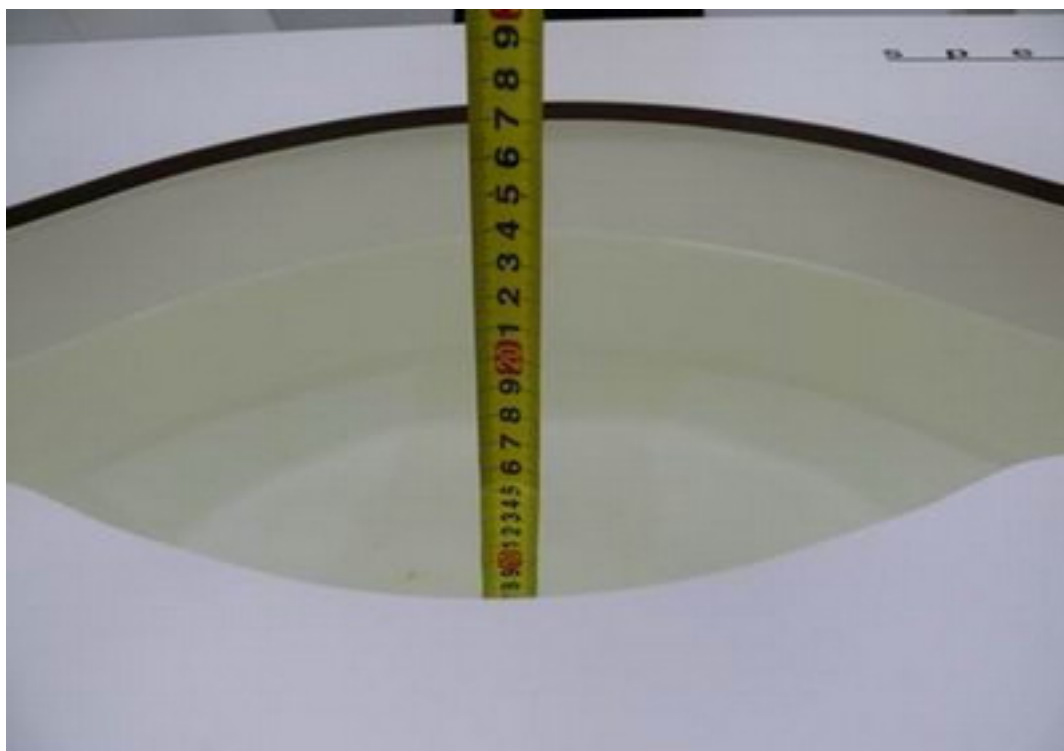


Tissue Simulating Liquids

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 5 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: 1291

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

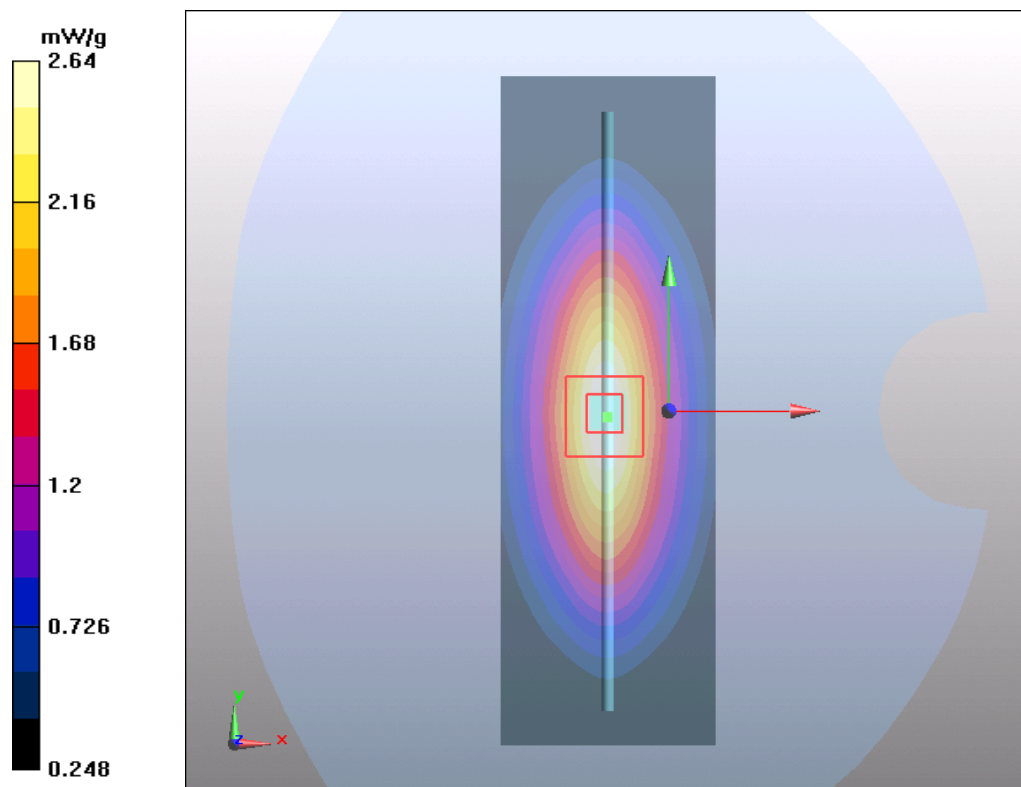
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 6 System Performance Check at 835 MHz TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: 1291

Date: 1/26/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

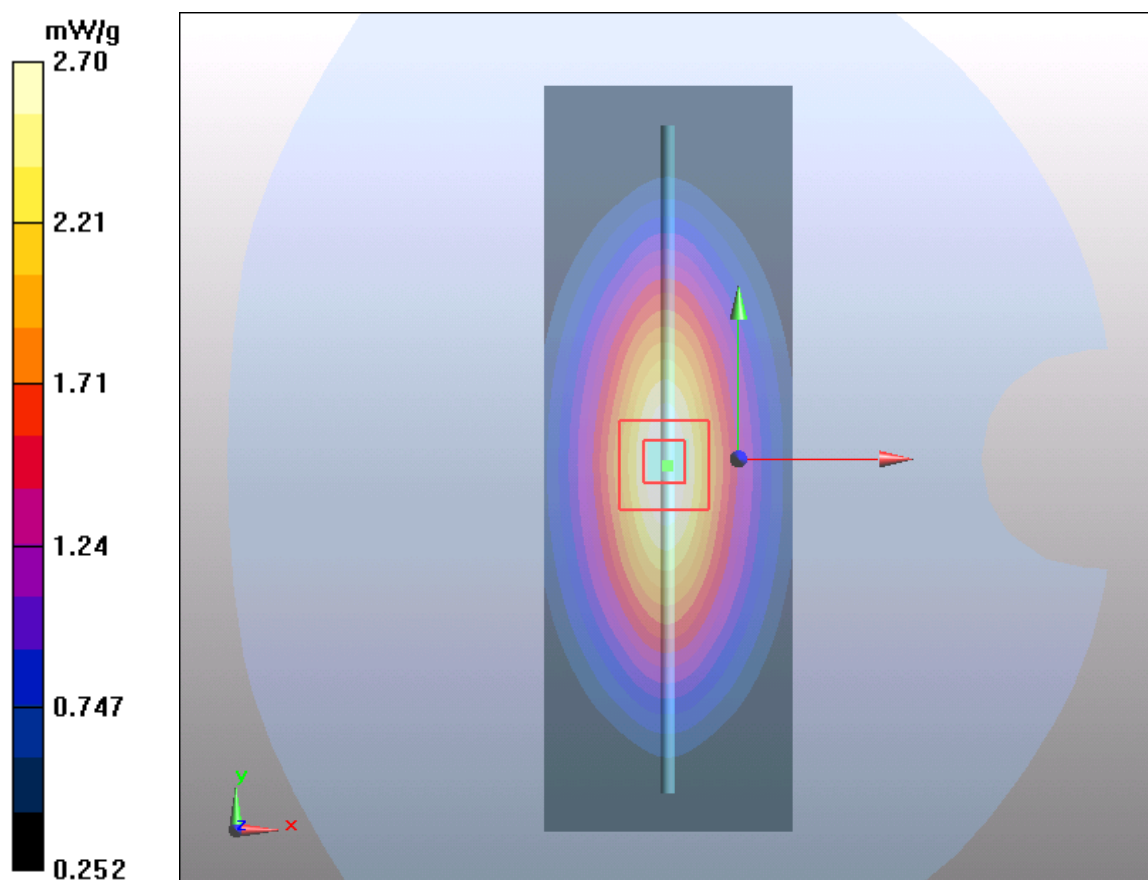
d=15mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

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 12 System Performance Check at 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1033

Date: 1/31/2021

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

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

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

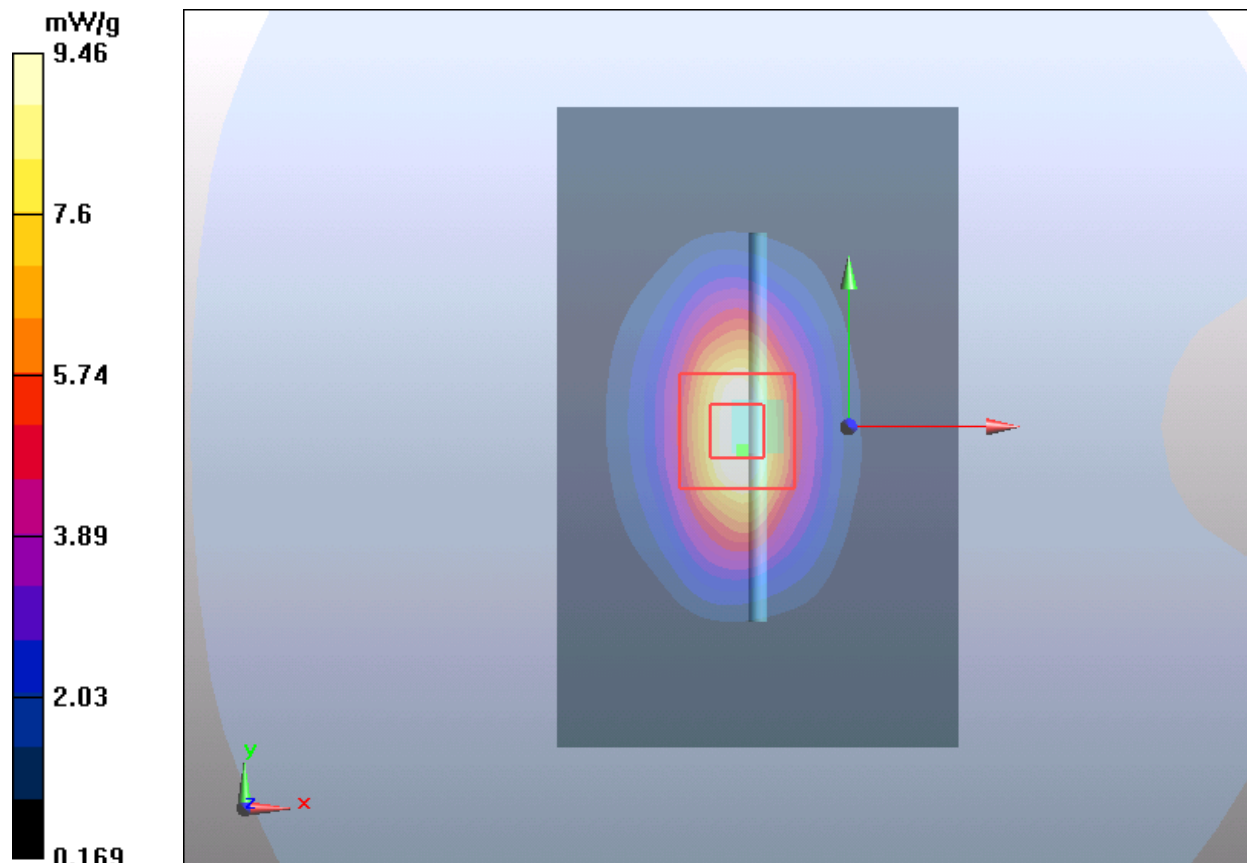
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 13 System Performance Check at 1750 MHz TSL****DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1033**

Date: 1/28/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

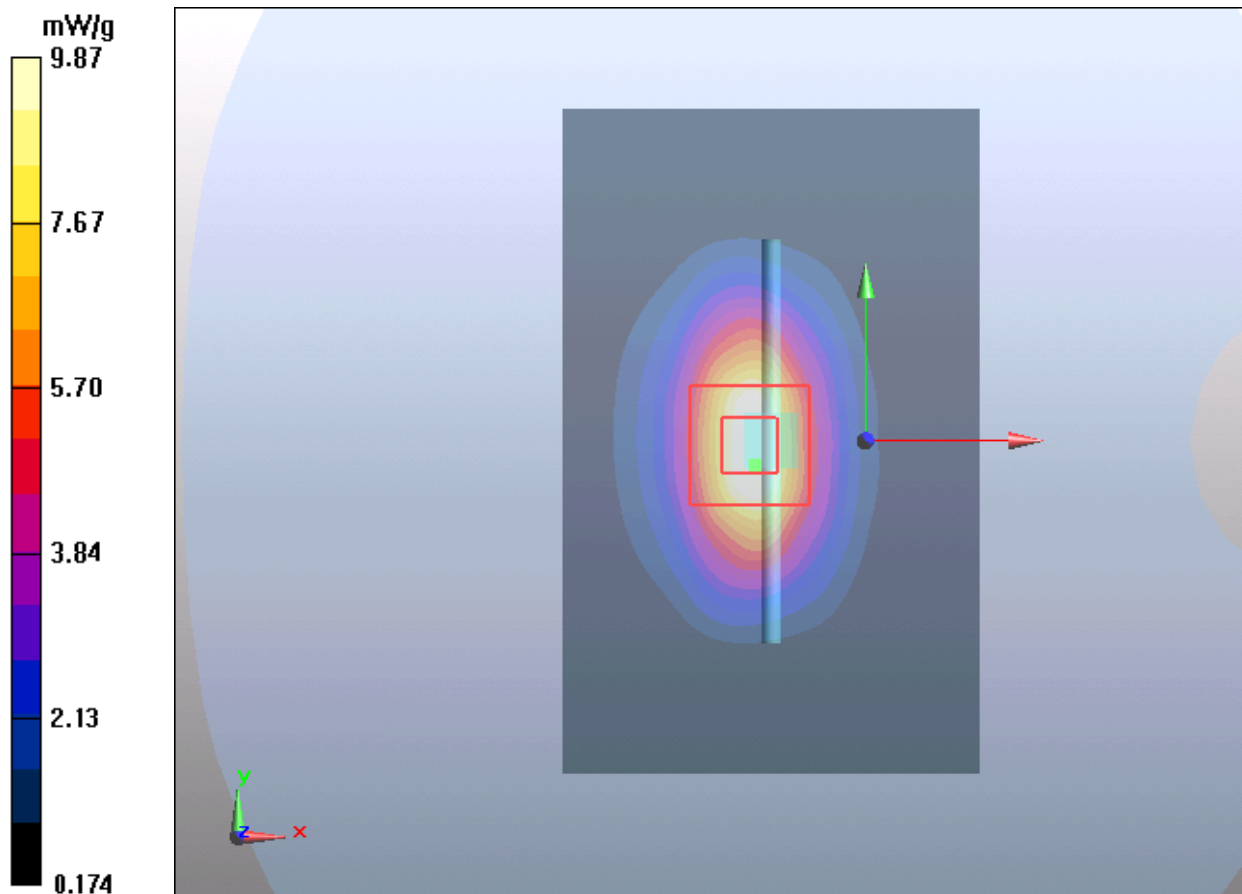
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 1750 MHz TSL

DUT: Dipole 1750 MHz; Type: D1750V2; Serial: 1033

Date: 1/27/2021

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

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 9.11 mW/g

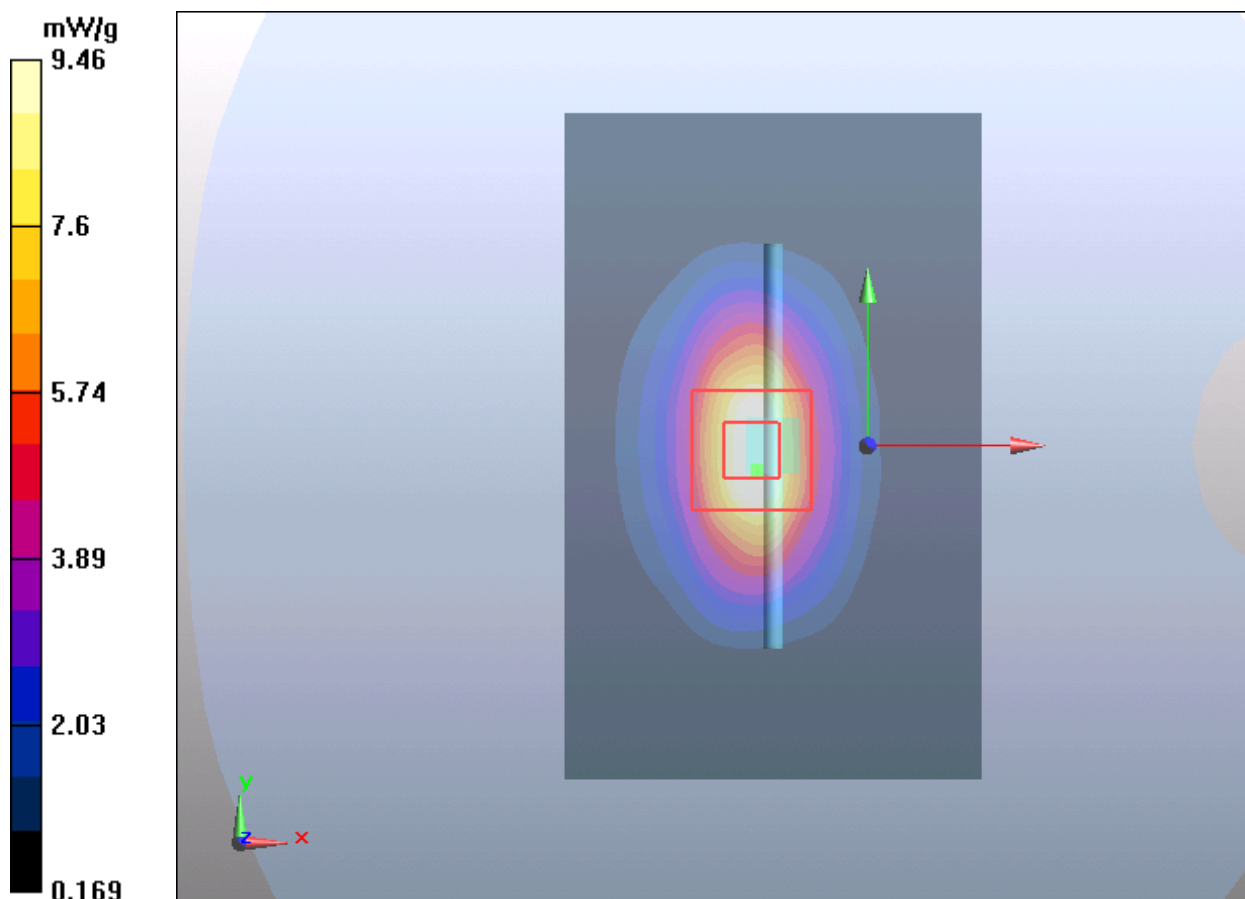
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 80 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 15.47 W/kg

SAR(1 g) = 8.96 mW/g; SAR(10 g) = 4.75 mW/g

Maximum value of SAR (measured) = 9.46 mW/g



Plot 16 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d060

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

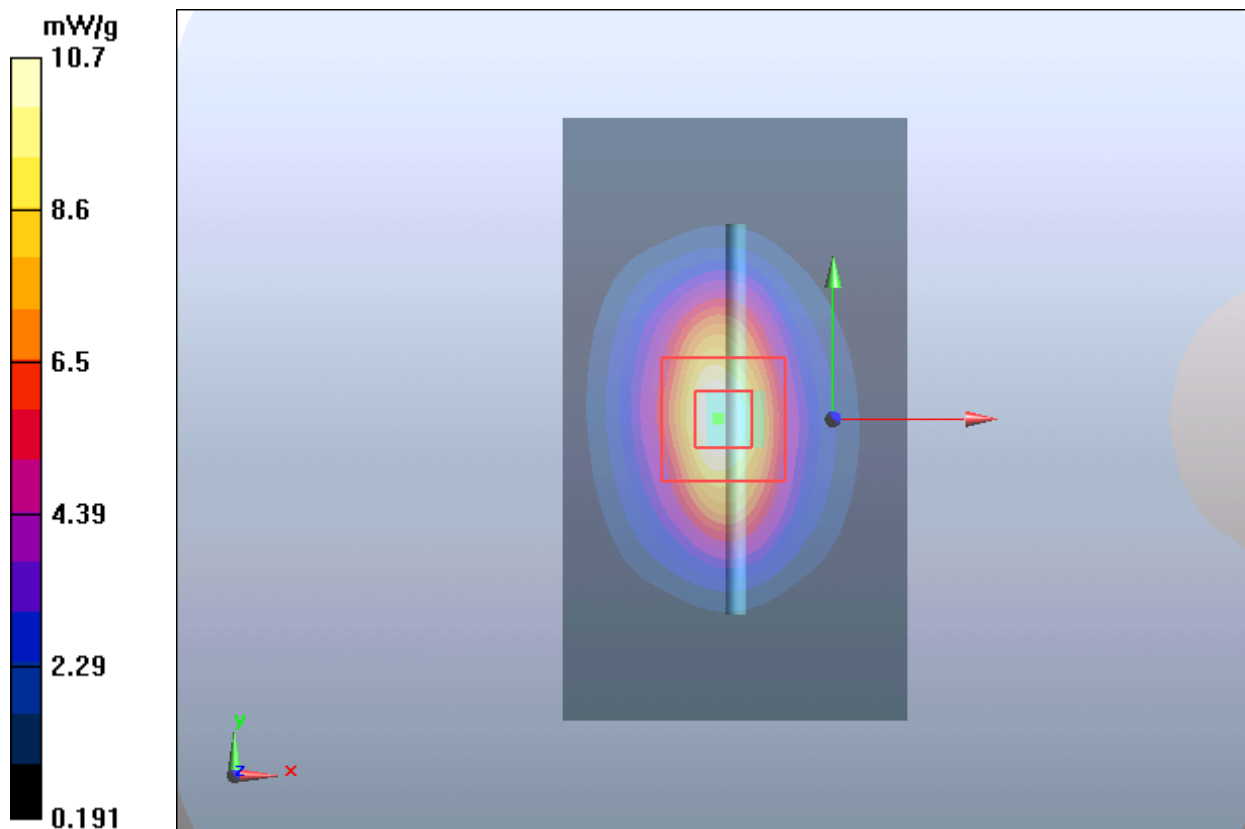
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 17 System Performance Check at 1900 MHz TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d060

Date: 1/29/2021

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

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

Ambient Temperature: 22.3 °C

Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

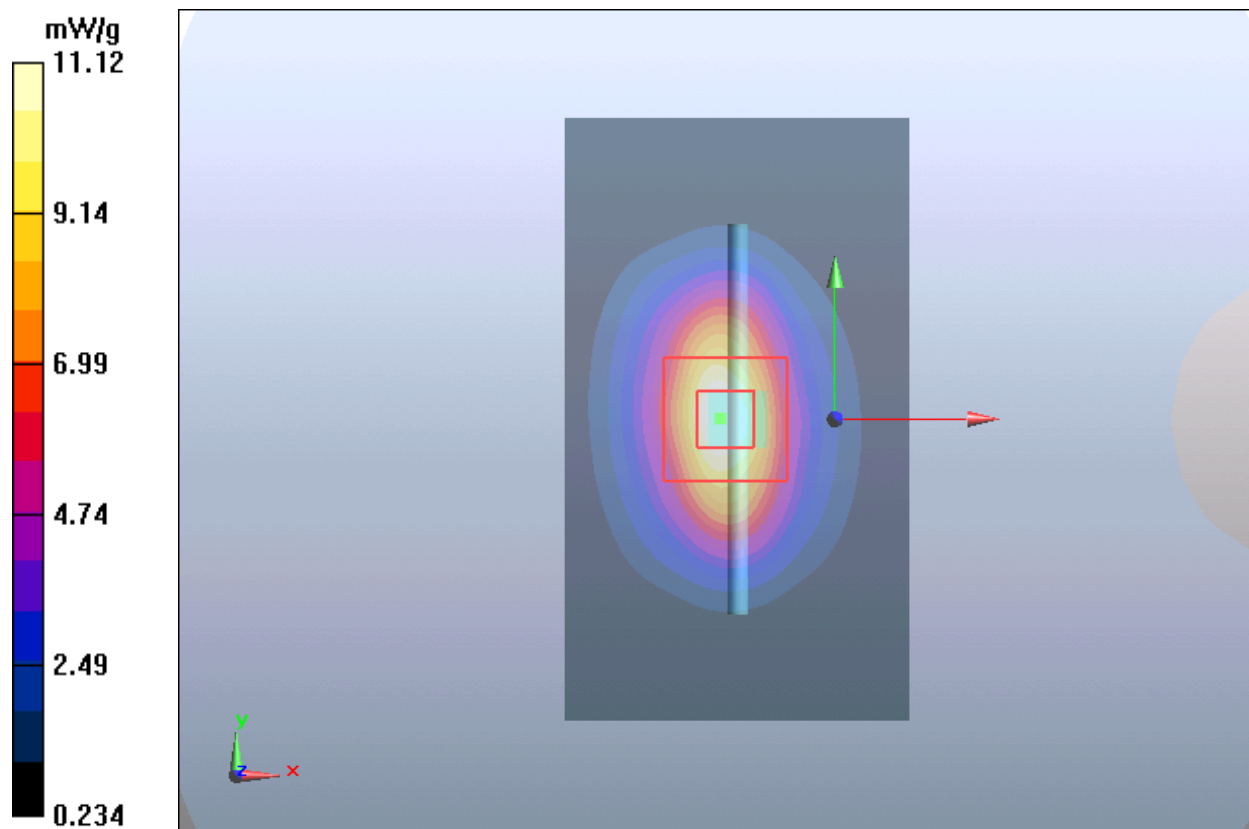
d=10mm, Pin=250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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 21 System Performance Check at 2450 MHz TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 786

Date: 2/1/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

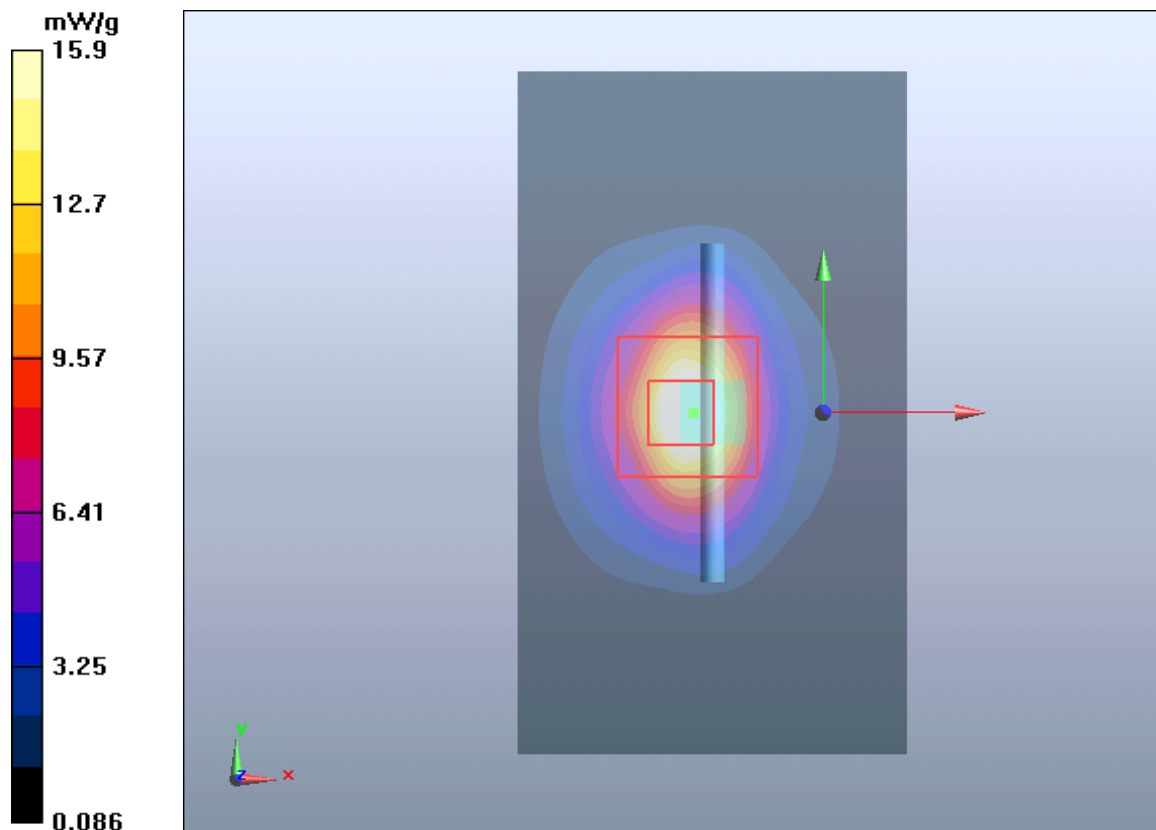
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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 23 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 1/20/2021

Communication System: CW; Frequency: 2600 MHz

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

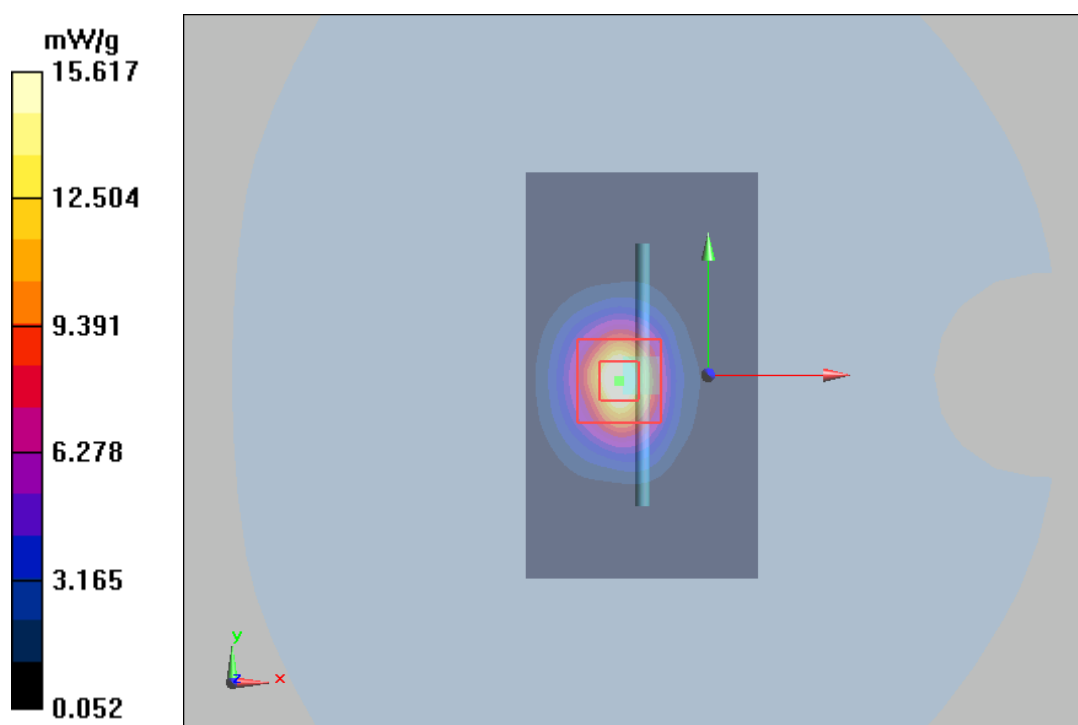
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 31.858 W/kg

SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.07 mW/g

Maximum value of SAR (measured) = 15.617 mW/g



Plot 24 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 1/21/2021

Communication System: CW; Frequency: 2600 MHz

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

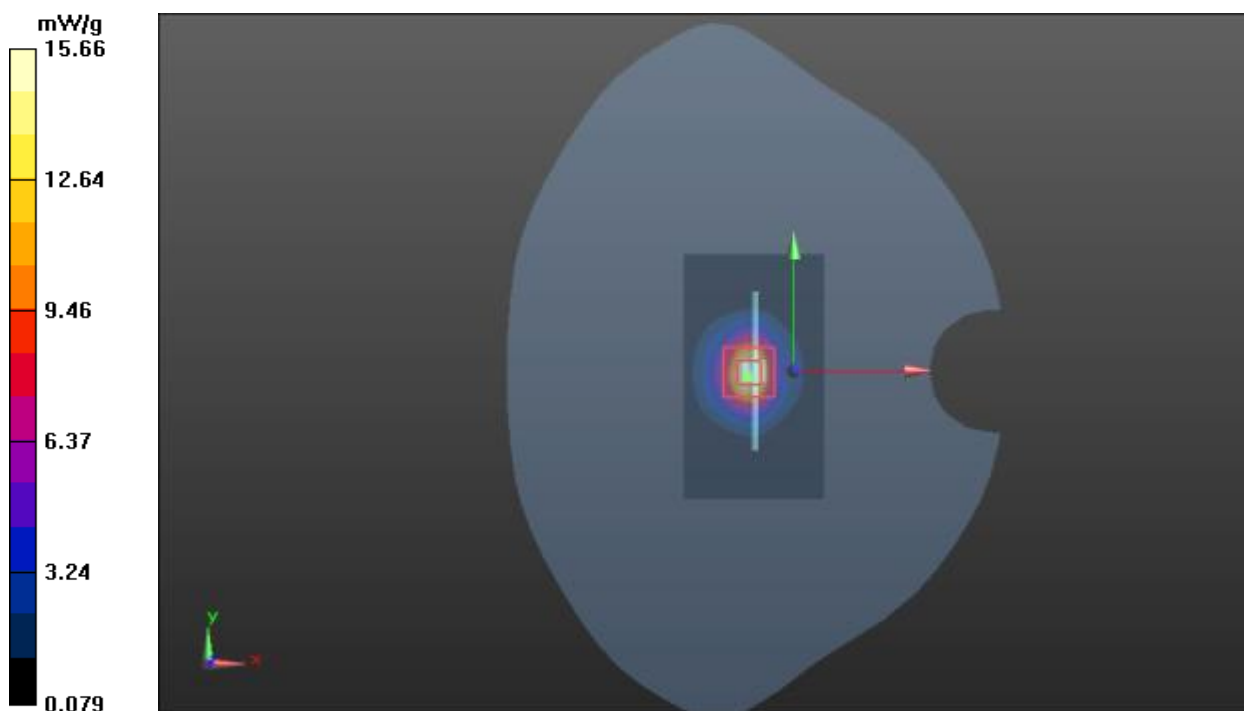
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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 11 System Performance Check at 2600 MHz TSL

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: 1025

Date: 2/9/2021

Communication System: CW; Frequency: 2600 MHz

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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

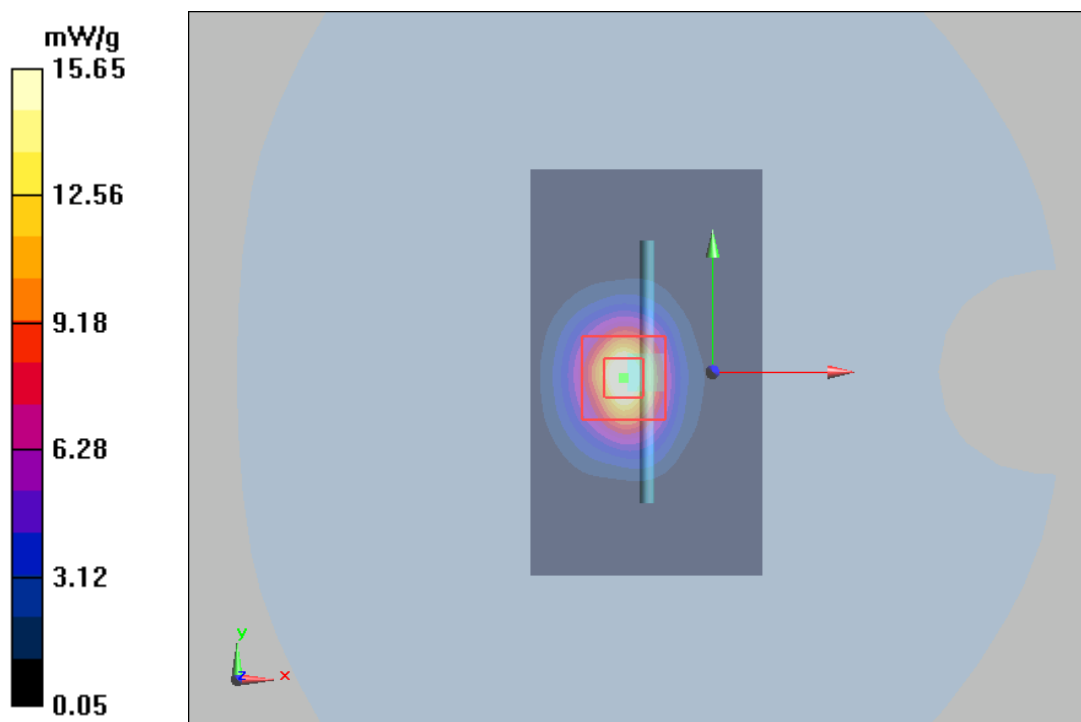
d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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



ANNEX C: Highest Graph Results

Down Antenna

Plot 36 GSM 850 Left Cheek Middle

Date: 1/25/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.178 W/kg

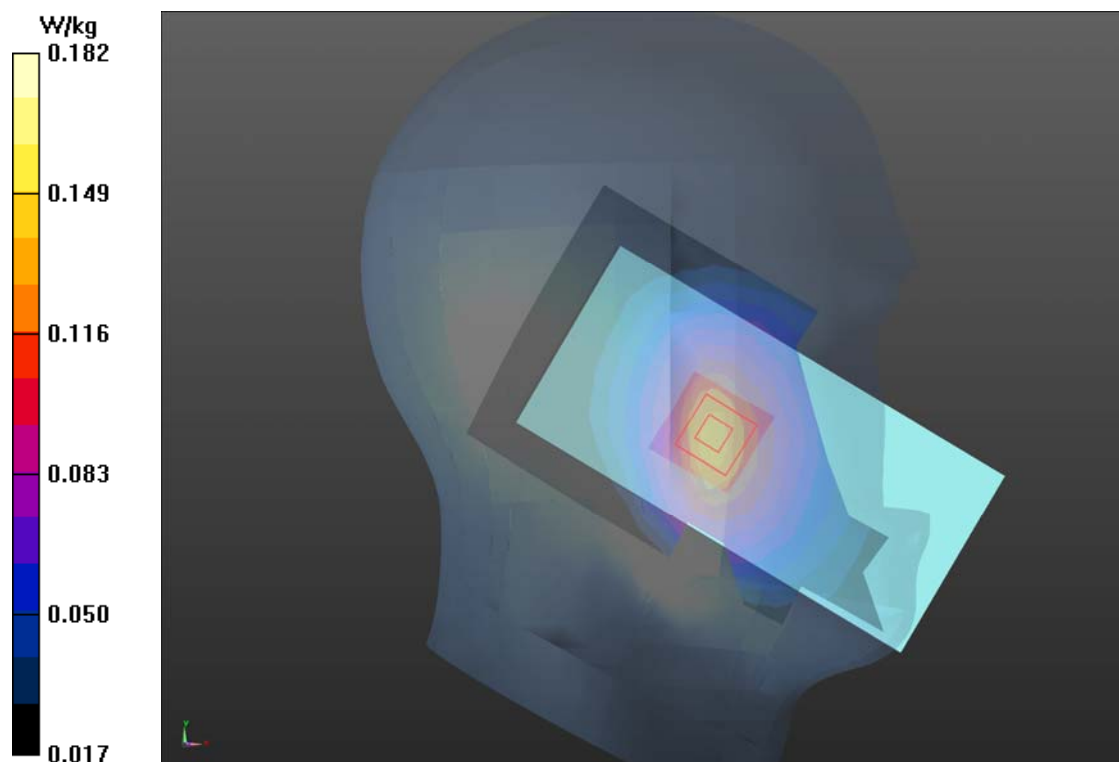
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.301 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.285 W/kg

SAR(1 g) = 0.173 W/kg; SAR(10 g) = 0.106 W/kg

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





Plot 37 GSM 850 Back Side Middle (Distance 15mm)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

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

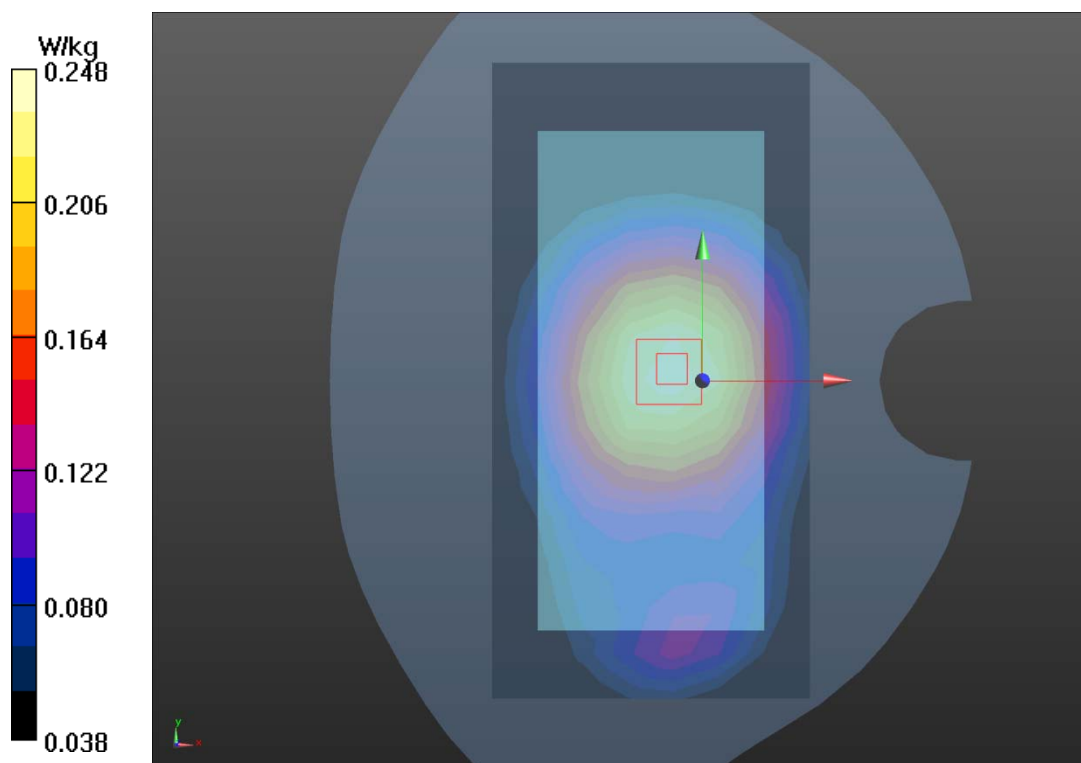
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.23 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.302 W/kg

SAR(1 g) = 0.235 W/kg; SAR(10 g) = 0.177 W/kg

Maximum value of SAR (measured) = 0.248 W/kg



Plot 38 GSM 850 GPRS (4Txslots) Back Side Middle (Distance 10mm, Battery 4)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.291 W/kg

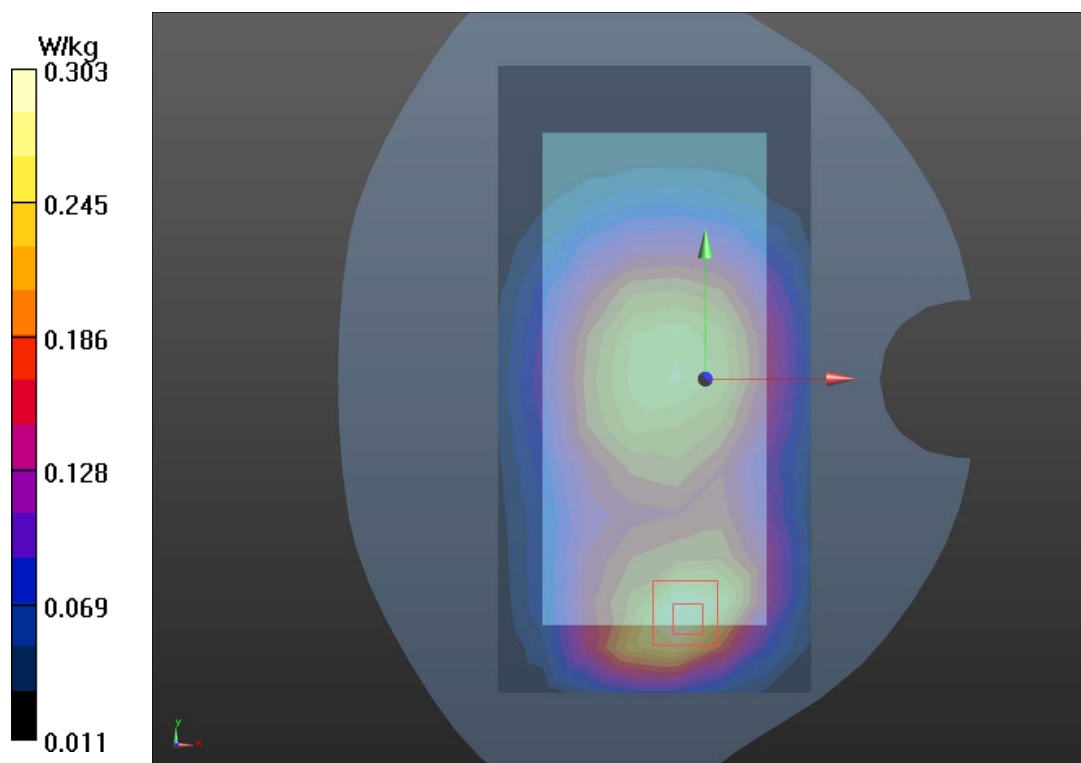
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.13 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.460 W/kg

SAR(1 g) = 0.286 W/kg; SAR(10 g) = 0.177 W/kg

Maximum value of SAR (measured) = 0.303 W/kg



Plot 39 GSM 1900 Left Cheek Middle

Date: 1/30/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.021 W/kg

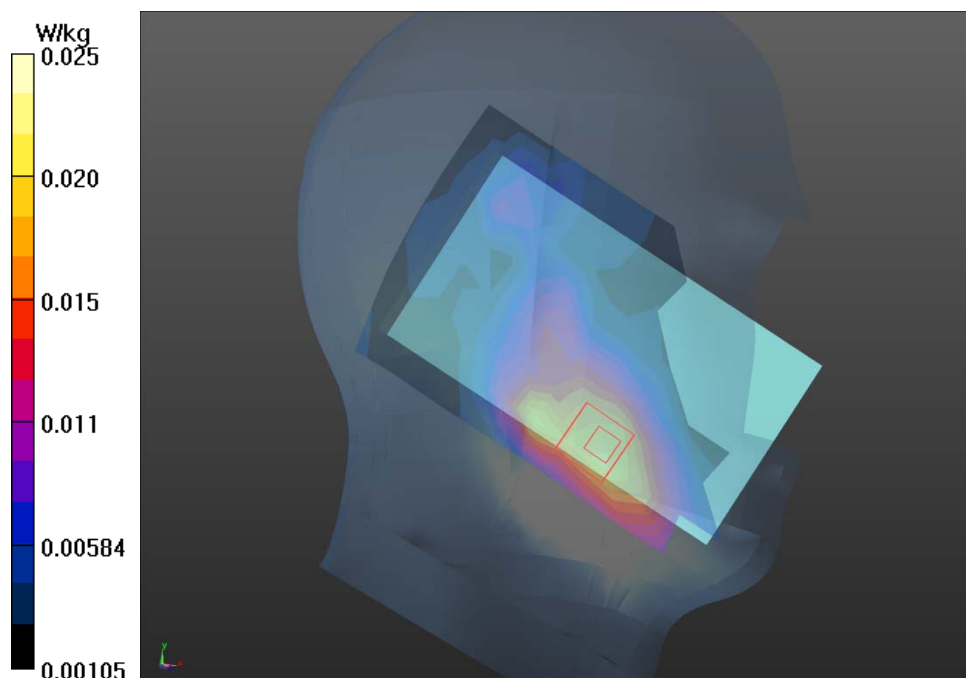
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.503 V/m; Power Drift = 0.107 dB

Peak SAR (extrapolated) = 0.035 W/kg

SAR(1 g) = 0.020 W/kg; SAR(10 g) = 0.013 W/kg

Maximum value of SAR (measured) = 0.025 W/kg



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

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.298 W/kg

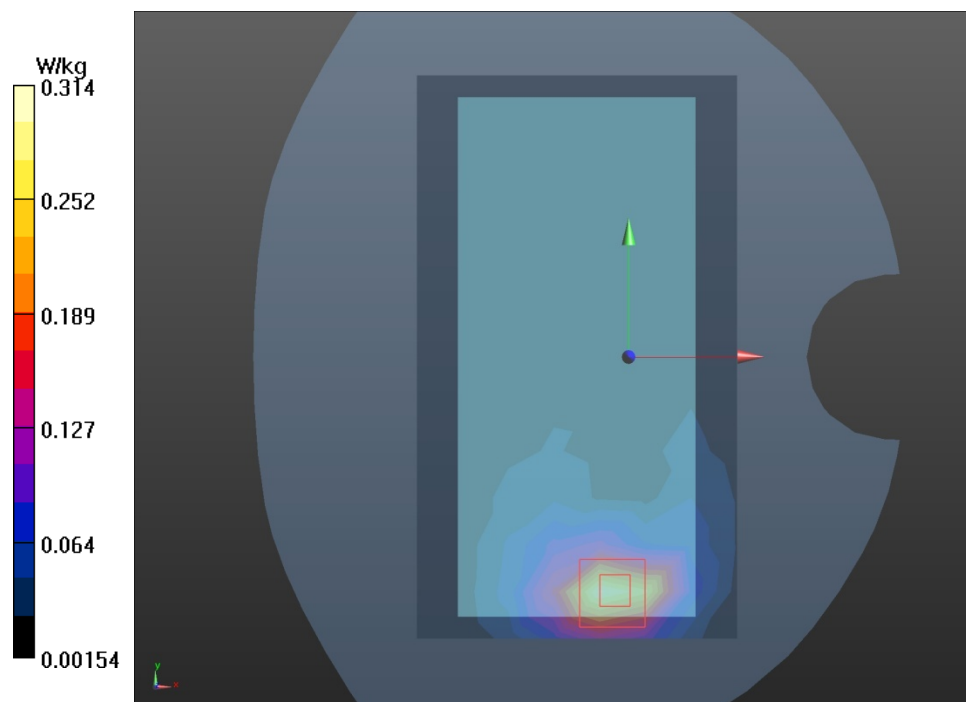
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.059 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.508 W/kg

SAR(1 g) = 0.286 W/kg; SAR(10 g) = 0.151 W/kg

Maximum value of SAR (measured) = 0.314 W/kg



Plot 41 GSM 1900 GPRS (4Txslots) Bottom Edge Middle (Distance 10mm)

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.442 W/kg

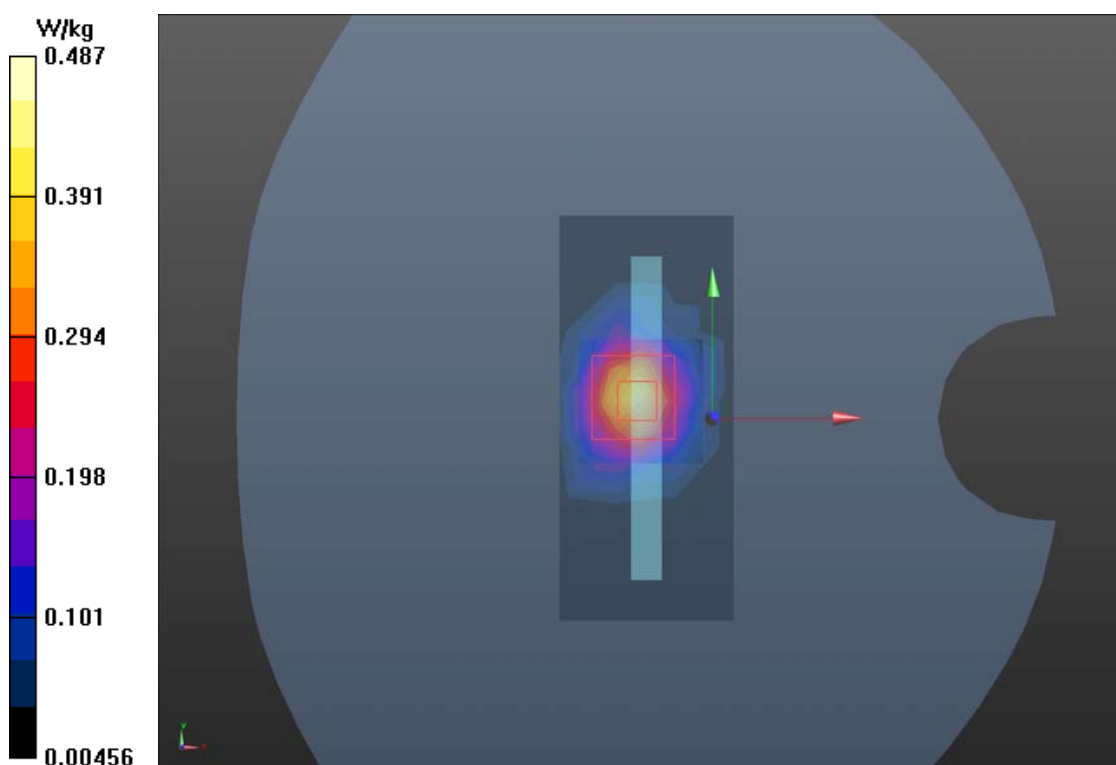
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.33 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.826 W/kg

SAR(1 g) = 0.479 W/kg; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 0.487 W/kg



Plot 42 UMTS Band II Right Cheek Middle

Date: 1/30/2021

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

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

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.0171 W/kg

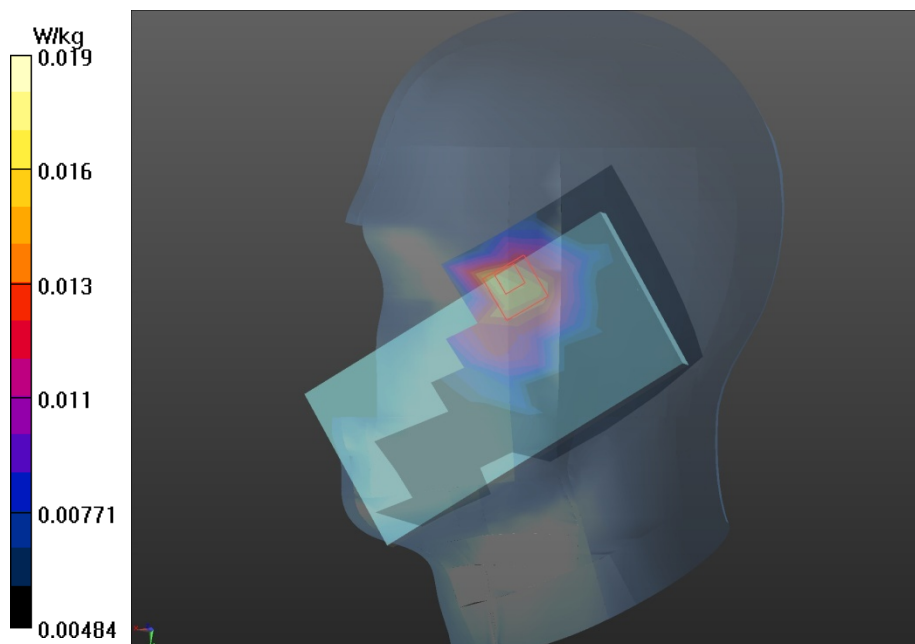
Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.664 V/m; Power Drift = 0.151 dB

Peak SAR (extrapolated) = 0.025 W/kg

SAR(1 g) = 0.016 W/kg; SAR(10 g) = 0.012 W/kg

Maximum value of SAR (measured) = 0.019 W/kg



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

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.319 W/kg

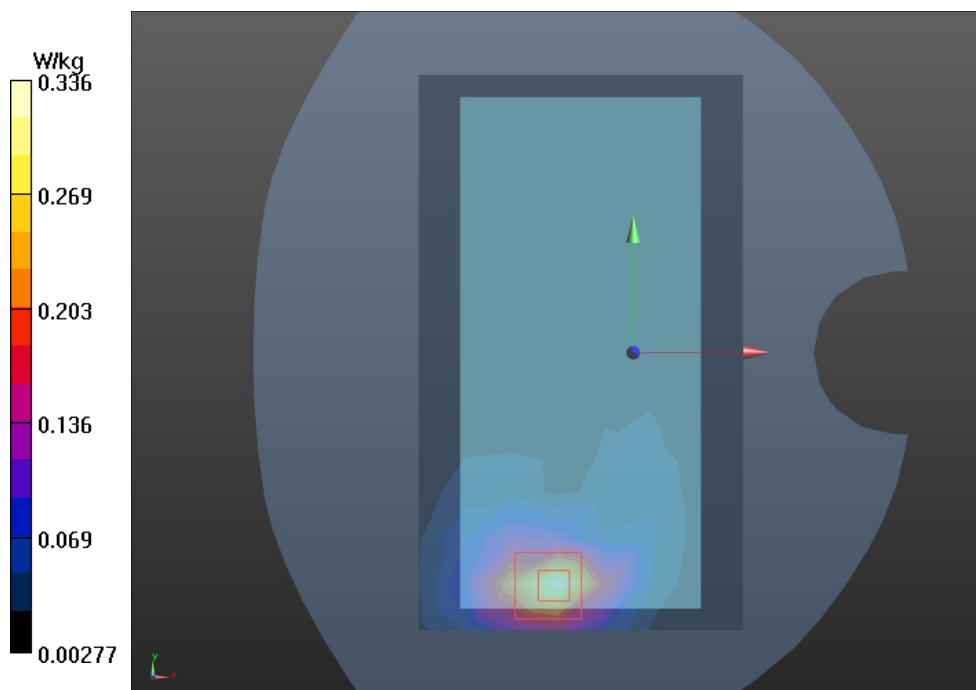
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.966 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.540 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.161 W/kg

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



Plot 44 UMTS Band II Bottom Edge Middle (Distance 10mm)

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.624 W/kg

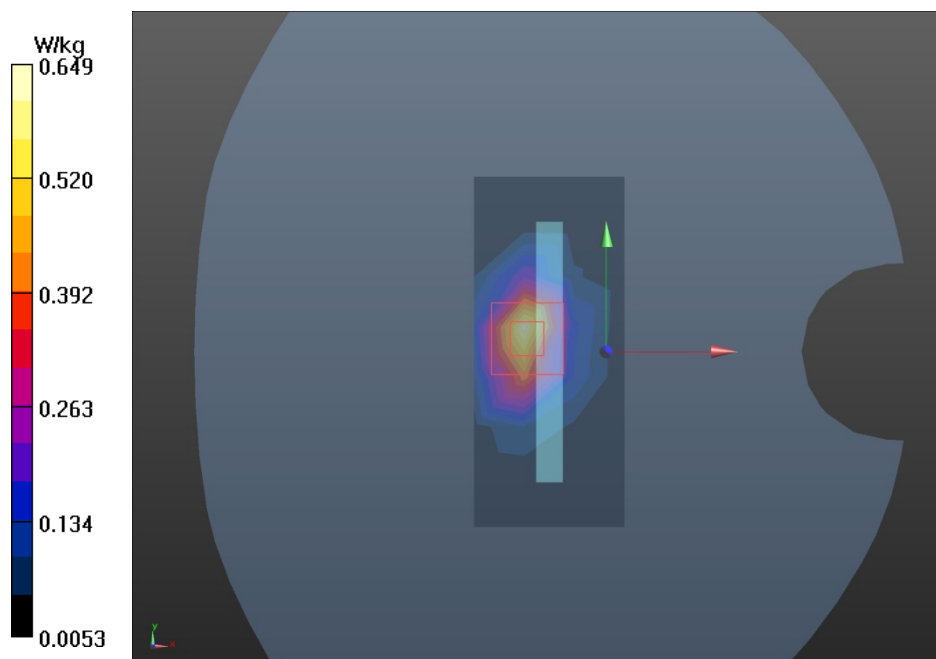
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.08 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.294 W/kg

Maximum value of SAR (measured) = 0.649 W/kg



Plot 43 UMTS Band II Back Side Middle (Distance 0mm)

Date: 1/30/2021

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.393$ S/m; $\epsilon_r = 38.344$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 2.92 W/kg

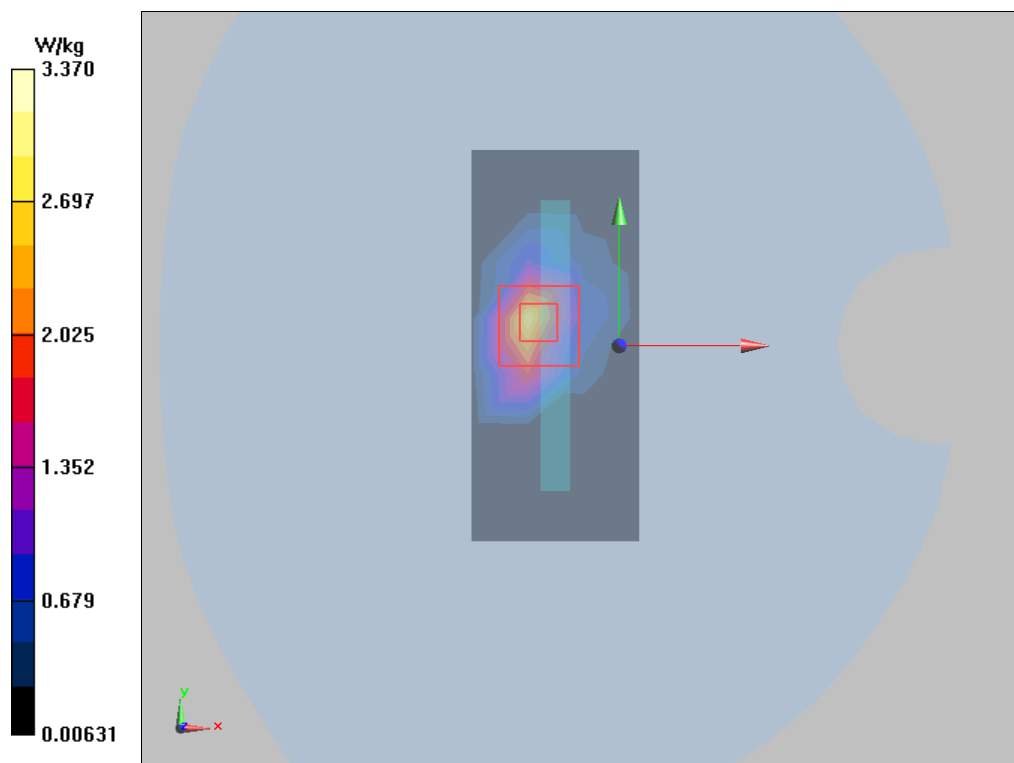
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 39.79 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 7.54 W/kg

SAR(1 g) = 2.77 W/kg; SAR(10 g) = 1.06 W/kg

Maximum value of SAR (measured) = 3.37 W/kg



Plot 46 UMTS Band IV Left Tilt Middle

Date: 1/31/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.007 W/kg

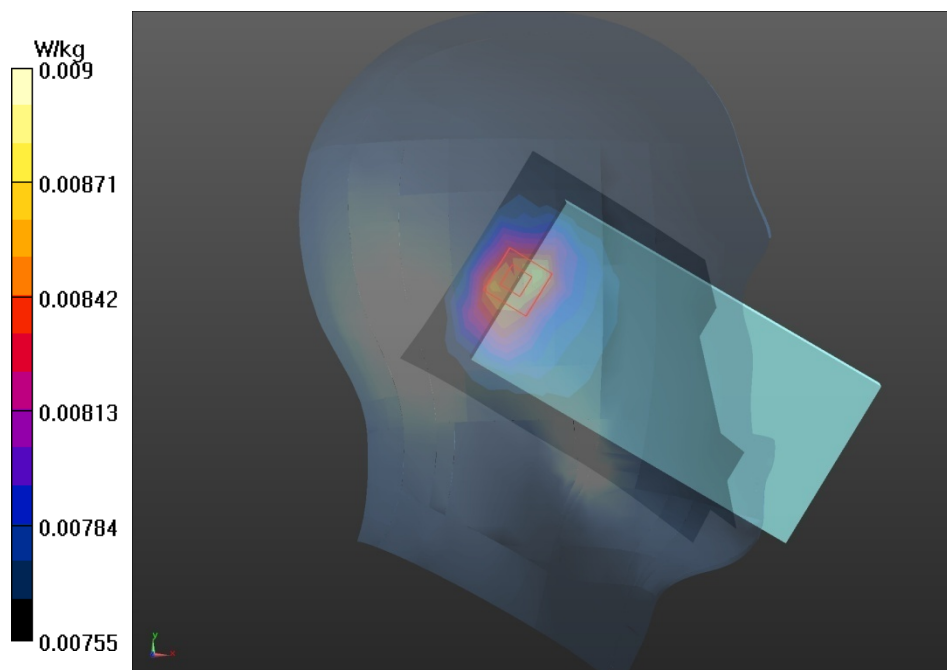
Left Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.26 V/m; Power Drift = 0.054 dB

Peak SAR (extrapolated) = 0.032 W/kg

SAR(1 g) = 0.006 W/kg; SAR(10 g) = 0.004 W/kg

Maximum value of SAR (measured) = 0.009 W/kg



Plot 47 UMTS Band IV Back Side Middle (Distance 15mm)

Date: 1/31/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

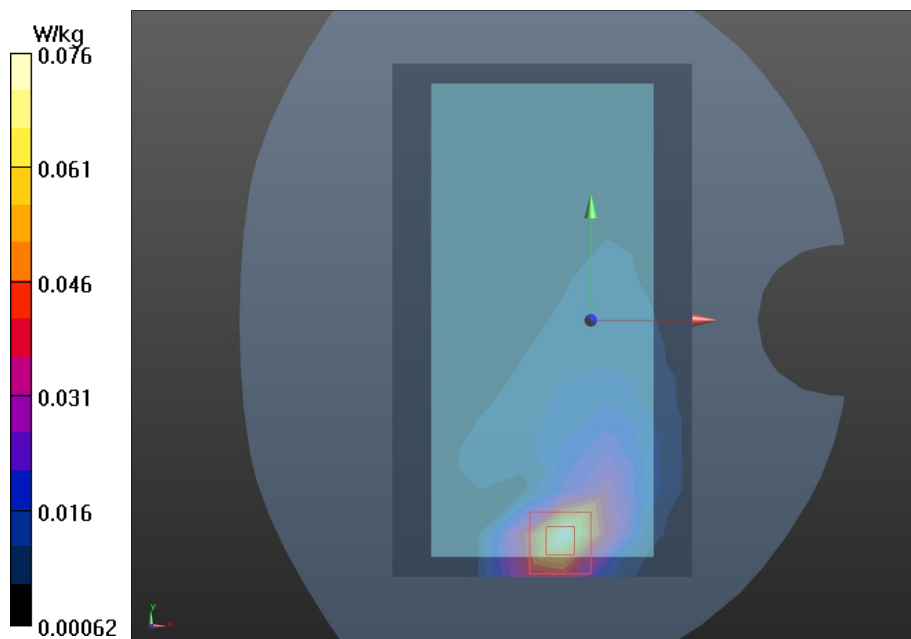
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.120 V/m; Power Drift = 0.107 dB

Peak SAR (extrapolated) = 0.125 W/kg

SAR(1 g) = 0.070 W/kg; SAR(10 g) = 0.036 W/kg

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



Plot 48 UMTS Band IV Bottom Edge Middle (Distance 10mm)

Date: 1/31/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.149 W/kg

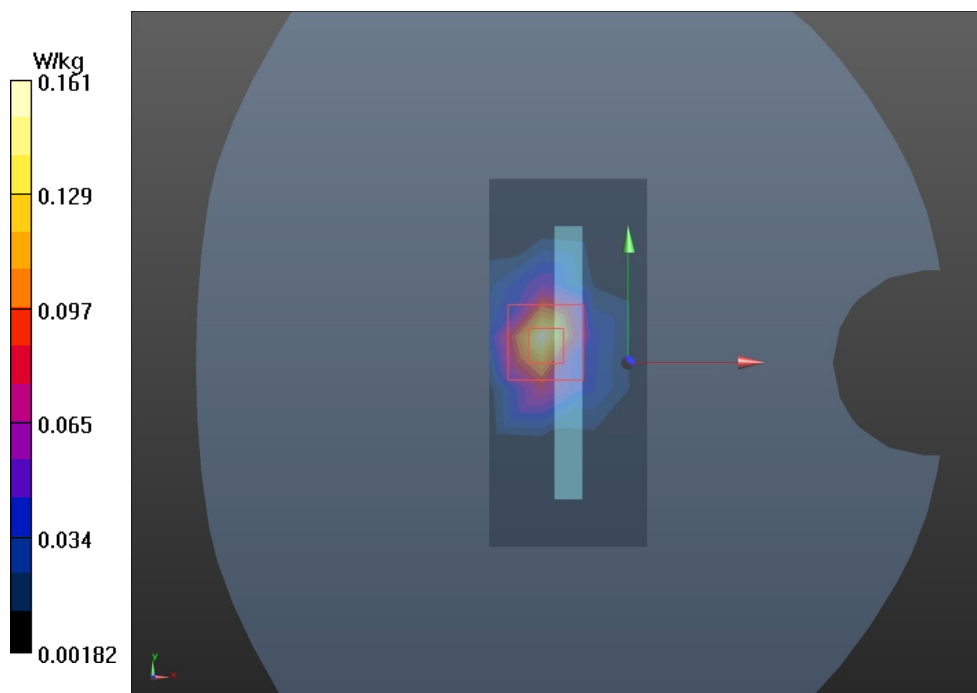
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.762 V/m; Power Drift = 0.047 dB

Peak SAR (extrapolated) = 0.280 W/kg

SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.067 W/kg

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



Plot 50 UMTS Band V Left Cheek Middle (Battery 3)

Date: 1/25/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.124 W/kg

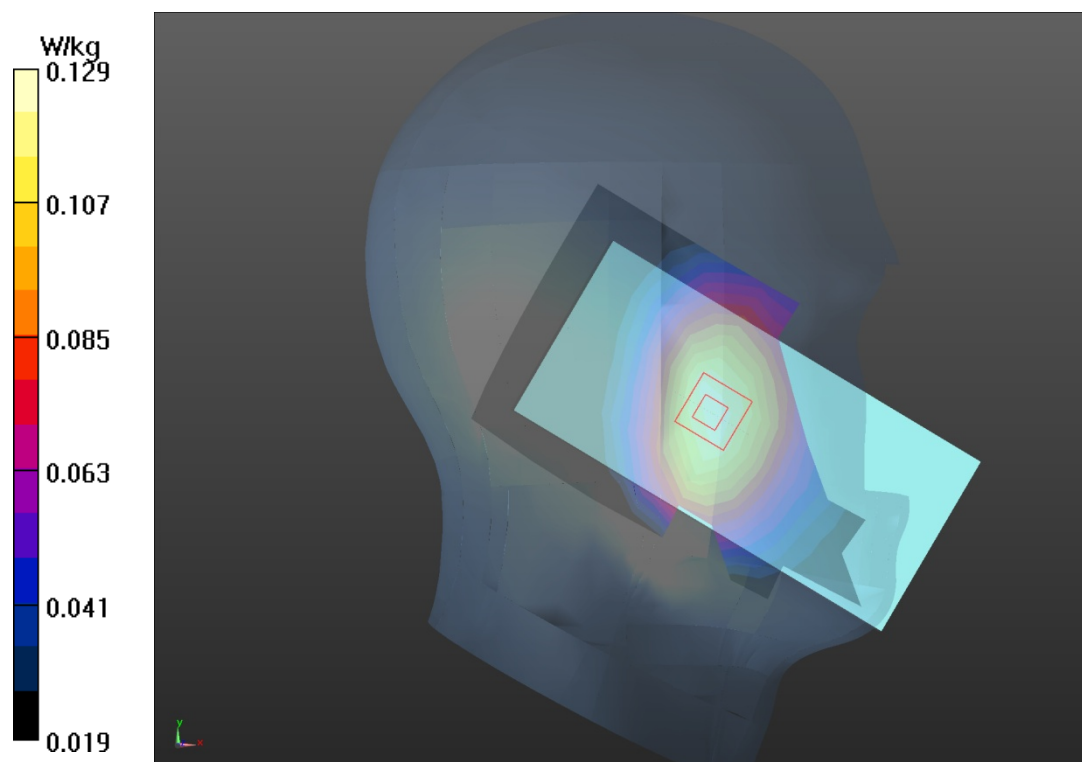
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.854 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.195 W/kg

SAR(1 g) = 0.122 W/kg; SAR(10 g) = 0.093 W/kg

Maximum value of SAR (measured) = 0.129 W/kg



Plot 51 UMTS Band V Back Side Middle (Distance 15mm)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.281 W/kg

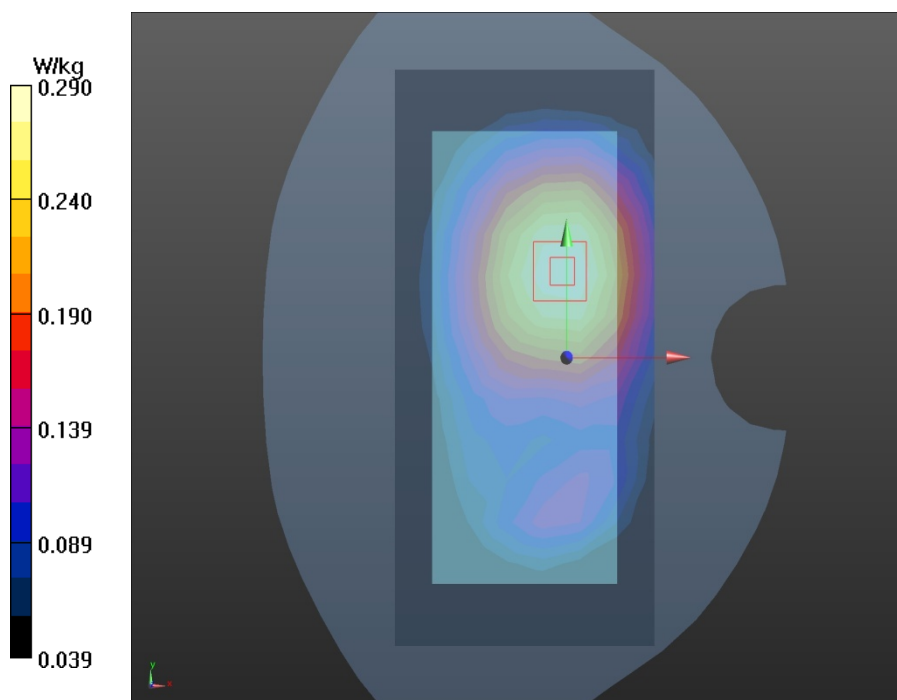
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.32 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.352 W/kg

SAR(1 g) = 0.277 W/kg; SAR(10 g) = 0.208 W/kg

Maximum value of SAR (measured) = 0.290 W/kg



Plot 52 UMTS Band V Back Side Middle (Distance 10mm)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

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

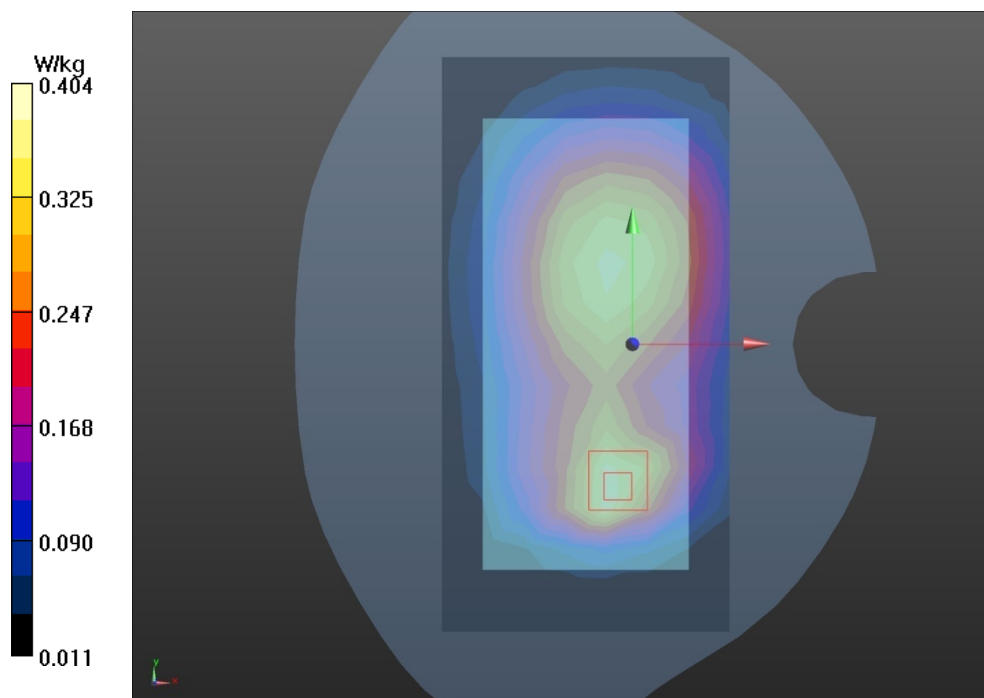
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.86 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.651 W/kg

SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.233 W/kg

Maximum value of SAR (measured) = 0.404 W/kg



Plot 53 LTE Band 2 1RB Left Cheek Middle

Date: 1/29/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.045 W/kg

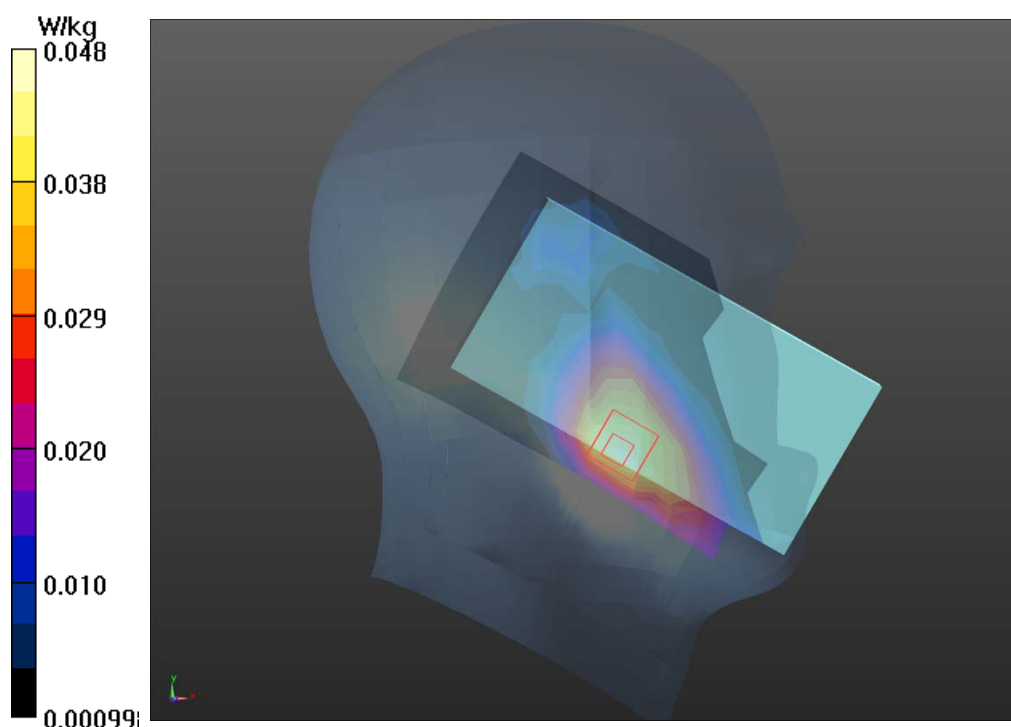
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.682 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.076 W/kg

SAR(1 g) = 0.044 W/kg; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.048 W/kg



Plot 54 LTE Band 2 1RB Back Side Middle (Distance 15mm)

Date: 1/29/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.373 W/kg

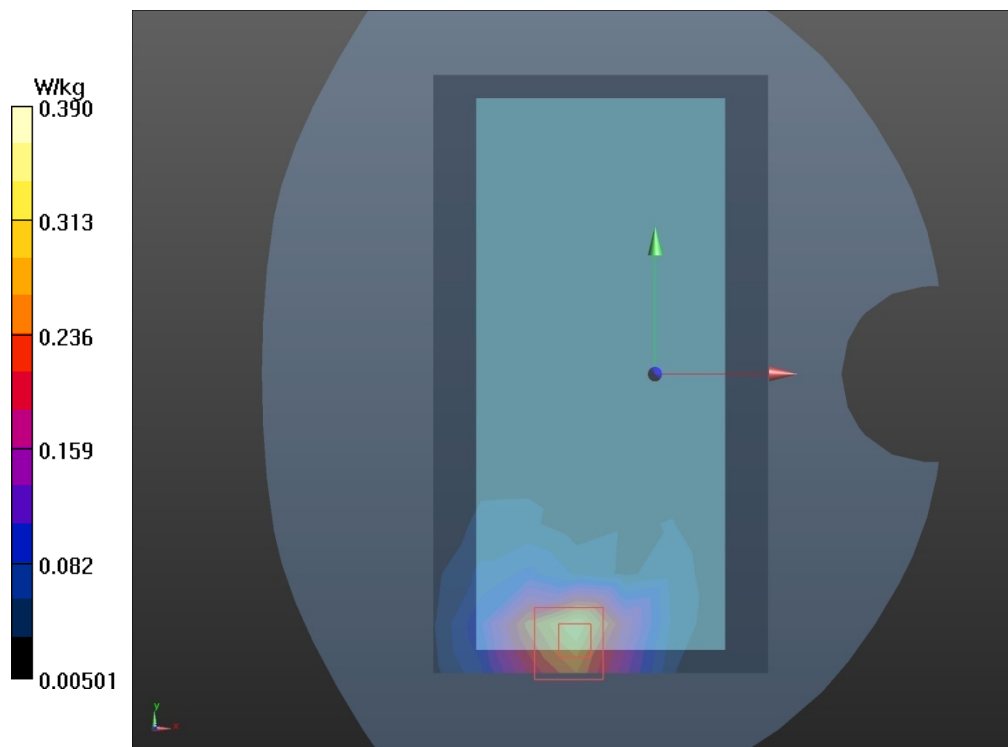
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.373 V/m; Power Drift = 0.094 dB

Peak SAR (extrapolated) = 0.618 W/kg

SAR(1 g) = 0.354 W/kg; SAR(10 g) = 0.189 W/kg

Maximum value of SAR (measured) = 0.390 W/kg



Plot 55 LTE Band 2 1RB Bottom Edge Low (Distance 10mm)

Date: 1/29/2021

Communication System: UID 0, LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.407$ S/m; $\epsilon_r = 39.071$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.665 W/kg

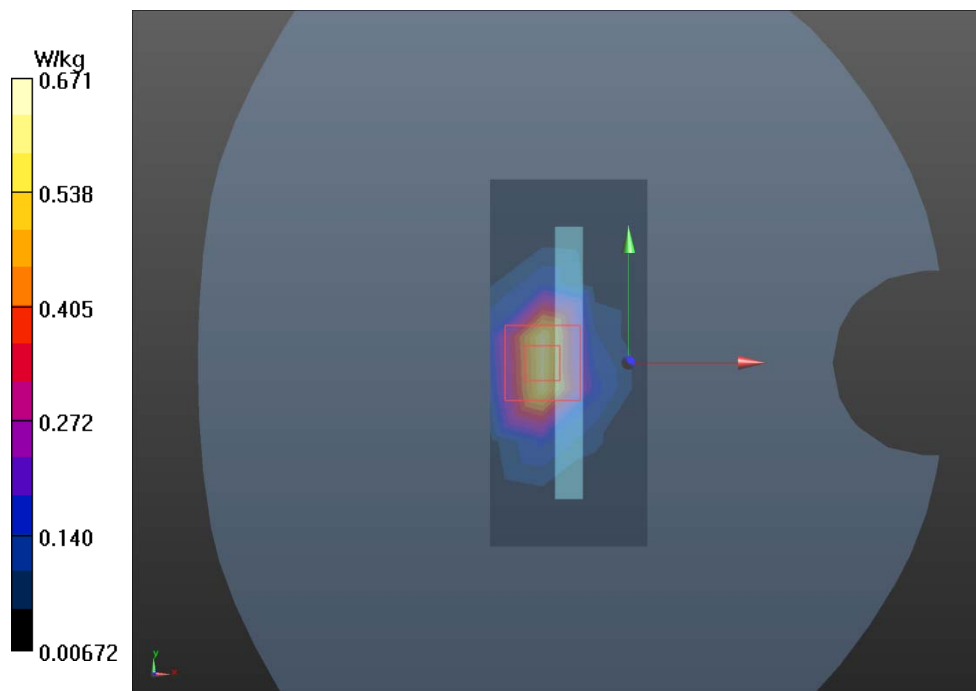
Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.06 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.303 W/kg

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



Plot 54 LTE Band 2 1RB Bottom Edge High (Distance 0mm)

Date: 1/29/2021

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.408$ S/m; $\epsilon_r = 38.294$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.02 W/kg

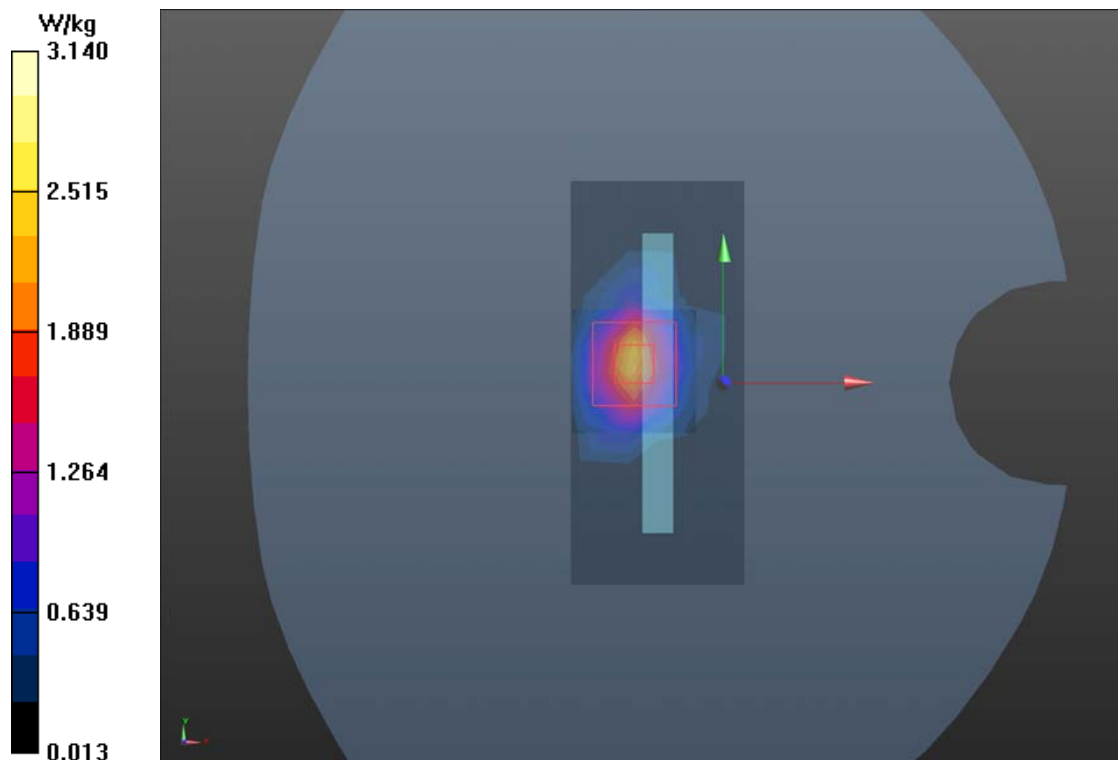
Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.24 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 5.99 W/kg

SAR(1 g) = 2.92 W/kg; SAR(10 g) = 1.29 W/kg

Maximum value of SAR (measured) = 3.14 W/kg



Plot 57 LTE Band 4 1RB Left Cheek Middle

Date: 1/28/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.0103 W/kg

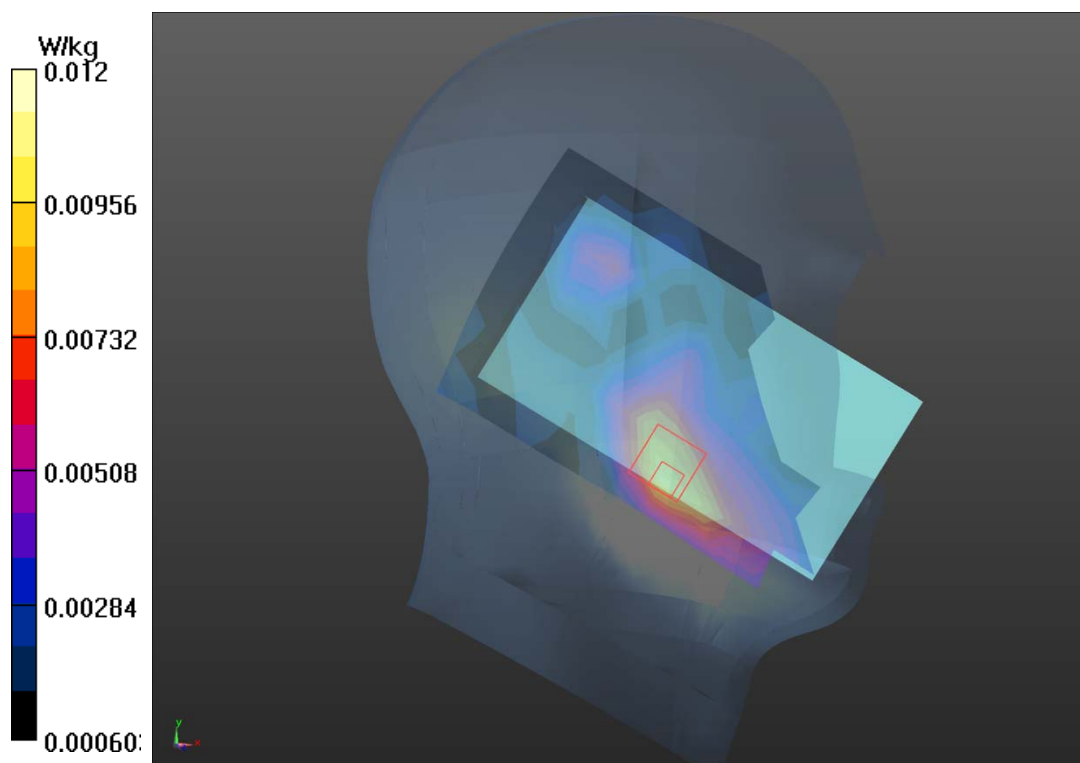
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.289 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.019 W/kg

SAR(1 g) = 0.010 W/kg; SAR(10 g) = 0.006 W/kg

Maximum value of SAR (measured) = 0.012 W/kg



Plot 58 LTE Band 4 1RB Back Side Middle (Distance 15mm)

Date: 1/28/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

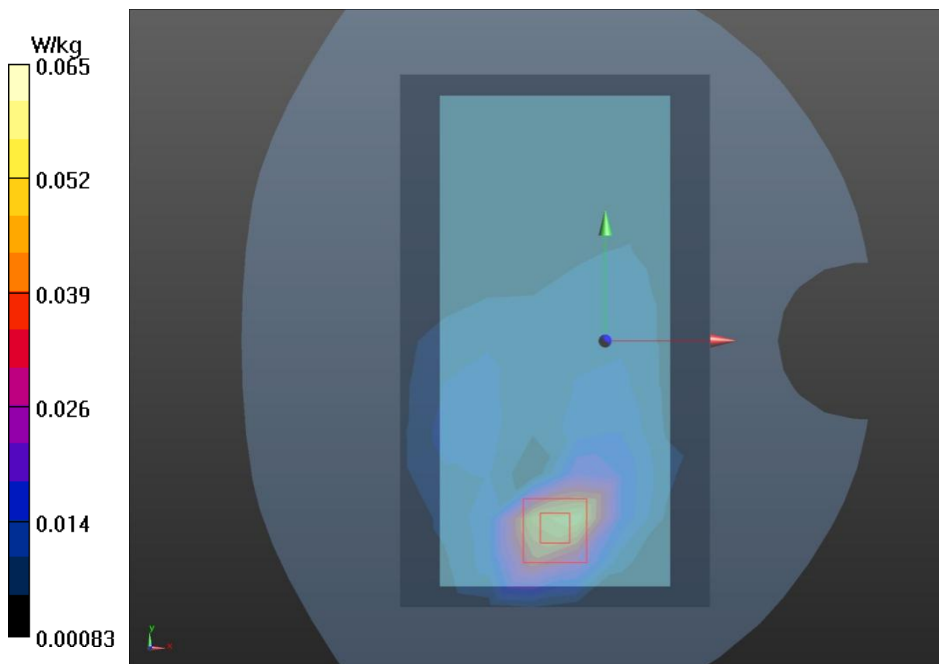
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.112 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.102 W/kg

SAR(1 g) = 0.057 W/kg; SAR(10 g) = 0.029 W/kg

Maximum value of SAR (measured) = 0.065 W/kg



Plot 59 LTE Band 4 50%RB Bottom Edge Middle (Distance 10mm)

Date: 1/28/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.269 W/kg

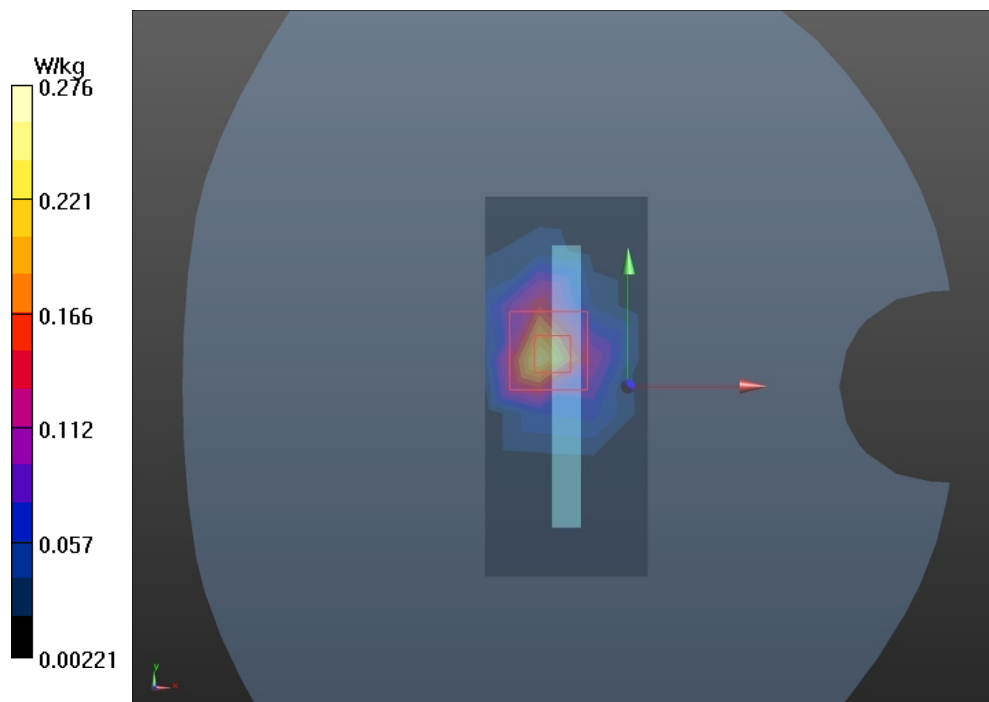
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.79 V/m; Power Drift = 0.120 dB

Peak SAR (extrapolated) = 0.367 W/kg

SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 0.276 W/kg



Plot 60 LTE Band 5 1RB Right Cheek Low

Date: 1/26/2021

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

Medium parameters used: $f = 829$ MHz; $\sigma = 0.917$ S/m; $\epsilon_r = 42.181$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

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

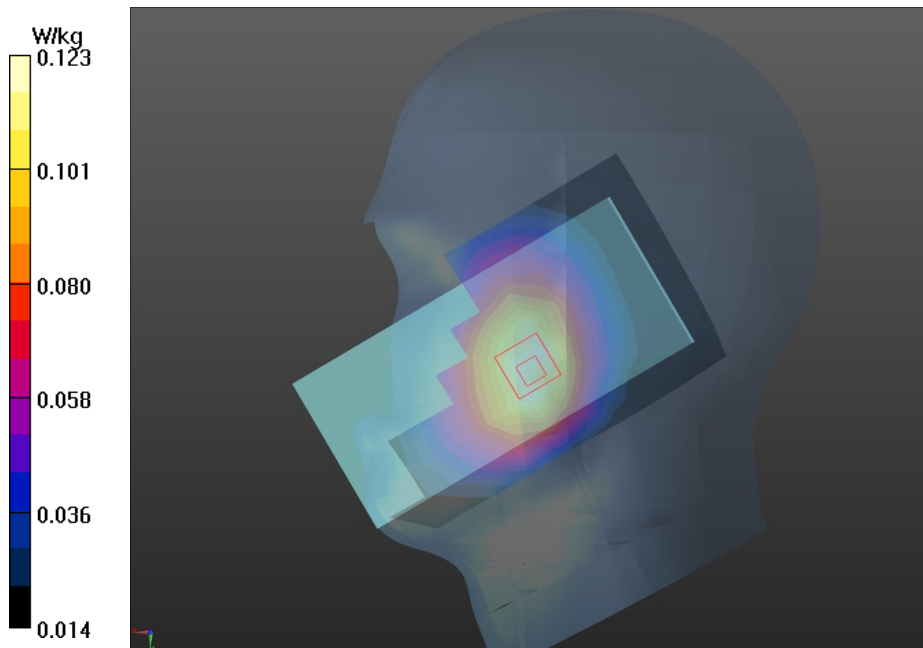
Right Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.757 V/m; Power Drift = -0.078 dB

Peak SAR (extrapolated) = 0.173 W/kg

SAR(1 g) = 0.119 W/kg; SAR(10 g) = 0.090 W/kg

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



Plot 61 LTE Band 5 1RB Back Side Low (Distance 15mm)

Date: 1/26/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

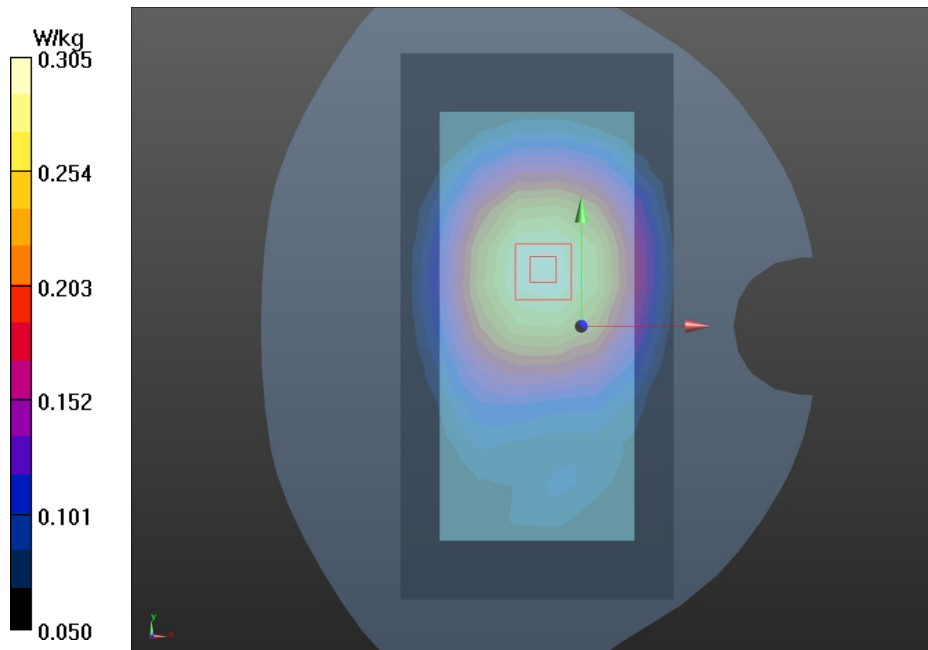
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.78 V/m ; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.362 W/kg

SAR(1 g) = 0.291 W/kg ; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 0.305 W/kg



Plot 62 LTE Band 5 1RB Back Side Low (Distance 10mm)

Date: 1/26/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

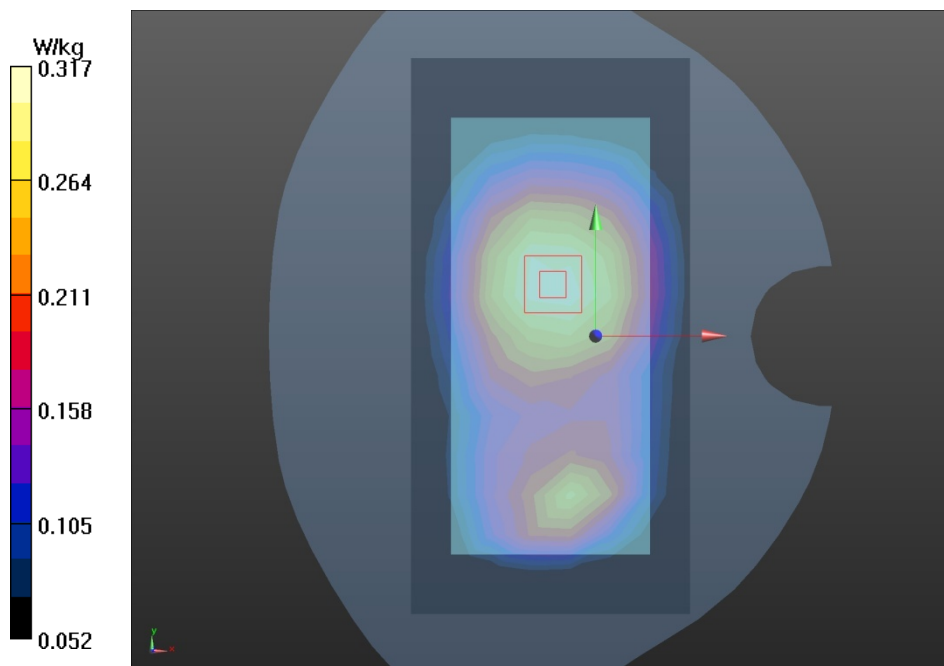
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.89 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.376 W/kg

SAR(1 g) = 0.303 W/kg ; SAR(10 g) = 0.232 W/kg

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



Plot 63 LTE Band 7 1RB Left Cheek Middle

Date: 1/20/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.101 W/kg

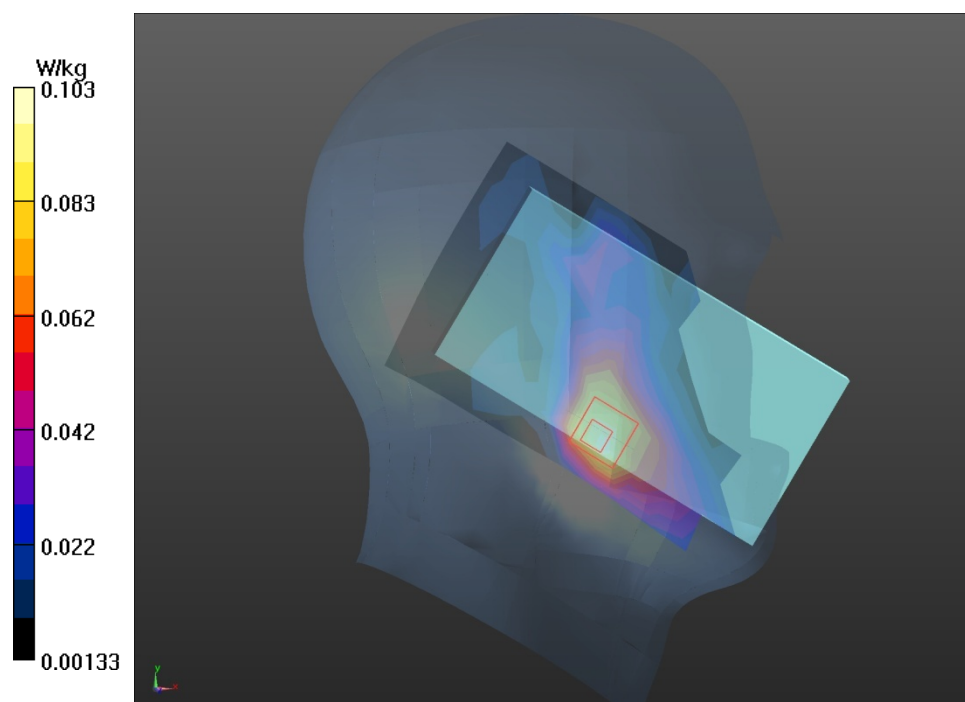
Left Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.8510 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 0.208 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.052 W/kg

Maximum value of SAR (measured) = 0.103 W/kg



Plot 64 LTE Band 7 50%RB Back Side Middle (Distance 15mm)

Date: 1/20/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.218 W/kg

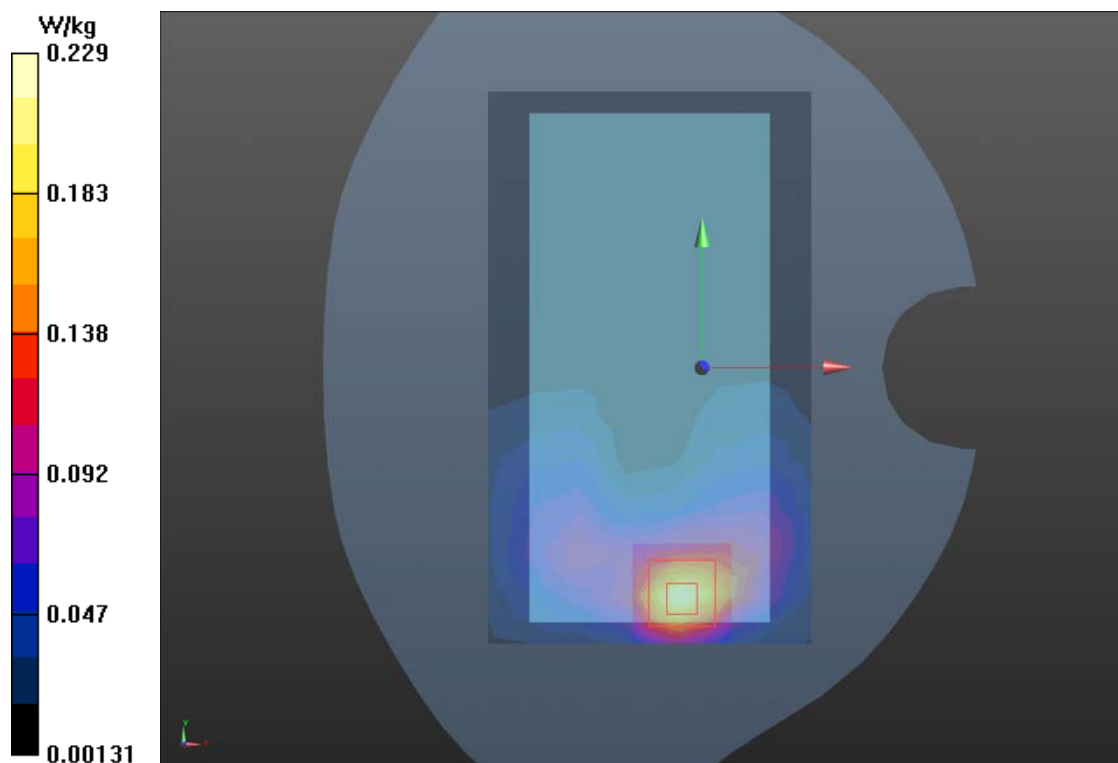
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.561 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 0.488 W/kg

SAR(1 g) = 0.214 W/kg; SAR(10 g) = 0.114 W/kg

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



Plot 65 LTE Band 7 1RB Back Side Middle(Distance 10mm)

Date: 1/20/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.389 W/kg

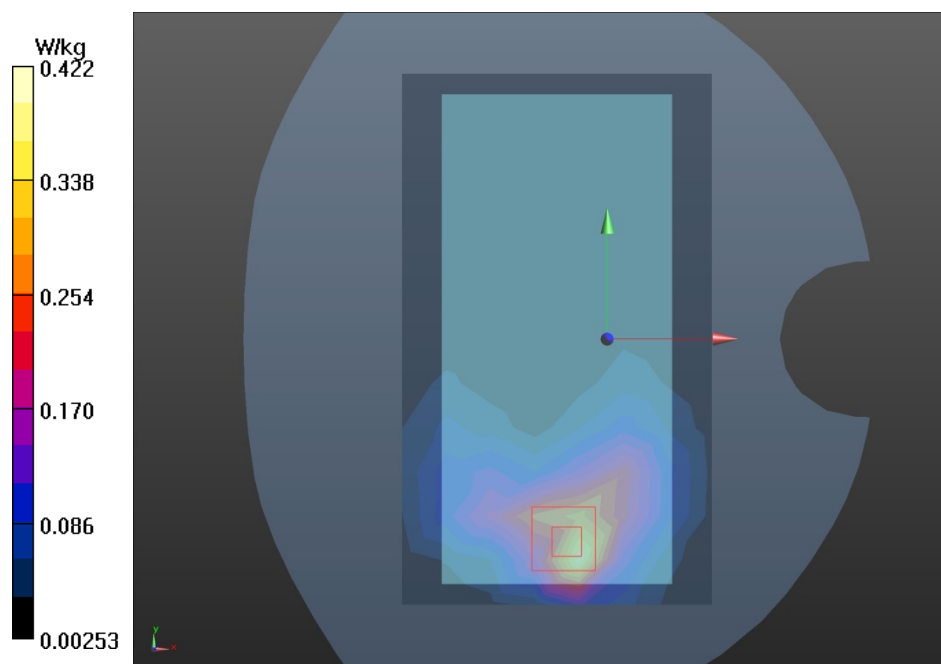
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.6080 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.914 W/kg

SAR(1 g) = 0.385 W/kg; SAR(10 g) = 0.174 W/kg

Maximum value of SAR (measured) = 0.422 W/kg



Plot 75 LTE Band 38 1RB Left Cheek High

Date: 1/21/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0598 W/kg

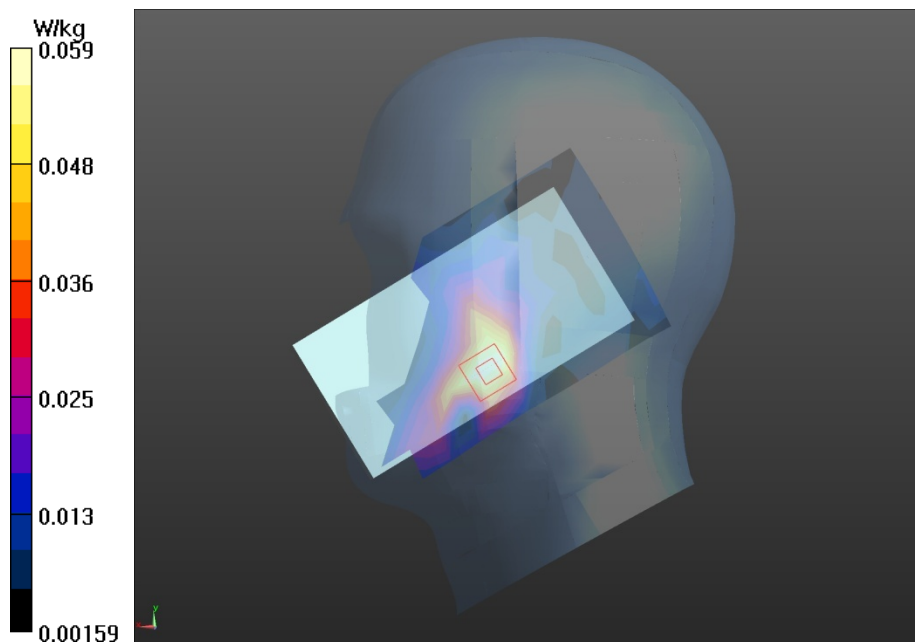
Left Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.713 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.119 W/kg

SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.030 W/kg

Maximum value of SAR (measured) = 0.059 W/kg



Plot 76 LTE Band 38 1RB Back Side High (Distance 15mm)

Date: 1/21/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.386 W/kg

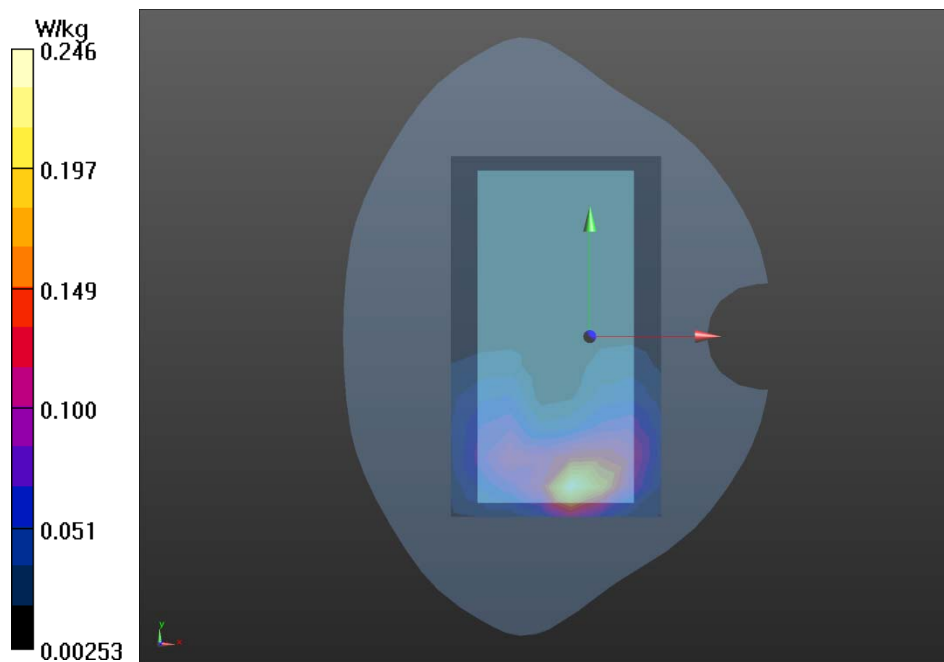
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.6410 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 0.497 W/kg

SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.056 W/kg

Maximum value of SAR (measured) = 0.246 W/kg



Plot 77 LTE Band 38 1RB Back Side High (Distance 10mm)

Date: 1/21/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.12 (7470)

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

Maximum value of SAR (measured) = 0.359 W/kg

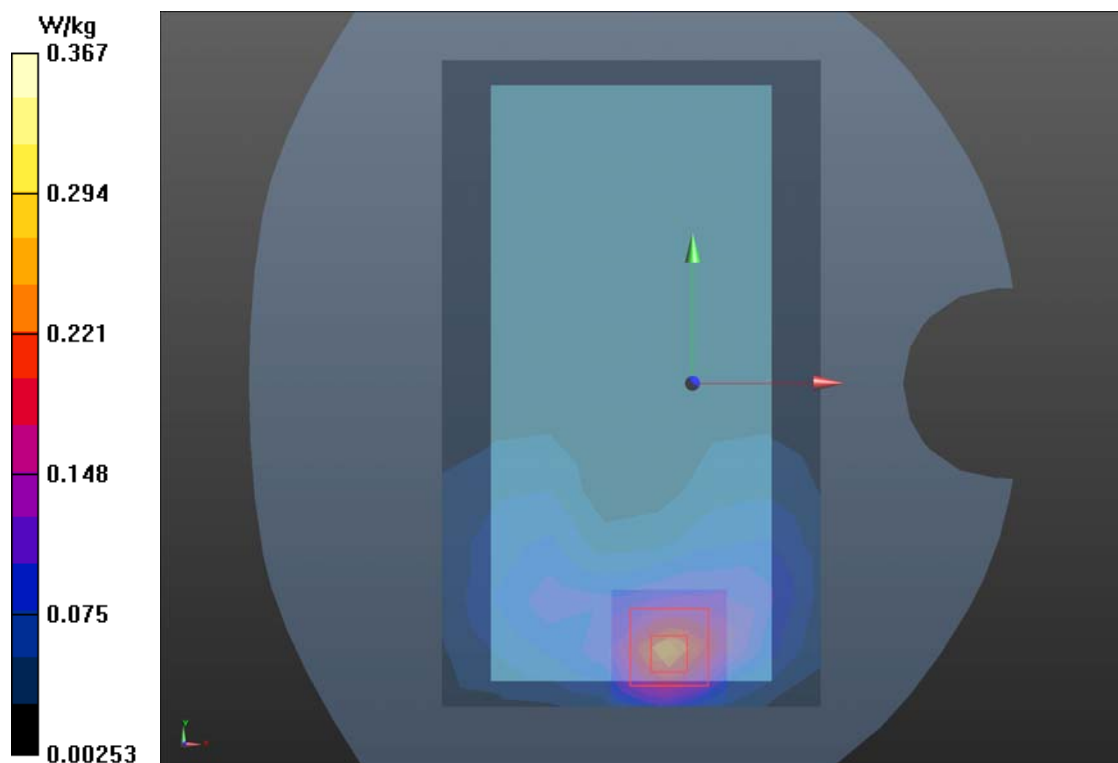
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.6410 V/m; Power Drift = -0.064 dB

Peak SAR (extrapolated) = 0.497 W/kg

SAR(1 g) = 0.354W/kg; SAR(10 g) = 0.181 W/kg

Maximum value of SAR (measured) = 0.367 W/kg



Plot 78 LTE Band 41 1RB Left Cheek High

Date: 2/9/2021

Communication System: UID 0, LTE (0); Frequency: 2625 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2625$ MHz; $\sigma = 2.006$ S/m; $\epsilon_r = 37.935$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0650 W/kg

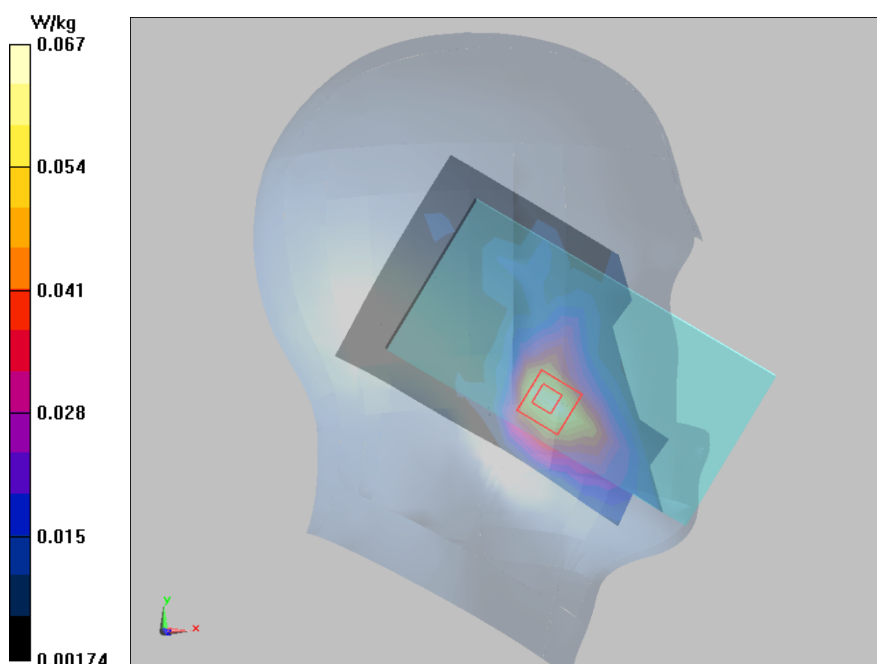
Left Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.4050 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 0.139 W/kg

SAR(1 g) = 0.063 W/kg; SAR(10 g) = 0.032 W/kg

Maximum value of SAR (measured) = 0.067 W/kg



Plot 79 LTE Band 41 1RB Back Side Middle (Distance 15mm)

Date: 2/9/2021

Communication System: UID 0, LTE (0); Frequency: 2625 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2625$ MHz; $\sigma = 2.006$ S/m; $\epsilon_r = 37.935$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.310 W/kg

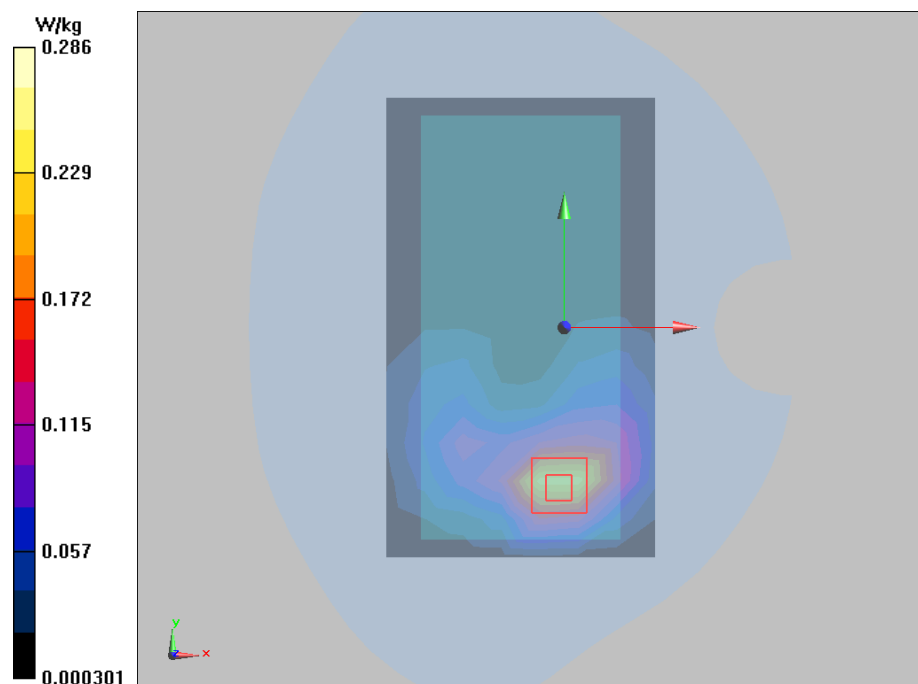
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.832 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.584 W/kg

SAR(1 g) = 0.258 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.286 W/kg



Plot 80 LTE Band 41 1RB Back Side Middle (Distance 10mm)

Date: 2/9/2021

Communication System: UID 0, LTE (0); Frequency: 2625.8 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2626$ MHz; $\sigma = 2.006$ S/m; $\epsilon_r = 37.935$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.610 W/kg

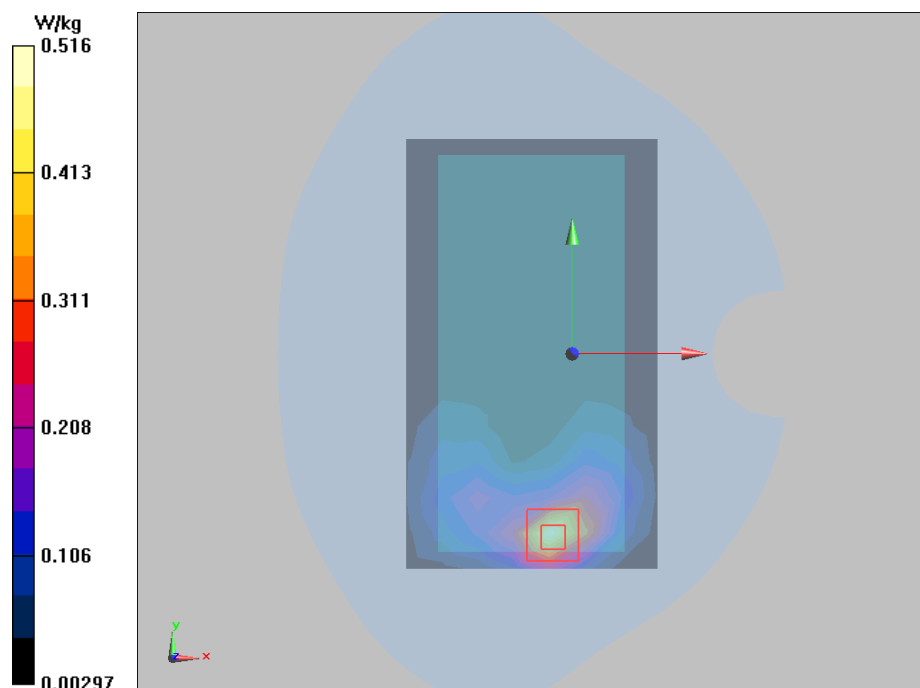
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.038 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.208 W/kg

Maximum value of SAR (measured) = 0.516 W/kg



Plot 78 LTE Band 66 1RB Left Cheek Middle

Date: 1/27/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.0122 W/kg

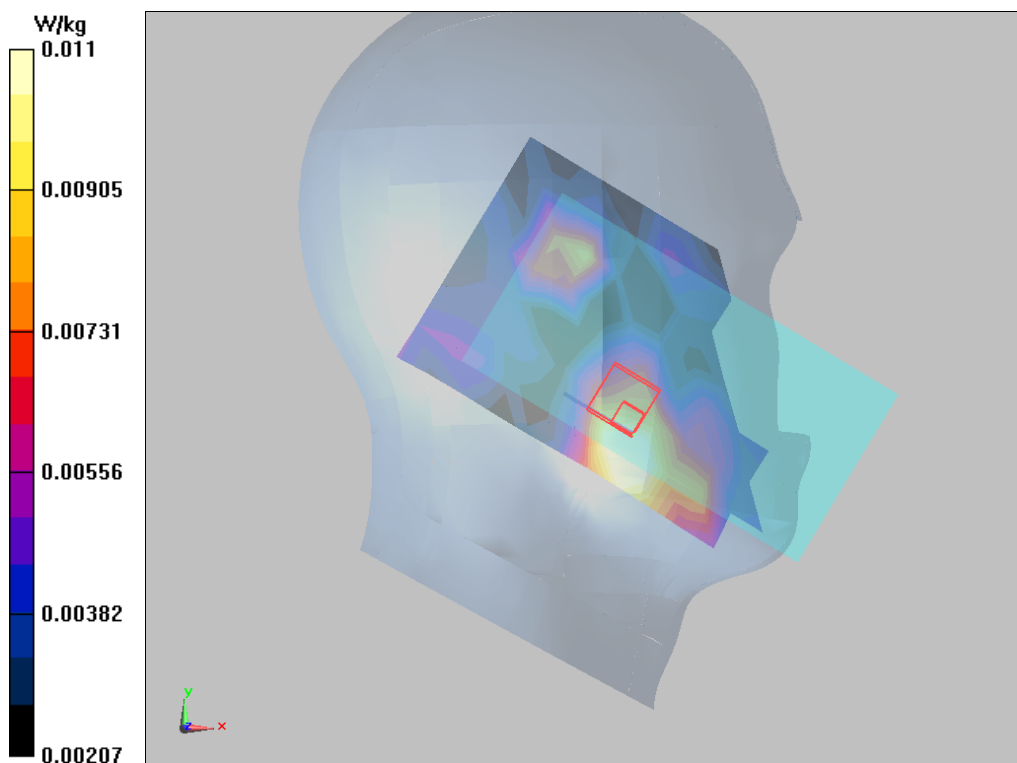
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.112 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.0170 W/kg

SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.009 W/kg

Maximum value of SAR (measured) = 0.011 W/kg



Plot 79 LTE Band 66 1RB Back Side Middle (Distance 15mm)

Date: 1/27/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.0953 W/kg

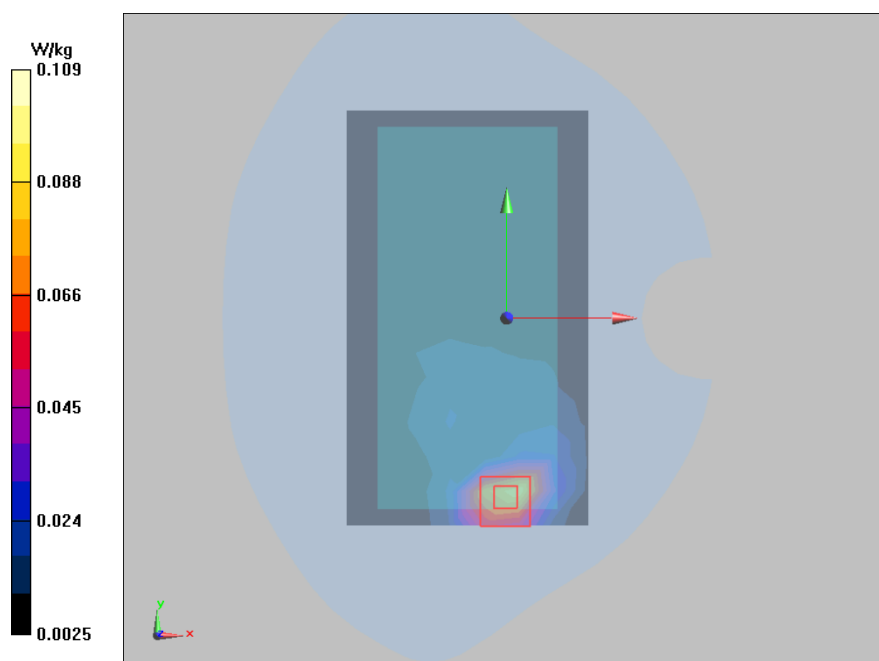
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.509 V/m; Power Drift = 0.180 dB

Peak SAR (extrapolated) = 0.177 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.052 W/kg

Maximum value of SAR (measured) = 0.109 W/kg



Plot 80 LTE Band 66 1RB Bottom Edge Middle (Distance 10mm)

Date: 1/27/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.312 W/kg

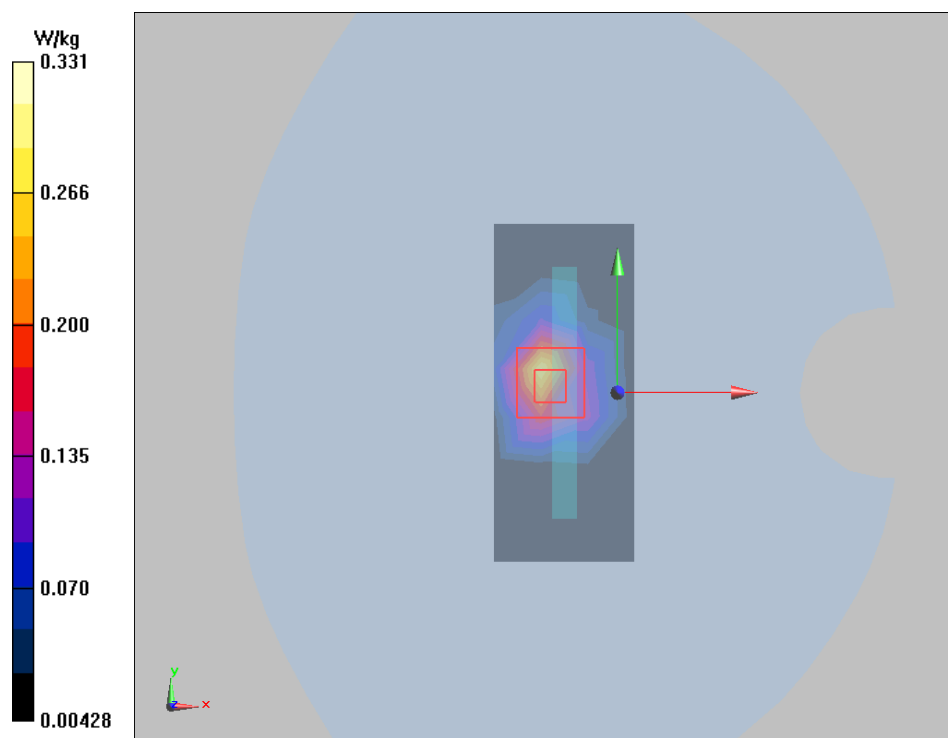
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.16 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.571 W/kg

SAR(1 g) = 0.292 W/kg; SAR(10 g) = 0.139 W/kg

Maximum value of SAR (measured) = 0.331 W/kg



Up Antenna

Plot 81 GSM 850 Right Tilt Middle

Date: 1/25/2021

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

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

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

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

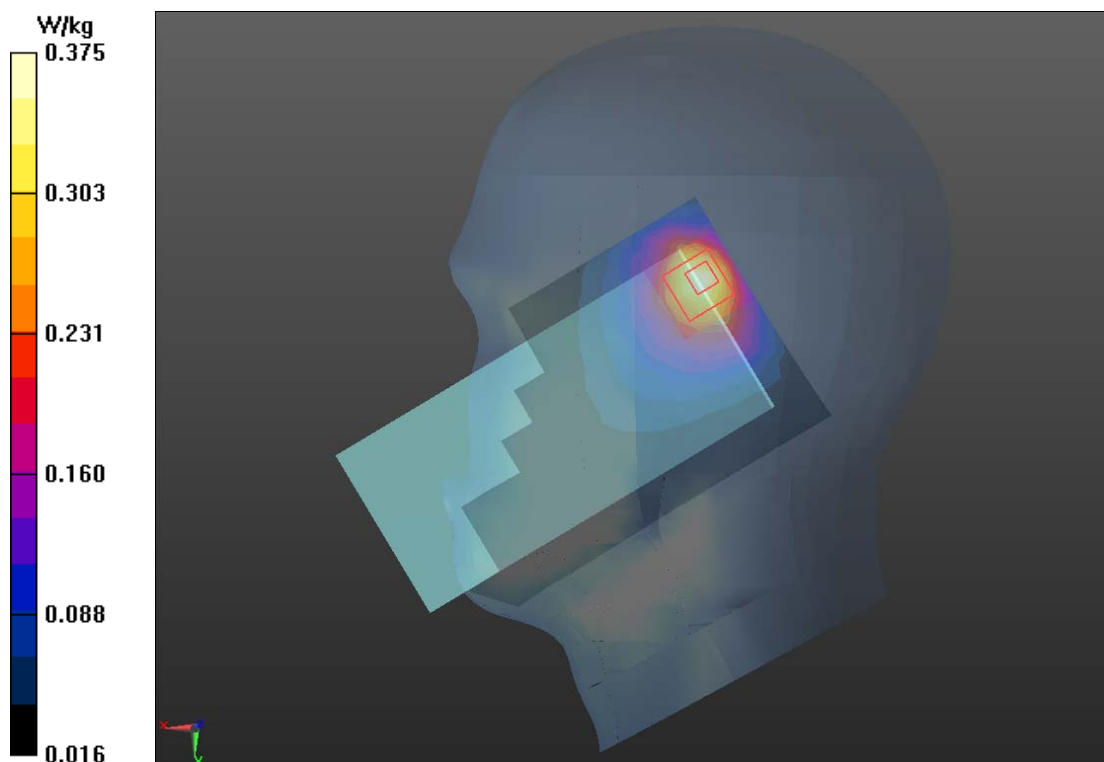
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.73 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.633 W/kg

SAR(1 g) = 0.356 W/kg; SAR(10 g) = 0.211 W/kg

Maximum value of SAR (measured) = 0.375 W/kg



Plot 83 GSM 850 Back Side Middle (Distance 15mm)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.157 W/kg

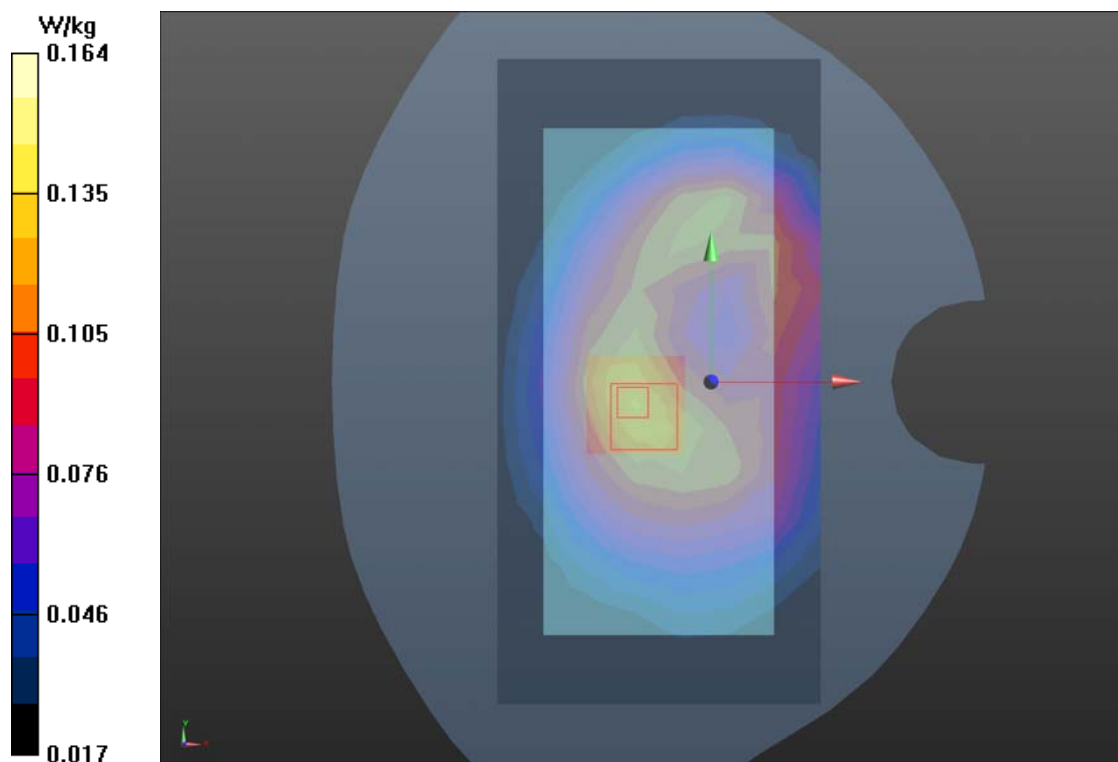
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.42 V/m; Power Drift = -0.024dB

Peak SAR (extrapolated) = 0.271 W/kg

SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.164 W/kg



Plot 84 GSM 850 GPRS (4Txslots) Back Side Middle (Distance 10mm)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.291 W/kg

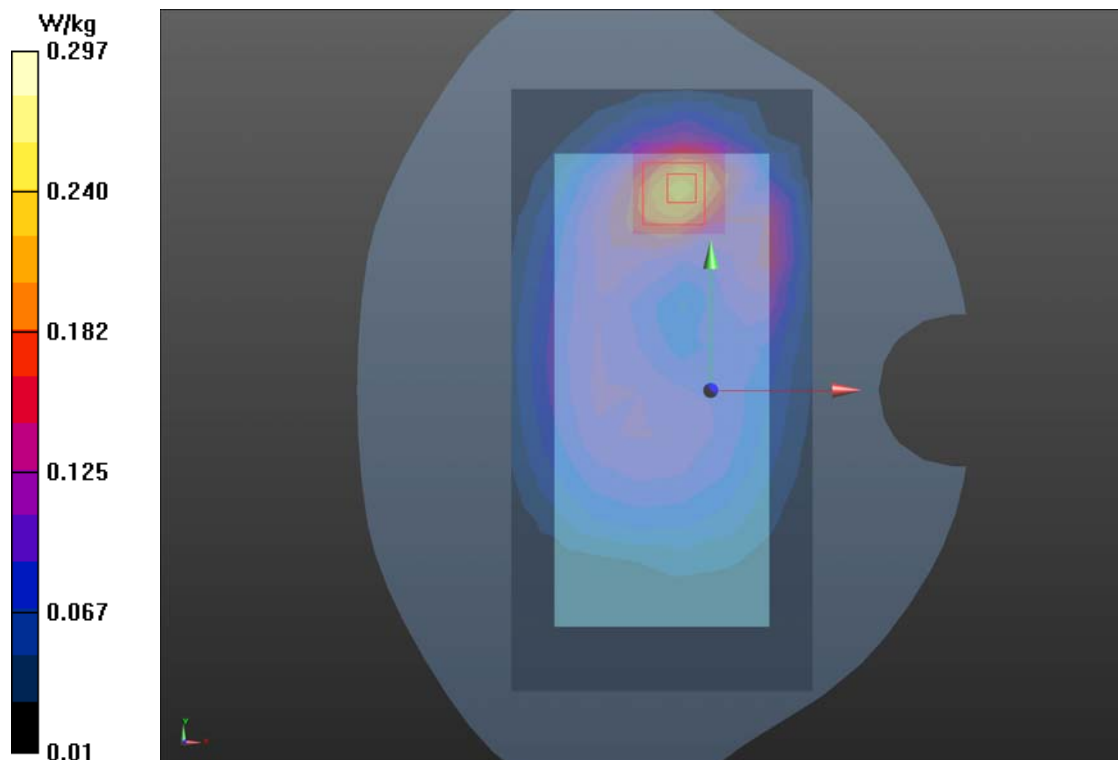
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.33 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.437 W/kg

SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.176 W/kg

Maximum value of SAR (measured) = 0.297 W/kg



Plot 85 GSM 1900 Right Cheek Middle

Date: 1/30/2021

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

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

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.681 W/kg

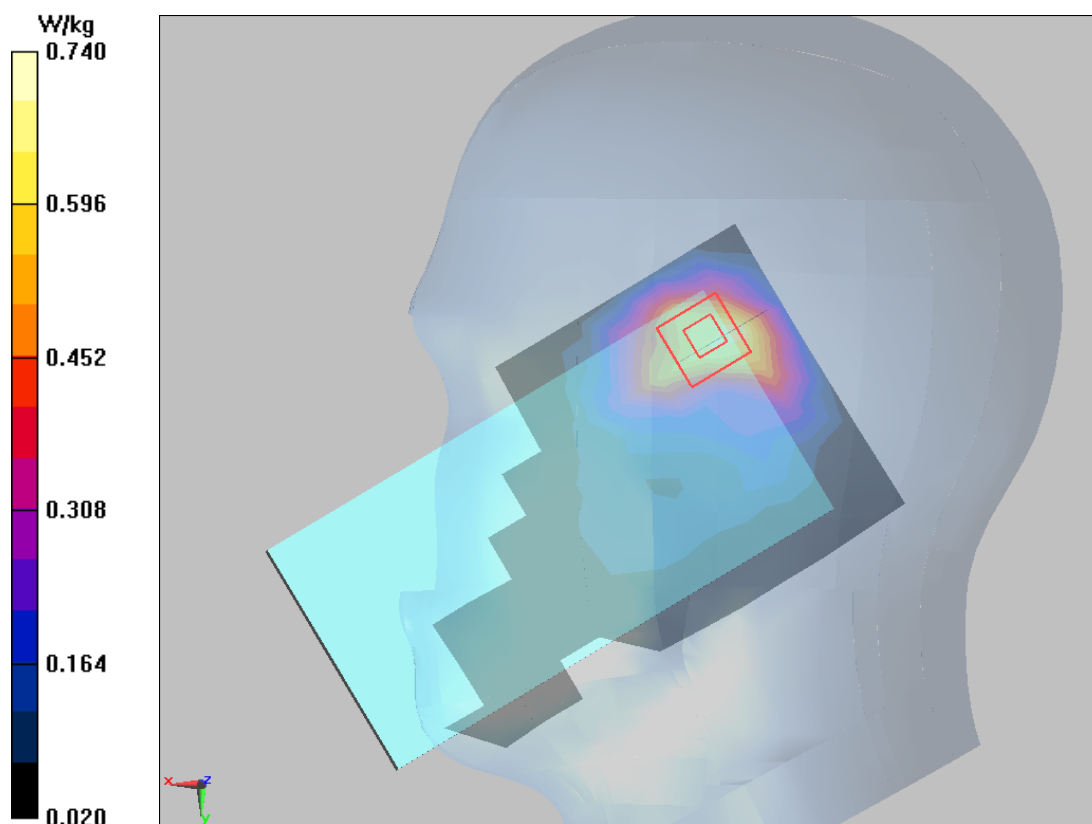
Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.97 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.696 W/kg; SAR(10 g) = 0.391 W/kg

Maximum value of SAR (measured) = 0.740 W/kg



Plot 86 GSM 1900 Back Side Middle (Distance 15mm)

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.234 W/kg

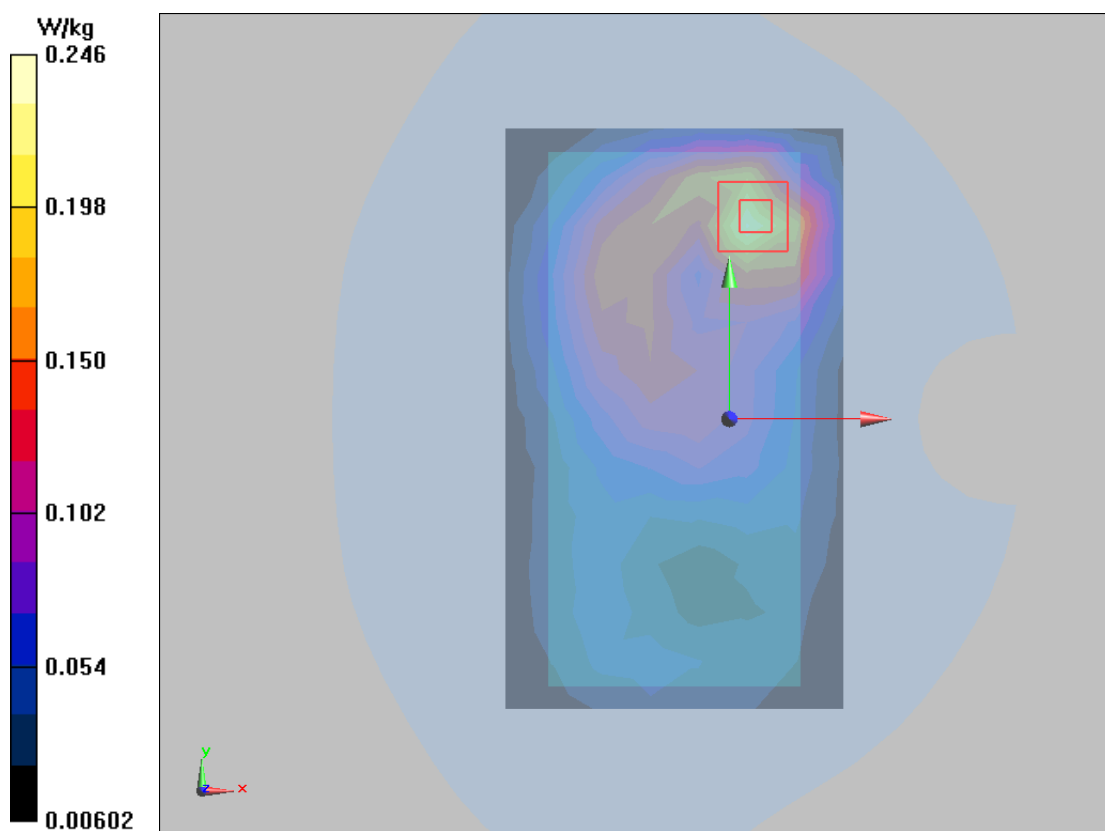
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.258 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.398 W/kg

SAR(1 g) = 0.228 W/kg; SAR(10 g) = 0.128 W/kg

Maximum value of SAR (measured) = 0.246 W/kg



Plot 87 GSM 1900 GPRS (4Txslots) Top Edge Middle (Distance 10mm)

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.354 W/kg

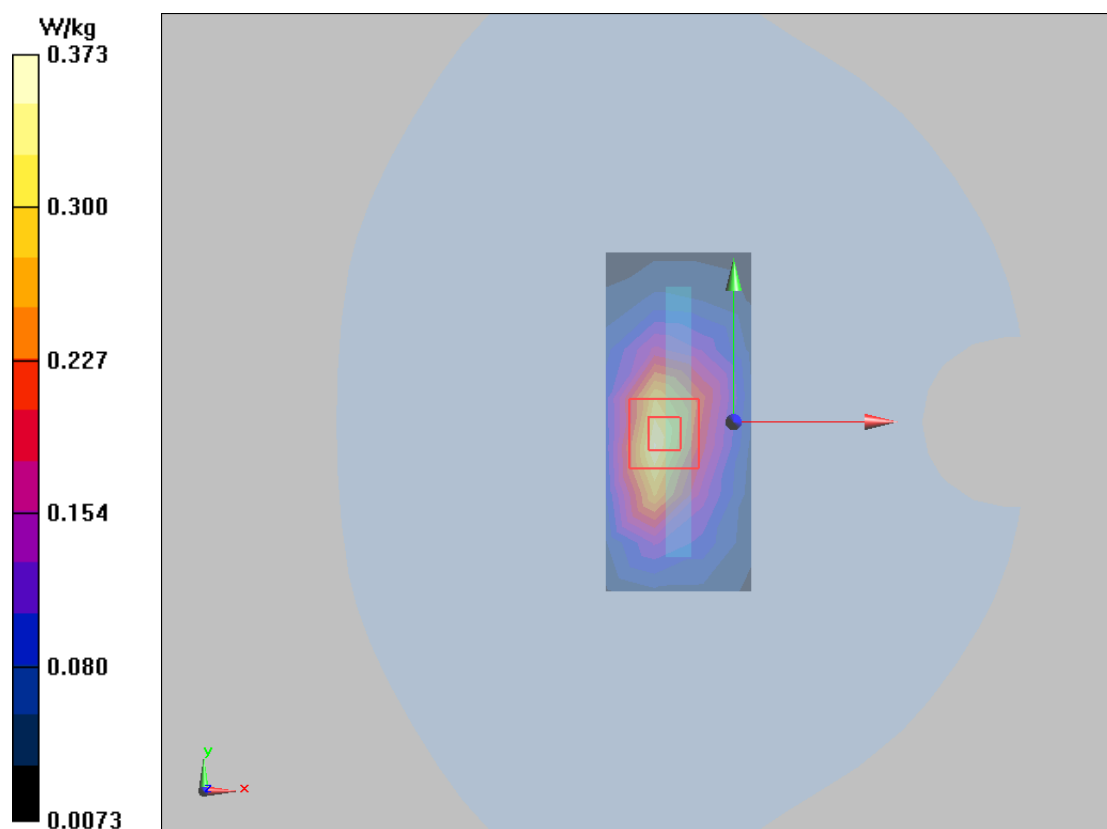
Top Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.49 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.597 W/kg

SAR(1 g) = 0.334 W/kg; SAR(10 g) = 0.180 W/kg

Maximum value of SAR (measured) = 0.373 W/kg



Plot 88 UMTS Band II Right Tilt Middle

Date: 1/30/2021

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

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

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

Maximum value of SAR (measured) = 0.771 W/kg

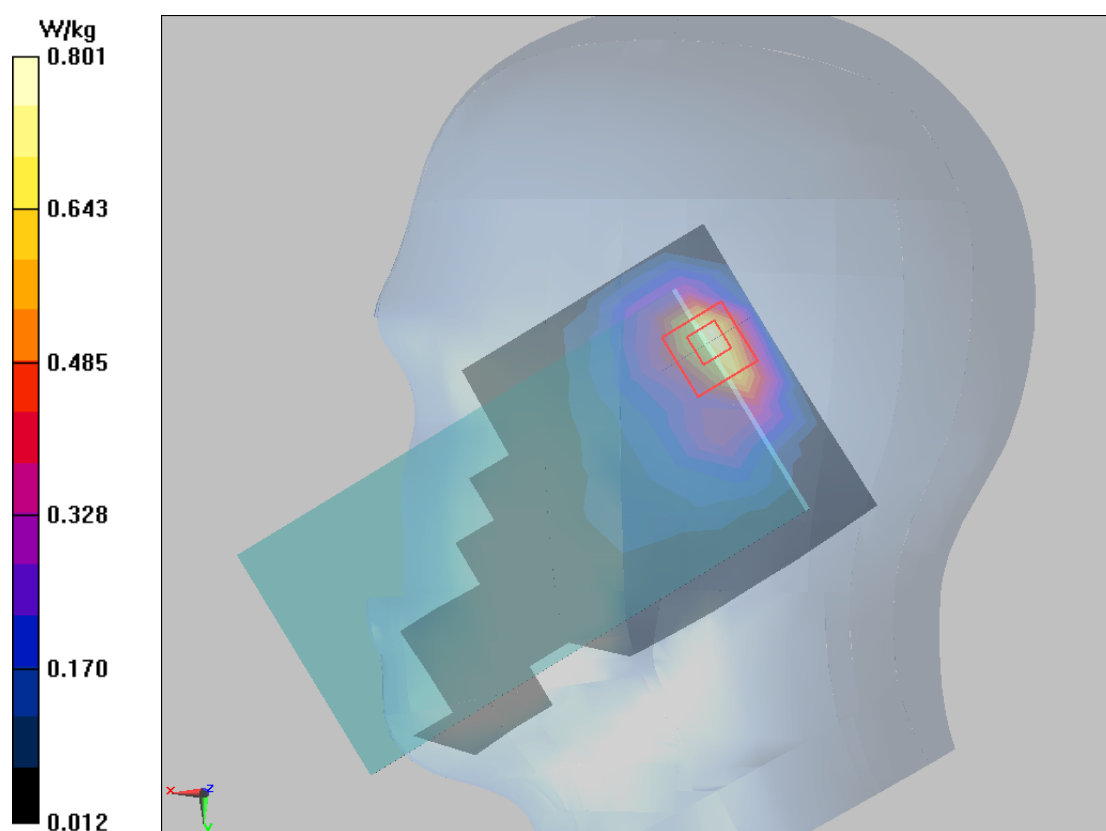
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.14 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.708 W/kg; SAR(10 g) = 0.360 W/kg

Maximum value of SAR (measured) = 0.801 W/kg



Plot 89 UMTS Band II Back Side Middle (Distance 15mm)

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.334 W/kg

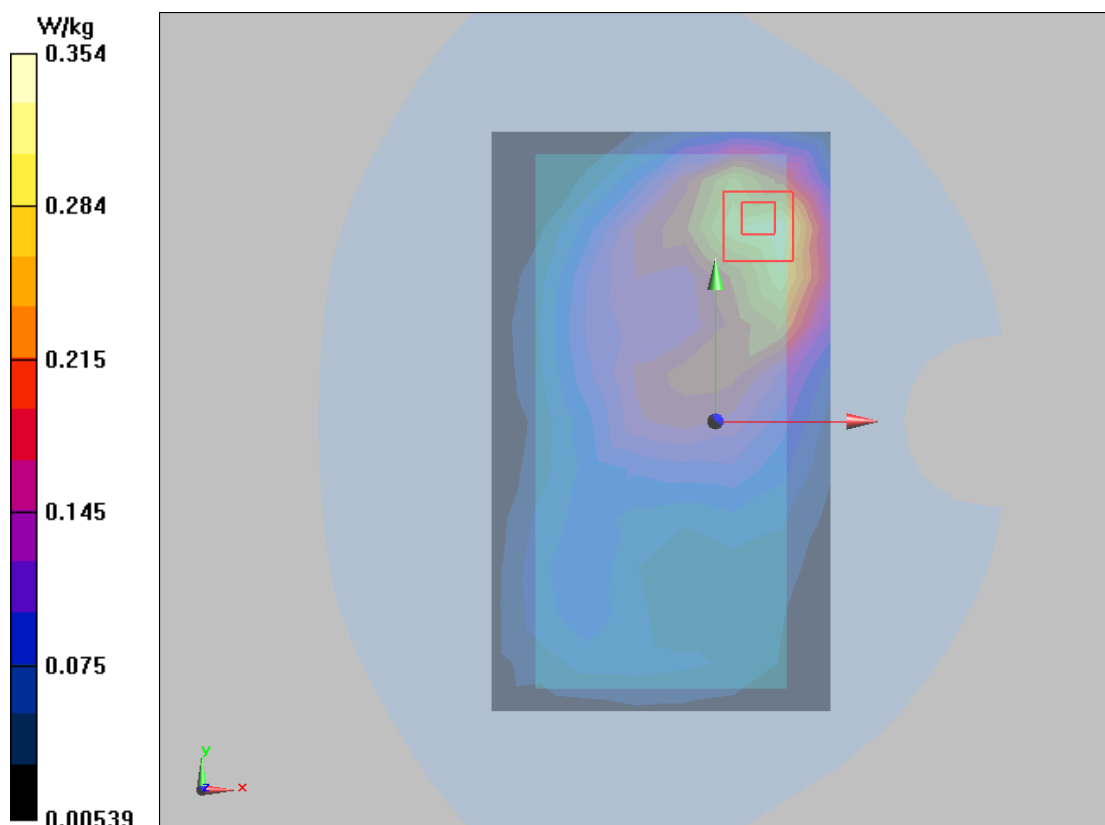
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.23 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.572 W/kg

SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.191 W/kg

Maximum value of SAR (measured) = 0.354 W/kg



Plot 90 UMTS Band II Back Side Middle (Distance 10mm)

Date: 1/30/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

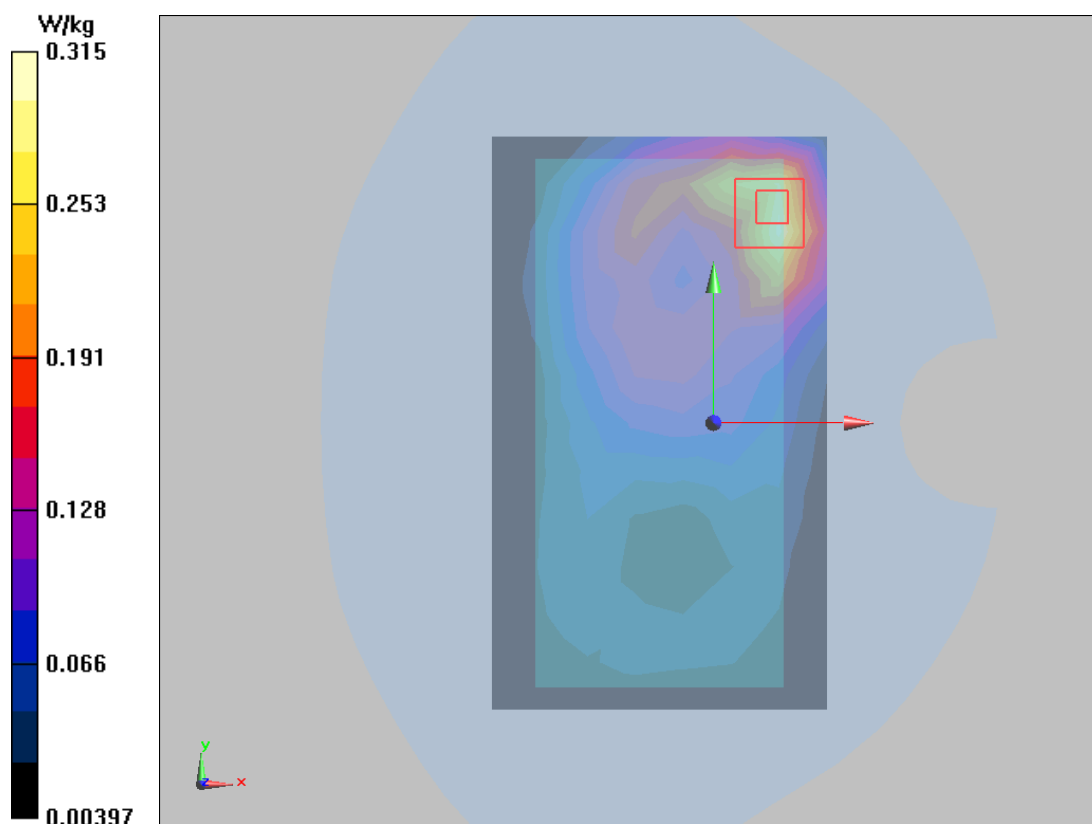
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.526 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.520 W/kg

SAR(1 g) = 0.288 W/kg; SAR(10 g) = 0.160 W/kg

Maximum value of SAR (measured) = 0.315 W/kg



Plot 91 UMTS Band IV Right Tilt Middle

Date: 1/31/2021

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

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

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

Maximum value of SAR (measured) = 0.560 W/kg

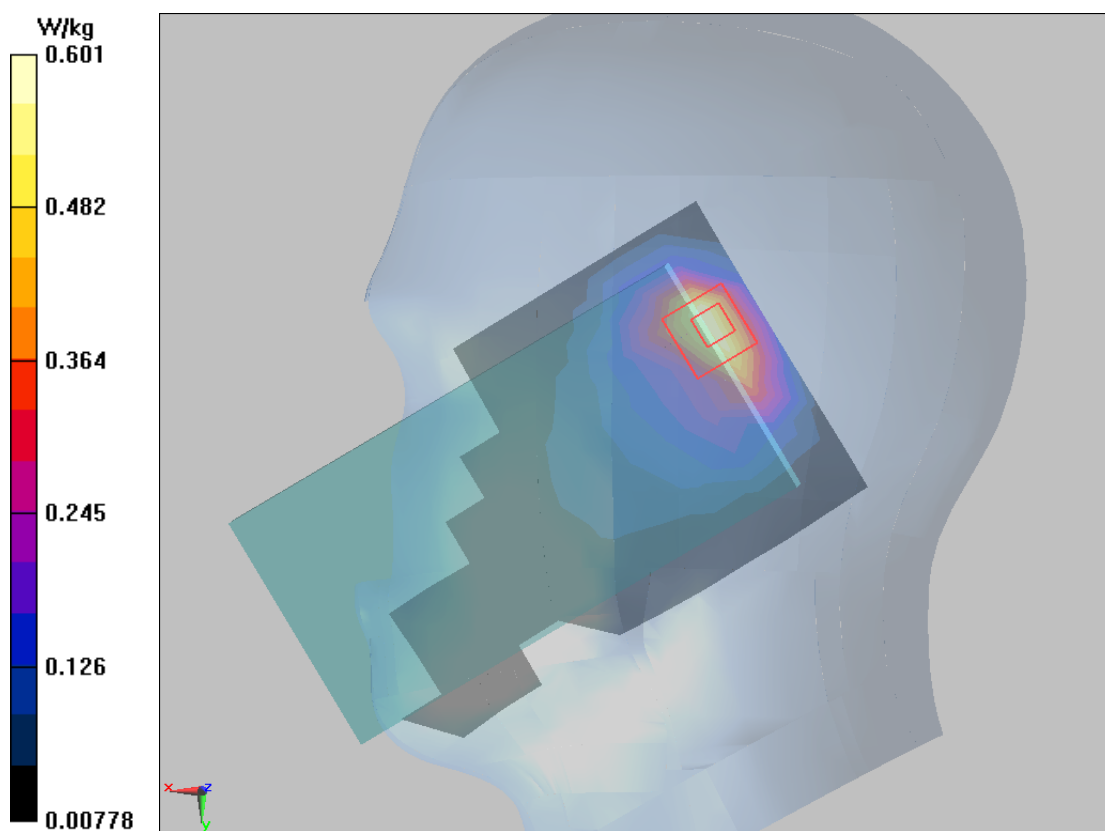
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.59 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.535 W/kg; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 0.601 W/kg



Plot 92 UMTS Band IV Back Side Middle (Distance 15mm)

Date: 1/31/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.305 W/kg

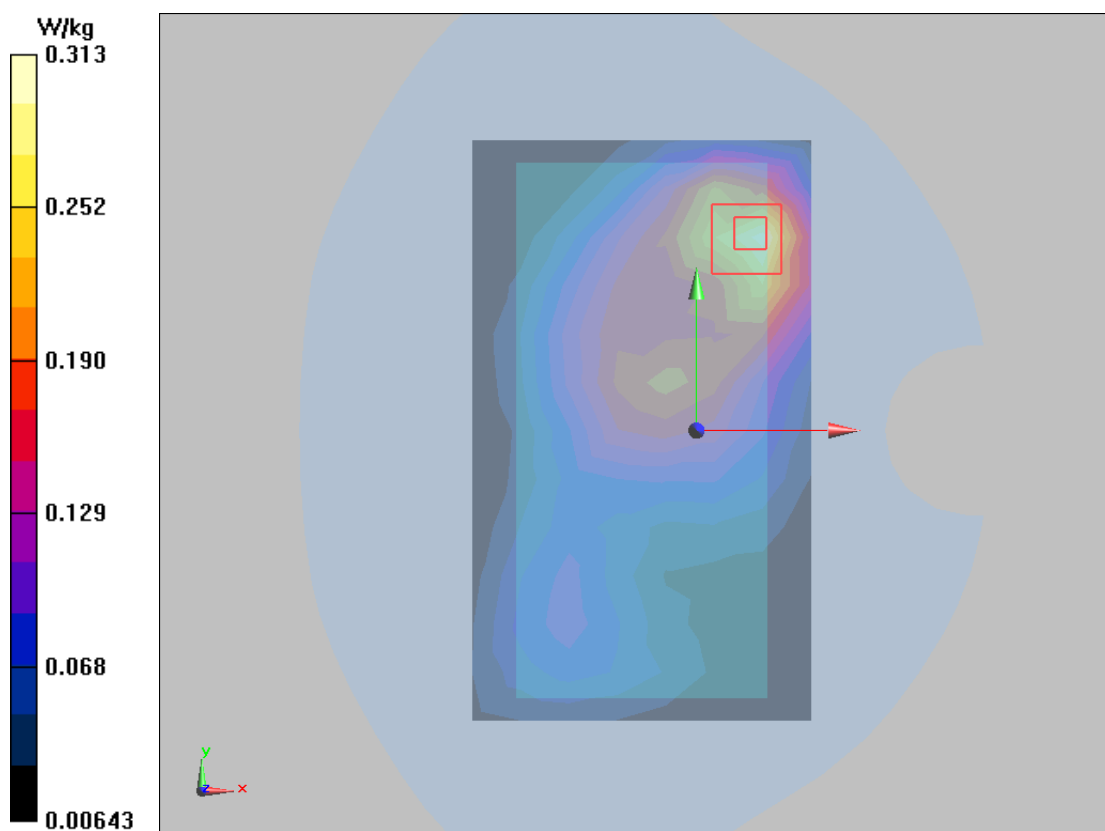
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.15 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.490 W/kg

SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.169 W/kg

Maximum value of SAR (measured) = 0.313 W/kg



Plot 93 UMTS Band IV Top Edge Middle (Distance 10mm)

Date: 1/31/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (4x8x1): Measurement grid: dx=15mm, dy=15mm

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

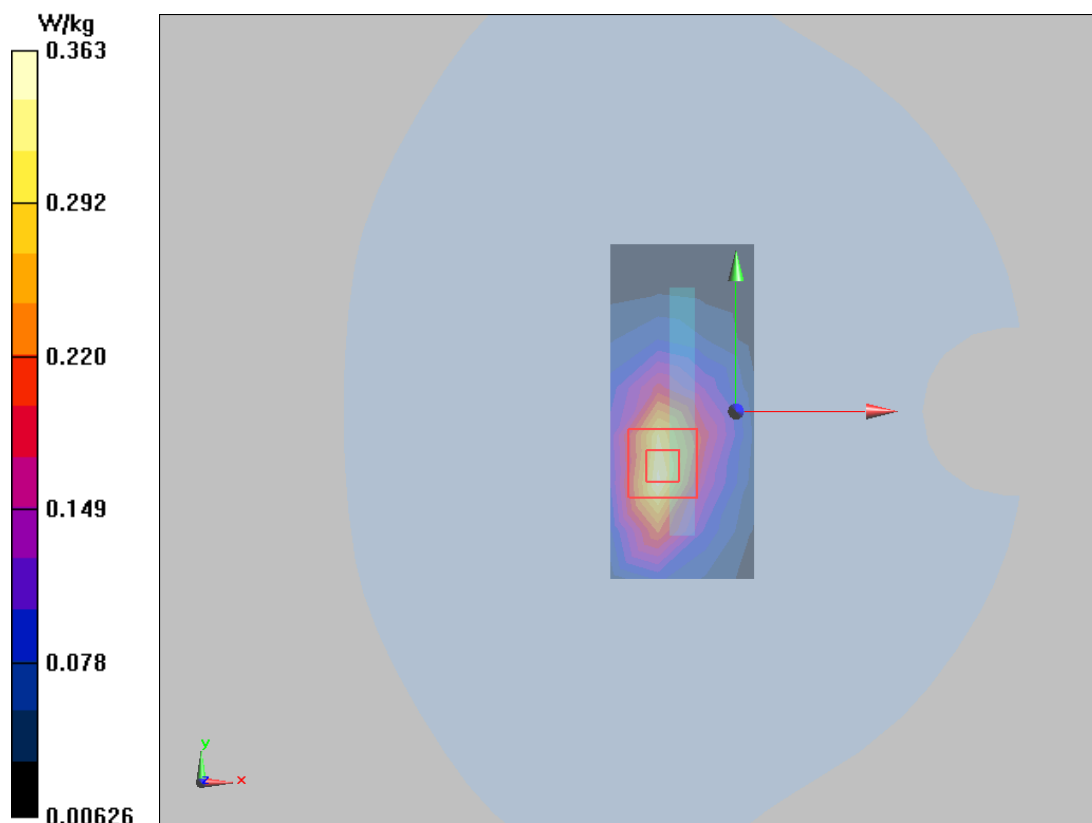
Top Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.56 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.569 W/kg

SAR(1 g) = 0.324 W/kg; SAR(10 g) = 0.177 W/kg

Maximum value of SAR (measured) = 0.363 W/kg



Plot 94 UMTS Band V Left Cheek Middle

Date: 1/25/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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) = 0.389 W/kg

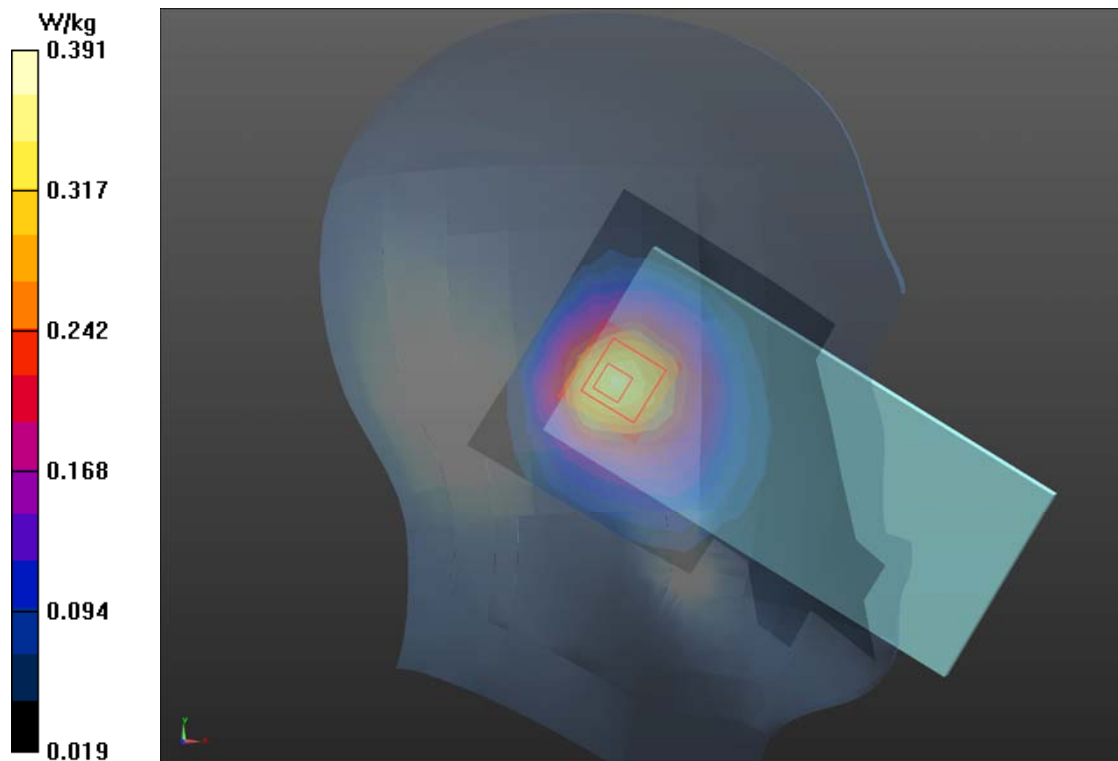
Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.13 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.780 W/kg

SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.253 W/kg

Maximum value of SAR (measured) = 0.391 W/kg



Plot 95 UMTS Band V Back Side Middle (Distance 15mm)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

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

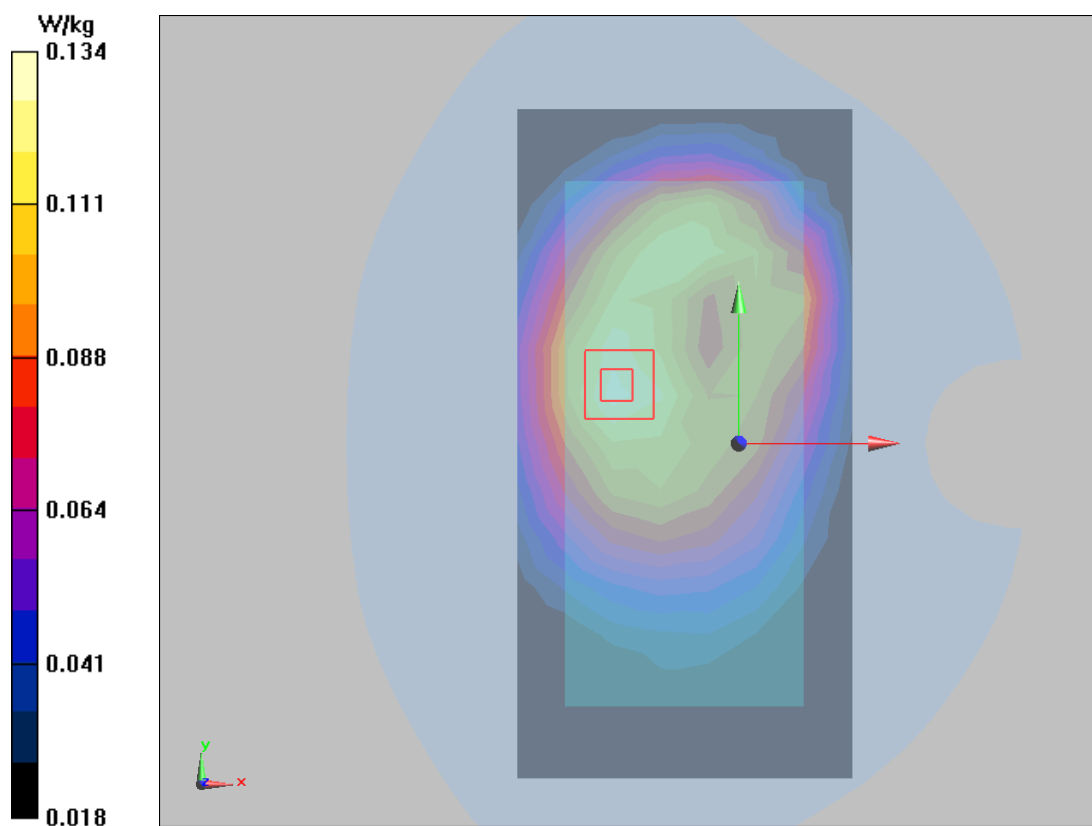
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.70 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.169 W/kg

SAR(1 g) = 0.126 W/kg; SAR(10 g) = 0.090 W/kg

Maximum value of SAR (measured) = 0.134 W/kg



Plot 96 UMTS Band V Back Side Middle (Distance 10mm)

Date: 1/25/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.203 W/kg

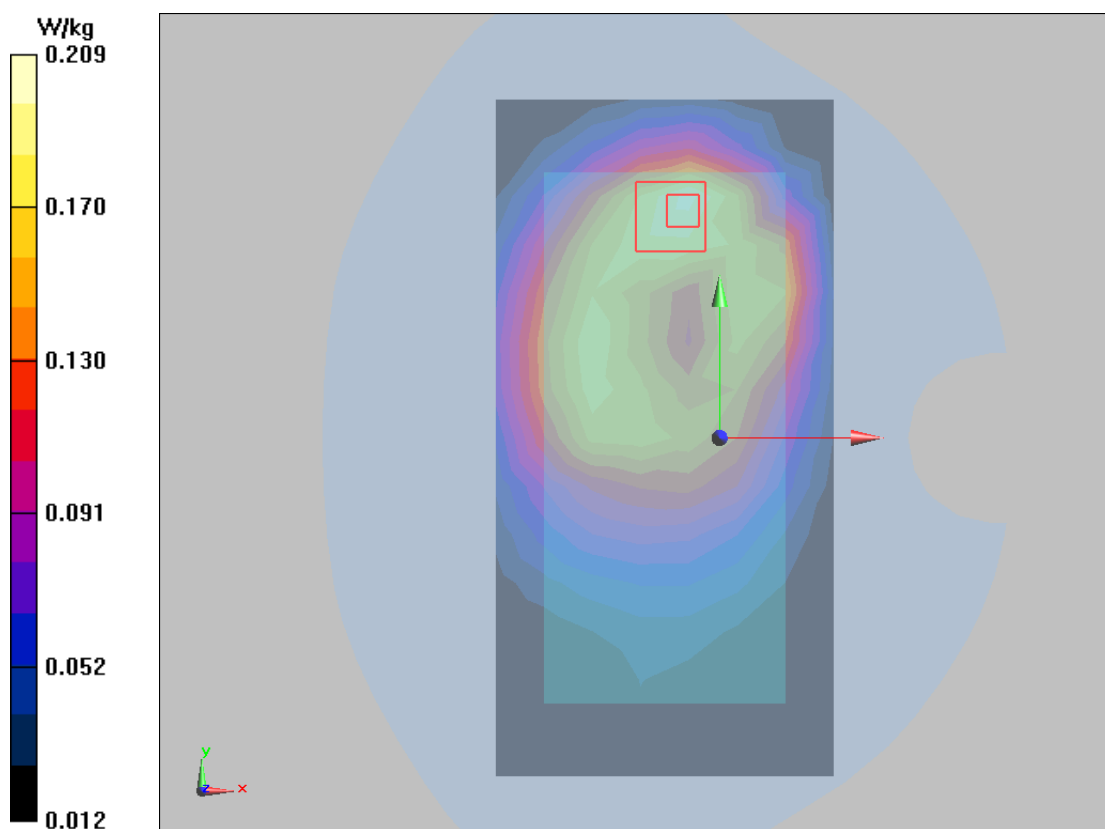
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.25 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.311 W/kg

SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.125 W/kg

Maximum value of SAR (measured) = 0.209 W/kg



Plot 97 LTE Band 2 1RB Right Tilt Low

Date: 1/29/2021

Communication System: UID 0, LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.407$ S/m; $\epsilon_r = 39.071$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

Maximum value of SAR (measured) = 0.723 W/kg

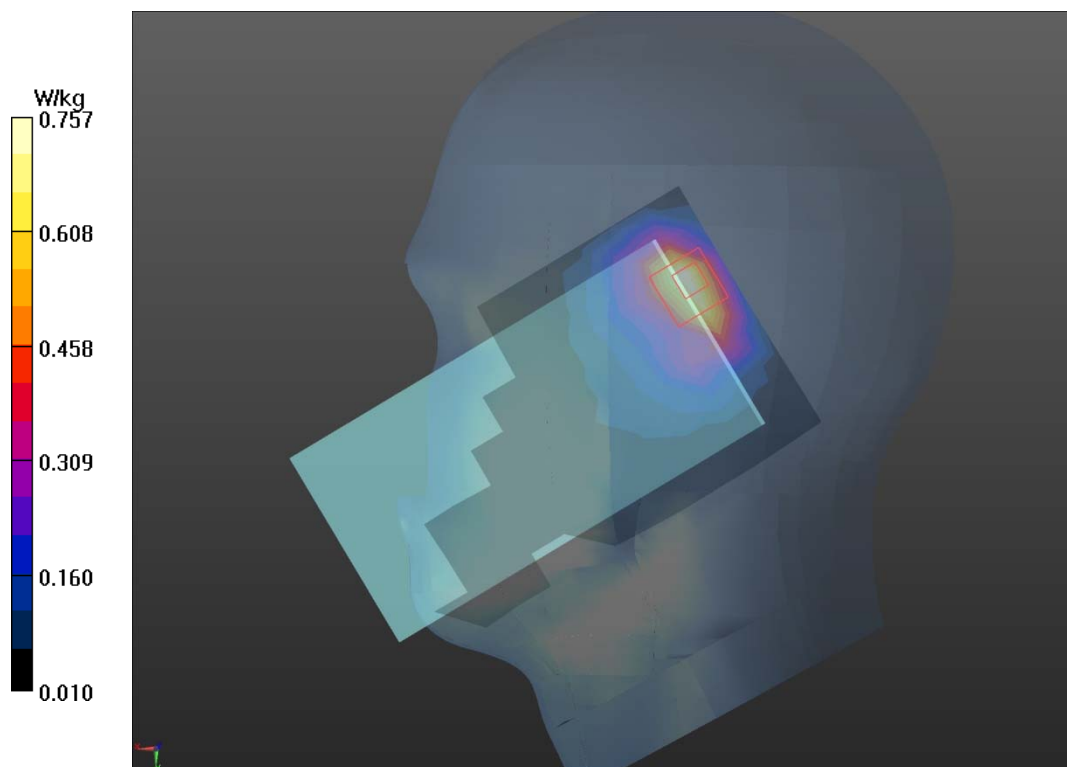
Right Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.42 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.691 W/kg; SAR(10 g) = 0.355 W/kg

Maximum value of SAR (measured) = 0.757 W/kg



Plot 98 LTE Band 2 1RB Back Side Low (Distance 15mm)

Date: 1/29/2021

Communication System: UID 0, LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.407$ S/m; $\epsilon_r = 39.071$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

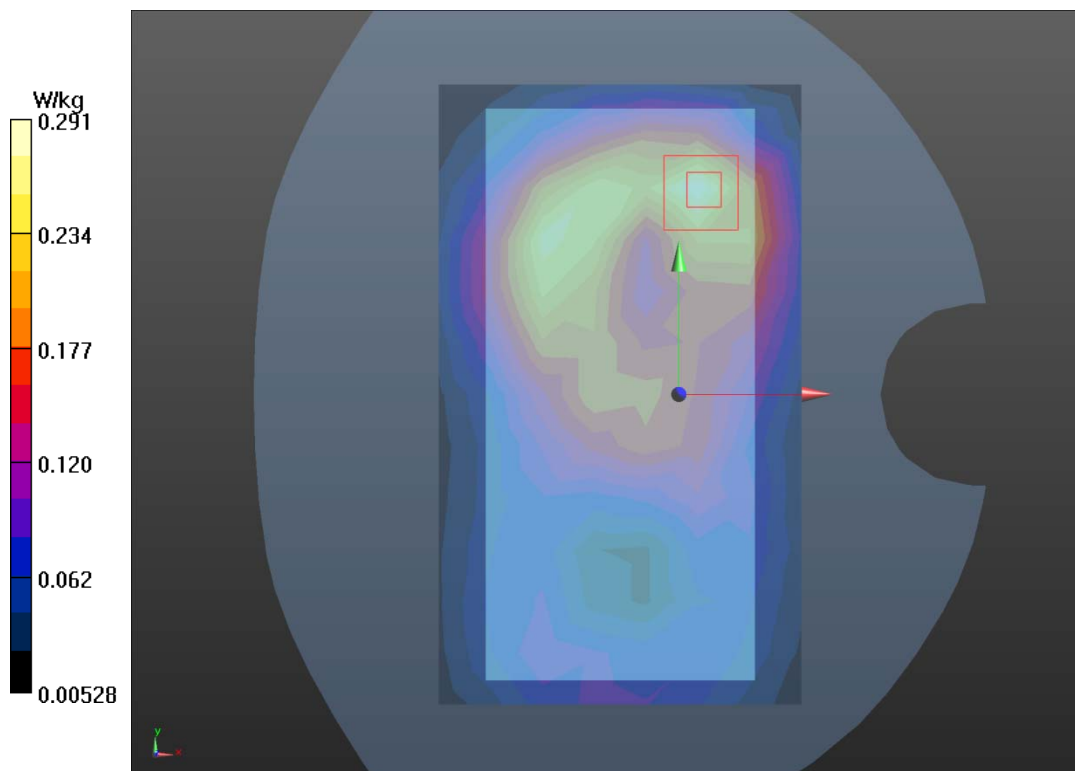
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.88 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.468 W/kg

SAR(1 g) = 0.270 W/kg; SAR(10 g) = 0.154 W/kg

Maximum value of SAR (measured) = 0.291 W/kg



Plot 99 LTE Band 2 50%RB Top Edge Low (Distance 10mm)

Date: 1/29/2021

Communication System: UID 0, LTE (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.407$ S/m; $\epsilon_r = 39.071$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

Maximum value of SAR (measured) = 0.389 W/kg

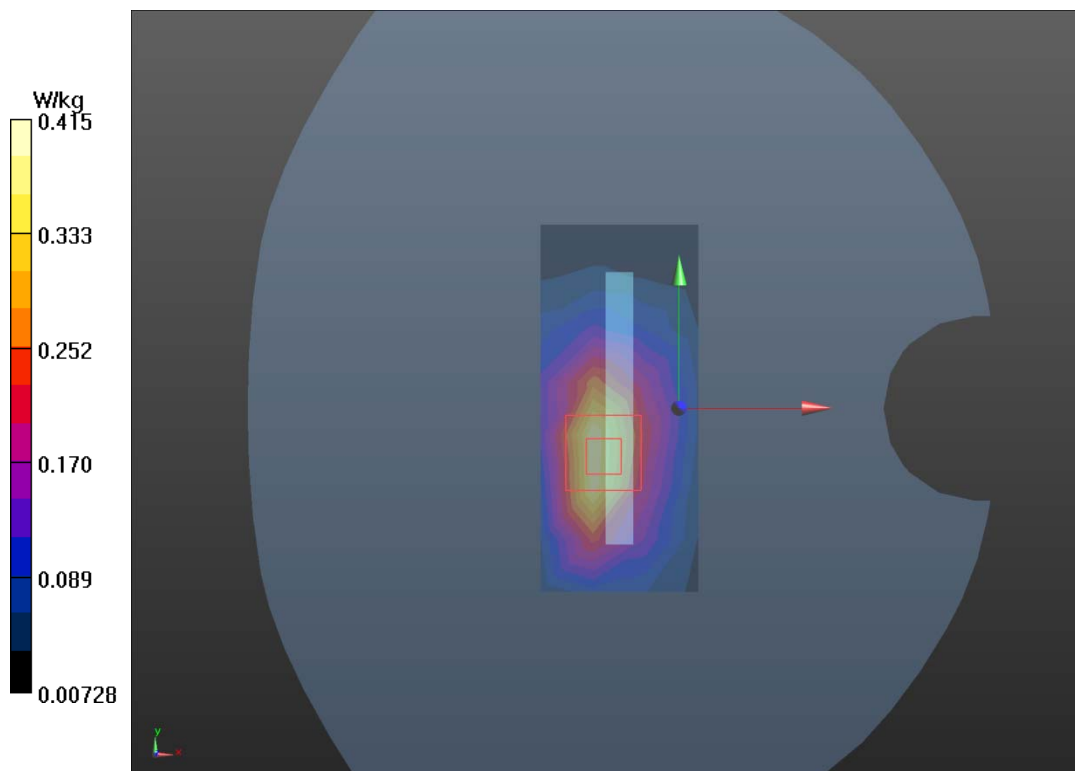
Top Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.45 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.676 W/kg

SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.203 W/kg

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



Plot 100 LTE Band 4 1RB Right Tilt Middle

Date: 1/28/2021

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

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

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

Maximum value of SAR (measured) = 0.703 W/kg

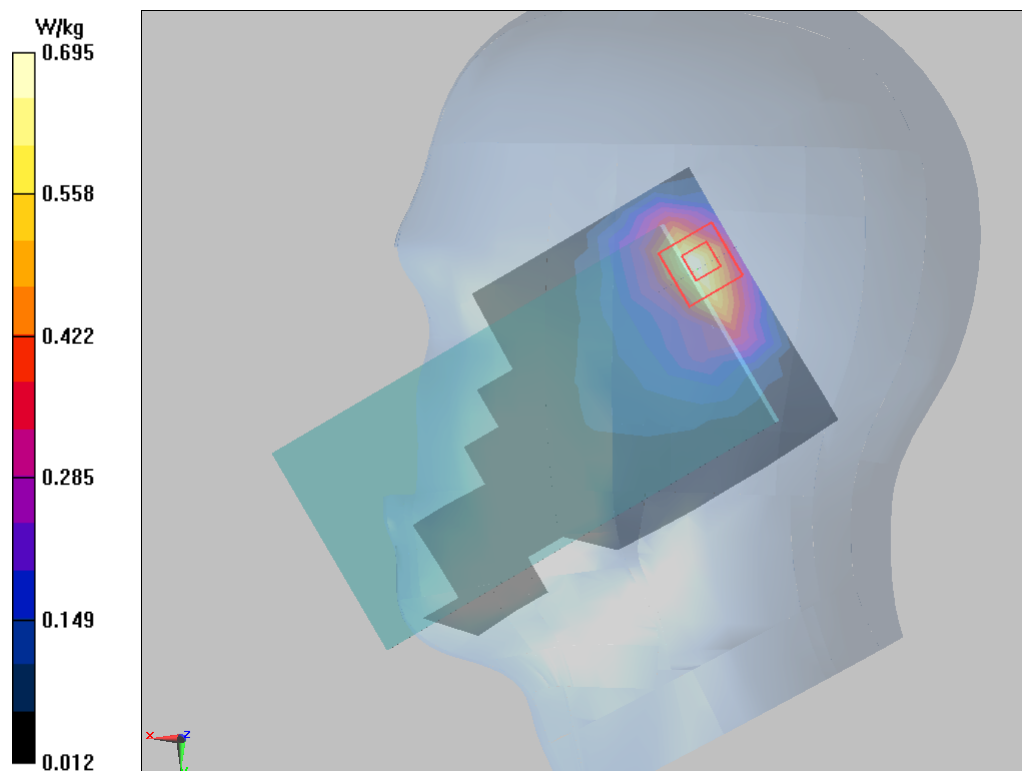
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.28 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.671 W/kg; SAR(10 g) = 0.375 W/kg

Maximum value of SAR (measured) = 0.695 W/kg



Plot 101 LTE Band 4 1RB Back Side Middle (Distance 15mm)

Date: 1/28/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.302 W/kg

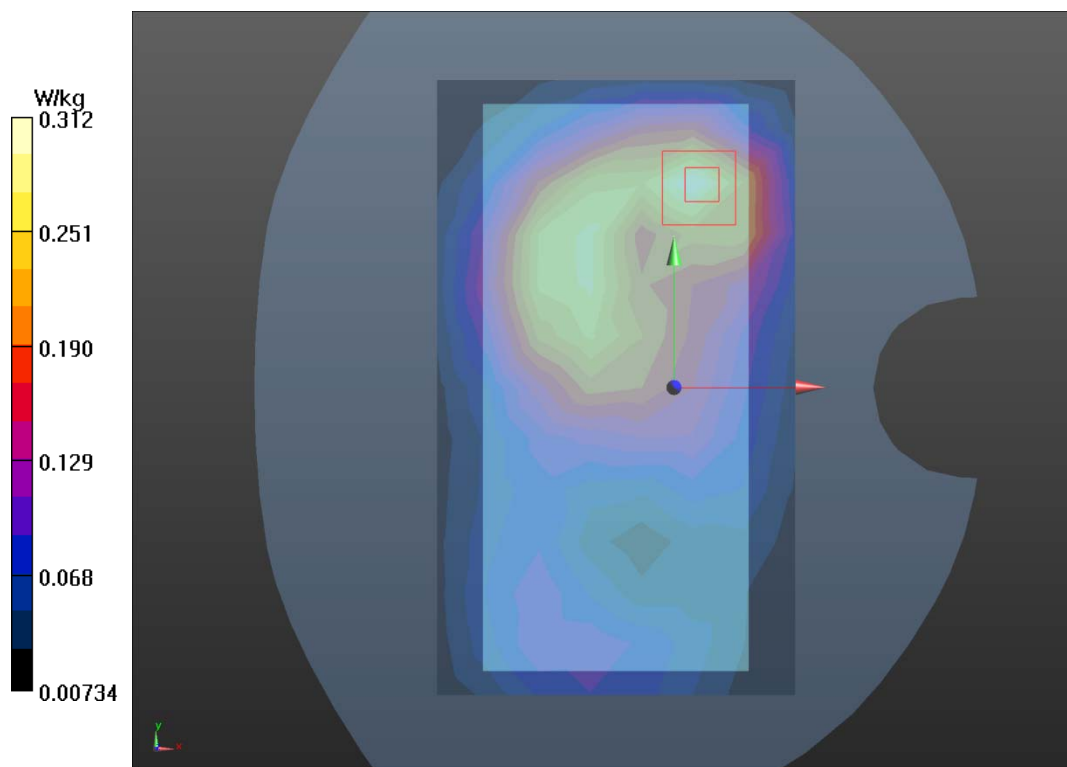
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.57 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.489 W/kg

SAR(1 g) = 0.292 W/kg; SAR(10 g) = 0.170 W/kg

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



Plot 102 LTE Band 4 50%RB Top Edge Middle (Distance 10mm)

Date: 1/28/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.421 W/kg

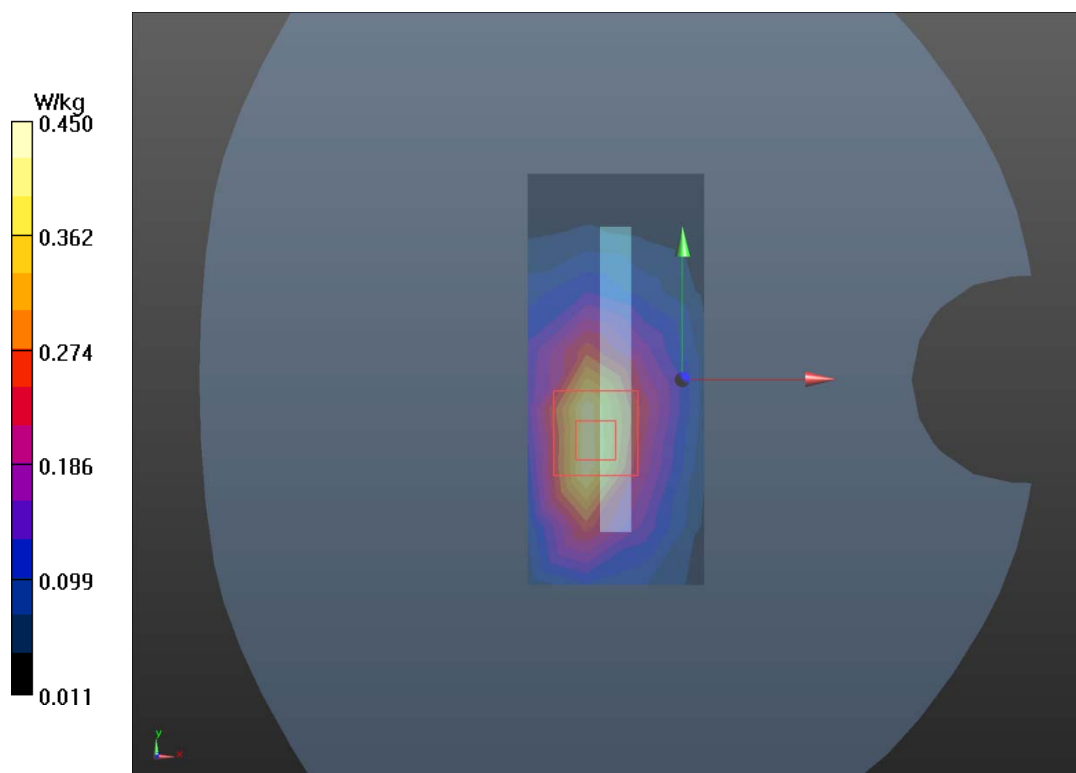
Top Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.93 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.709 W/kg

SAR(1 g) = 0.407 W/kg; SAR(10 g) = 0.224 W/kg

Maximum value of SAR (measured) = 0.450 W/kg



Plot 103 LTE Band 5 1RB Right Cheek Middle

Date: 1/26/2021

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

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.199$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.372 W/kg

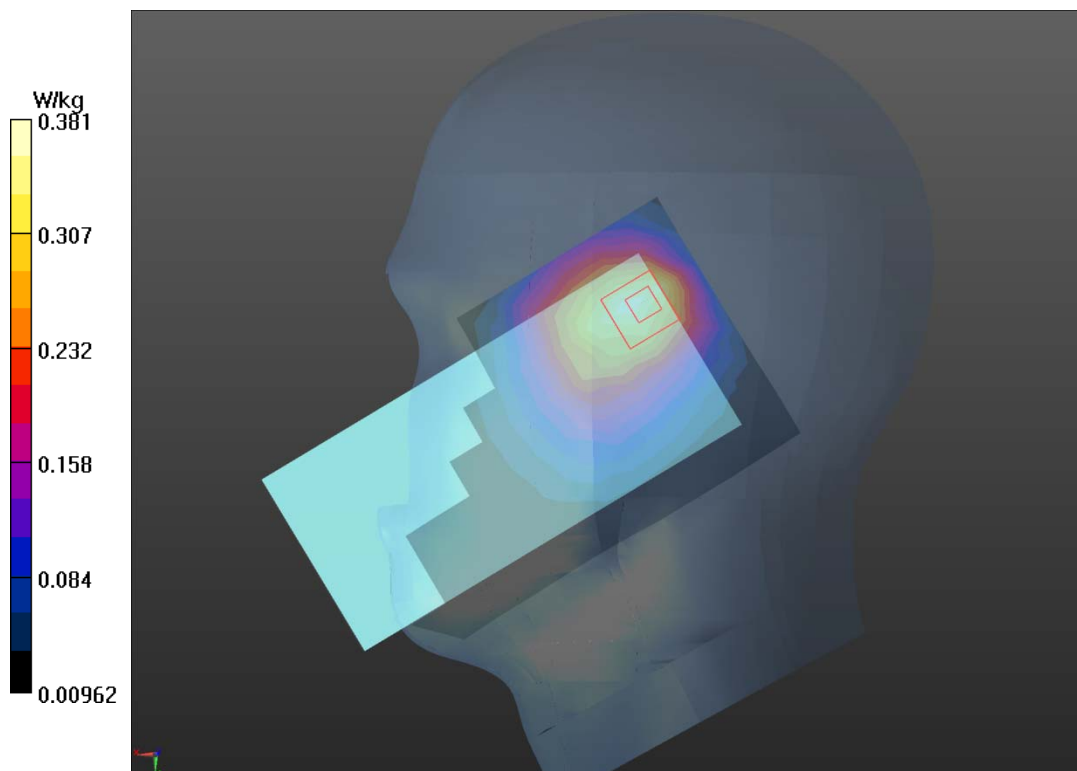
Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.32 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.593 W/kg

SAR(1 g) = 0.361 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.381 W/kg



Plot 104 LTE Band 5 1RB Back Side Middle (Distance 15mm)

Date: 1/26/2021

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

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.199$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.130 W/kg

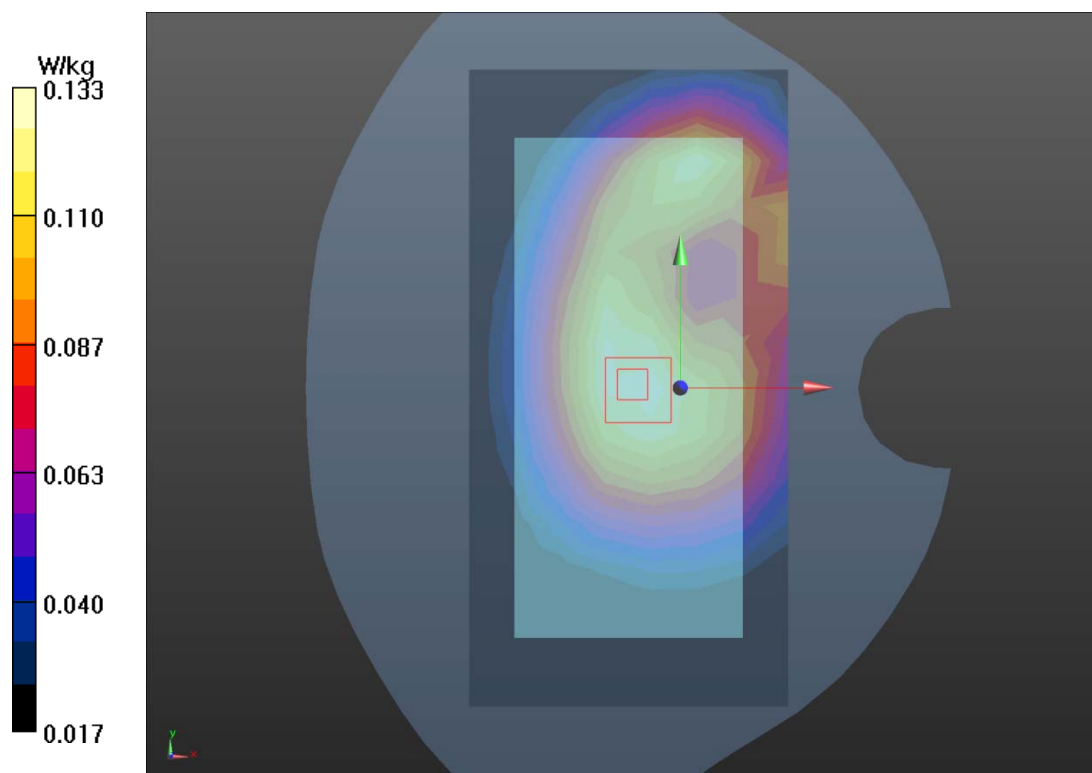
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.04 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.162 W/kg

SAR(1 g) = 0.126 W/kg; SAR(10 g) = 0.094 W/kg

Maximum value of SAR (measured) = 0.133 W/kg



Plot 105 LTE Band 5 1RB Back Side Middle (Distance 10mm)

Date: 1/26/2021

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

Medium parameters used: $f = 836.5$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.199$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.215 W/kg

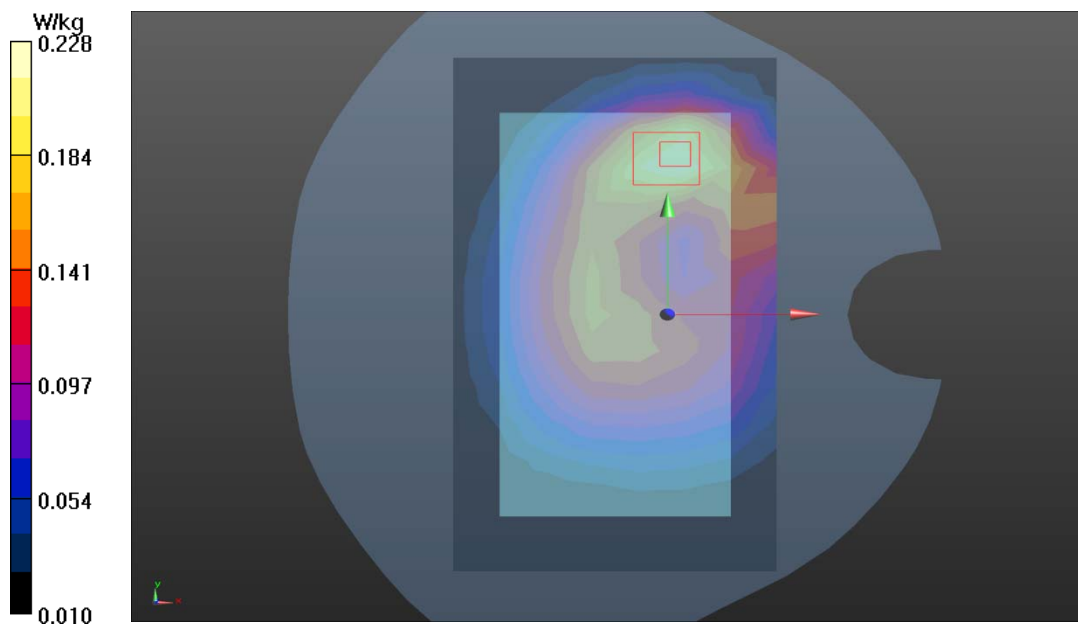
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.20 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.335 W/kg

SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.135 W/kg

Maximum value of SAR (measured) = 0.228 W/kg



Plot 106 LTE Band 7 1RB Left Tilt High

Date: 1/20/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

Left Tilt High/Area Scan (10x15x1): Measurement grid: dx=12mm, dy=12mm

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

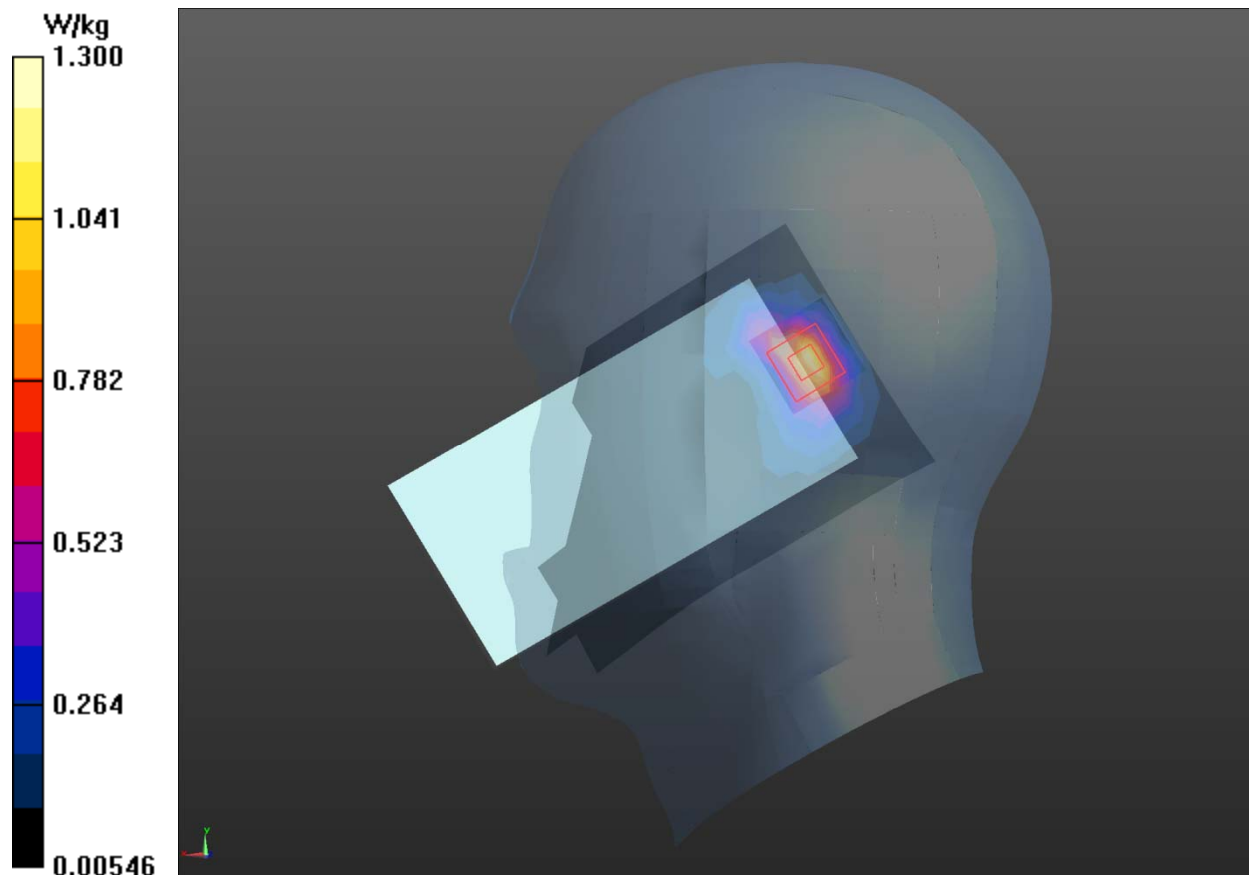
Left Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.02 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.15 W/kg

SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.213 W/kg

Maximum value of SAR (measured) = 1.30 W/kg



Plot 107 LTE Band 7 1RB Back Side Middle (Distance 15mm)

Date: 1/20/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x15x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.451 W/kg

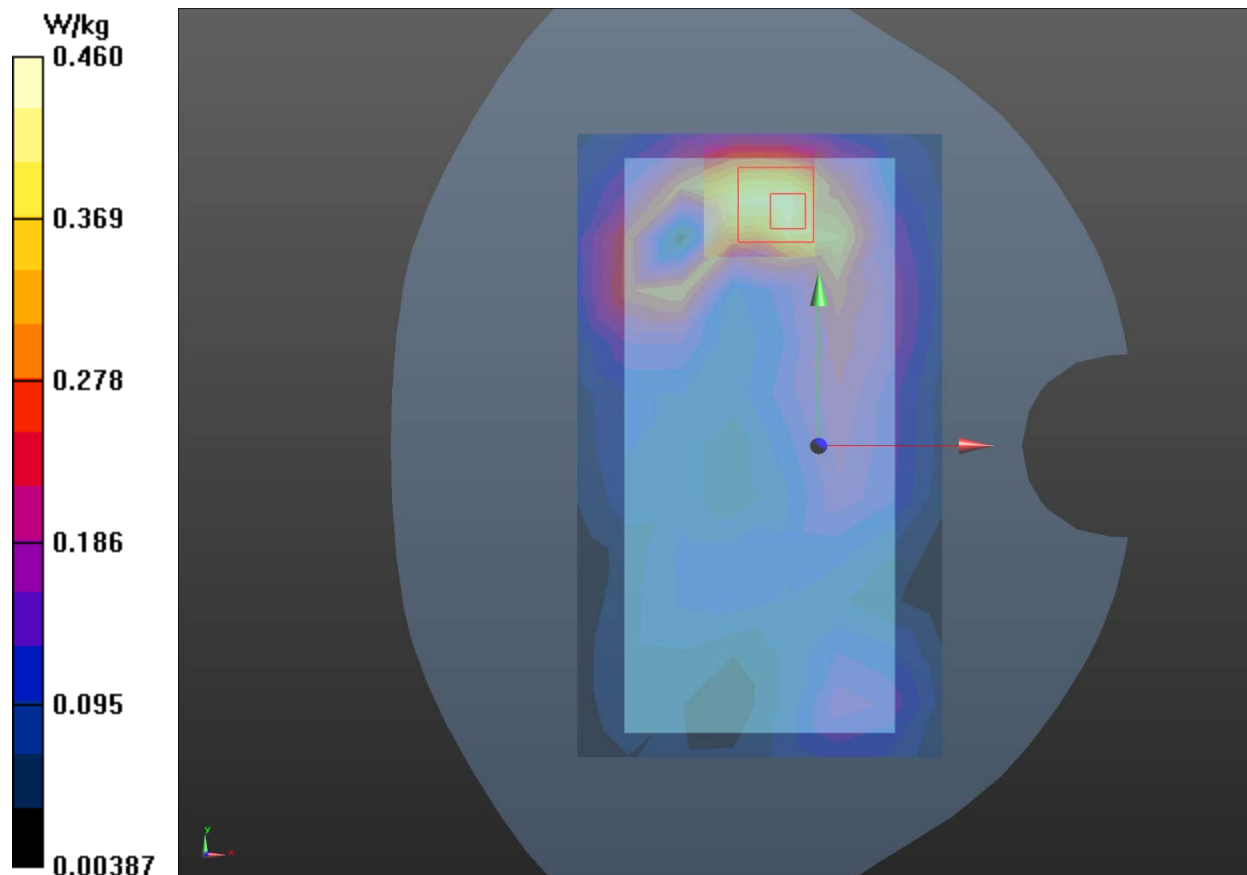
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.865 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 0.885 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.221 W/kg

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



Plot 108 LTE Band 7 1RB Top Edge High (Distance 10mm)

Date: 1/20/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.516 W/kg

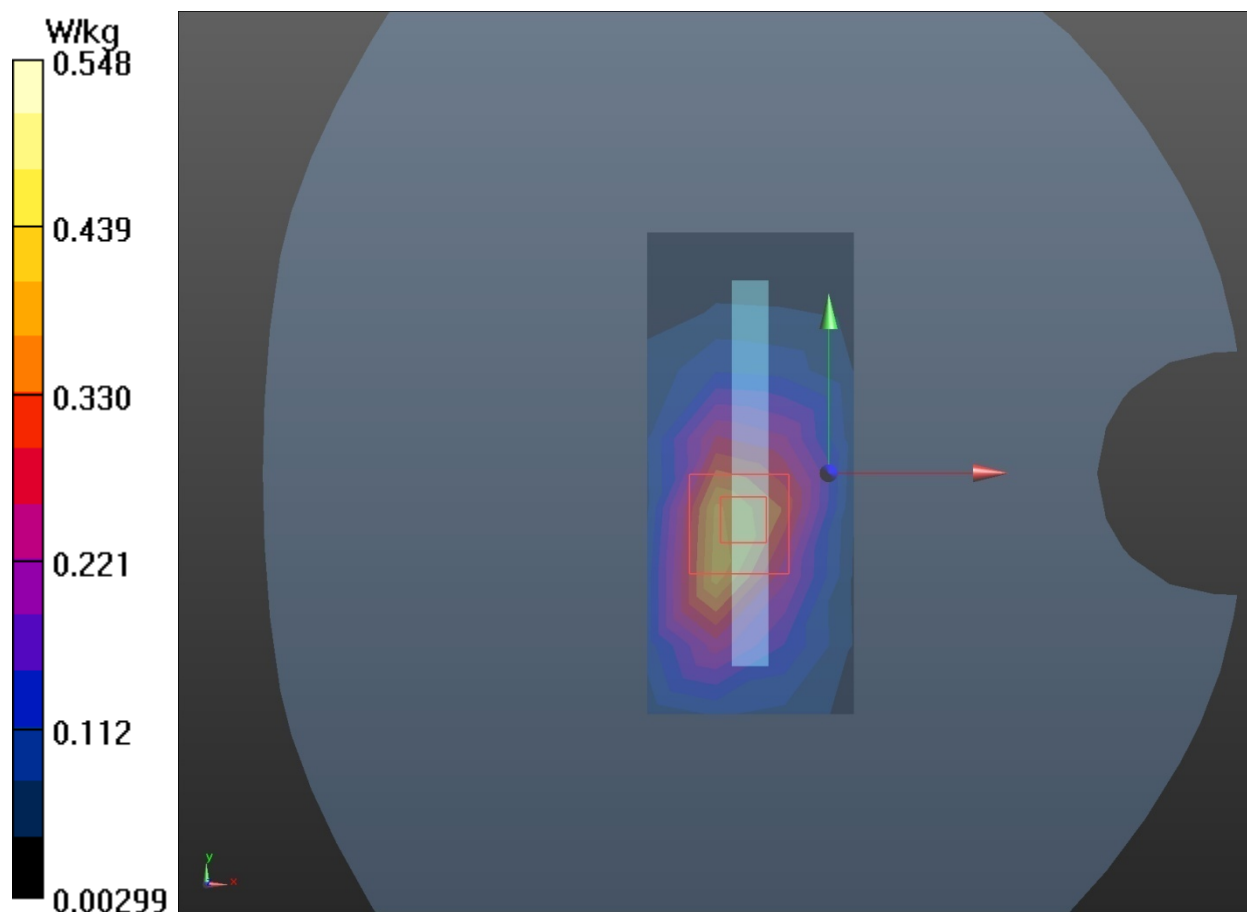
Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.40 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.488 W/kg; SAR(10 g) = 0.227 W/kg

Maximum value of SAR (measured) = 0.548 W/kg



Plot 108 LTE Band 7 1RB Top Edge Middle (Distance 0mm)

Date: 1/20/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 4.72 W/kg

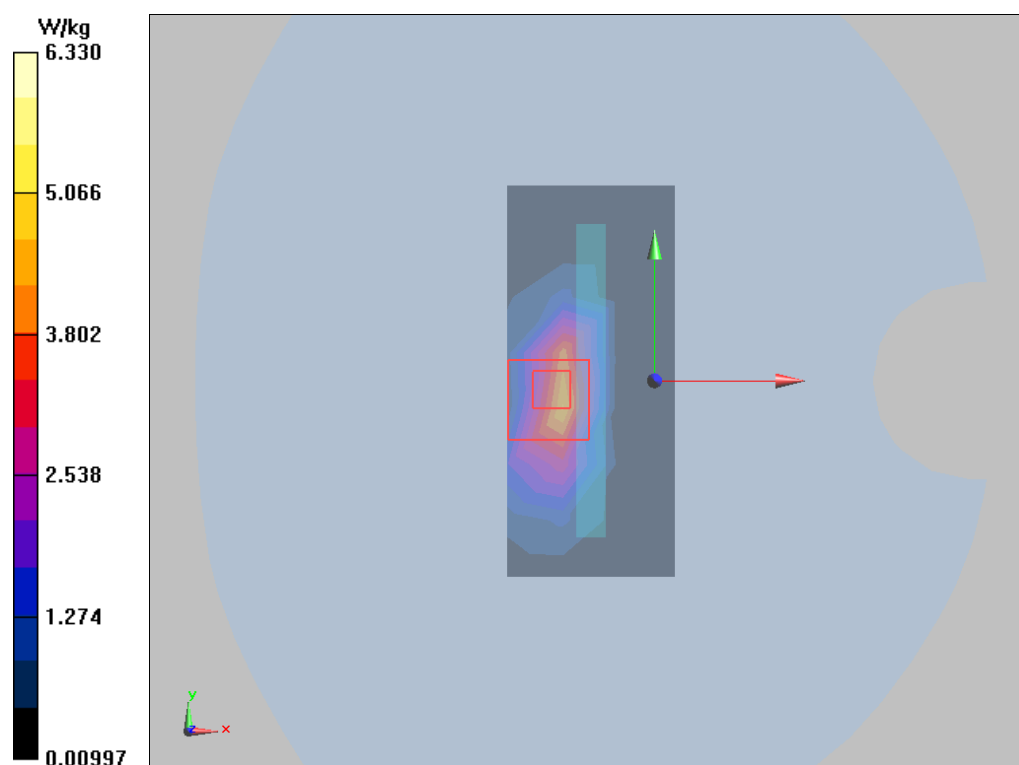
Top Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.17 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 14.8 W/kg

SAR(1 g) = 4.88 W/kg; SAR(10 g) = 1.70 W/kg

Maximum value of SAR (measured) = 6.33 W/kg



Plot 120 LTE Band 38 1RB Left Tilt High

Date: 1/21/2021

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

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

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

Left Tilt High/Area Scan (10x15x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.775 W/kg

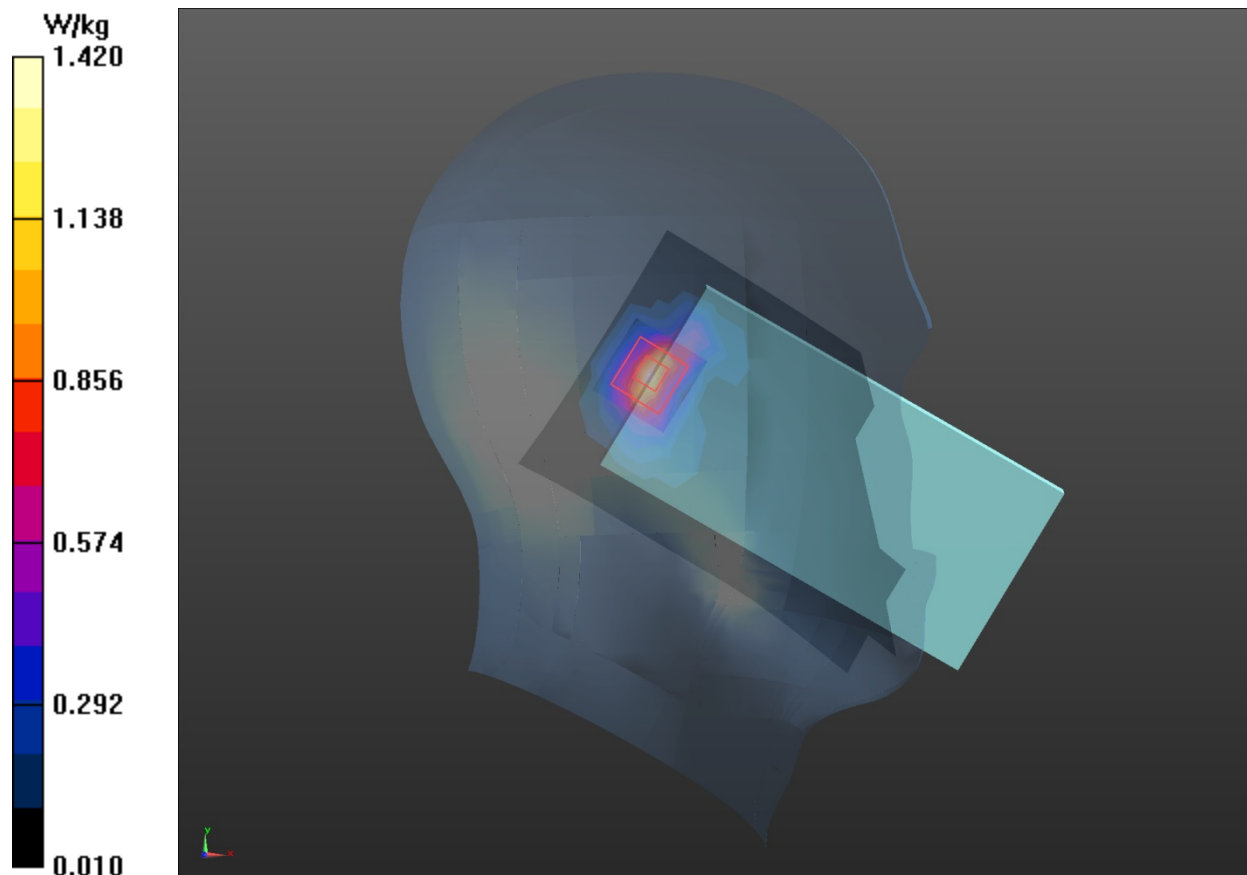
Left Tilt High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 26.15 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 2.20 W/kg

SAR(1 g) = 0.584 W/kg; SAR(10 g) = 0.230 W/kg

Maximum value of SAR (measured) = 1.42 W/kg



Plot 121 LTE Band 38 1RB Back Side High (Distance 15mm)

Date: 1/21/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x15x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.411 W/kg

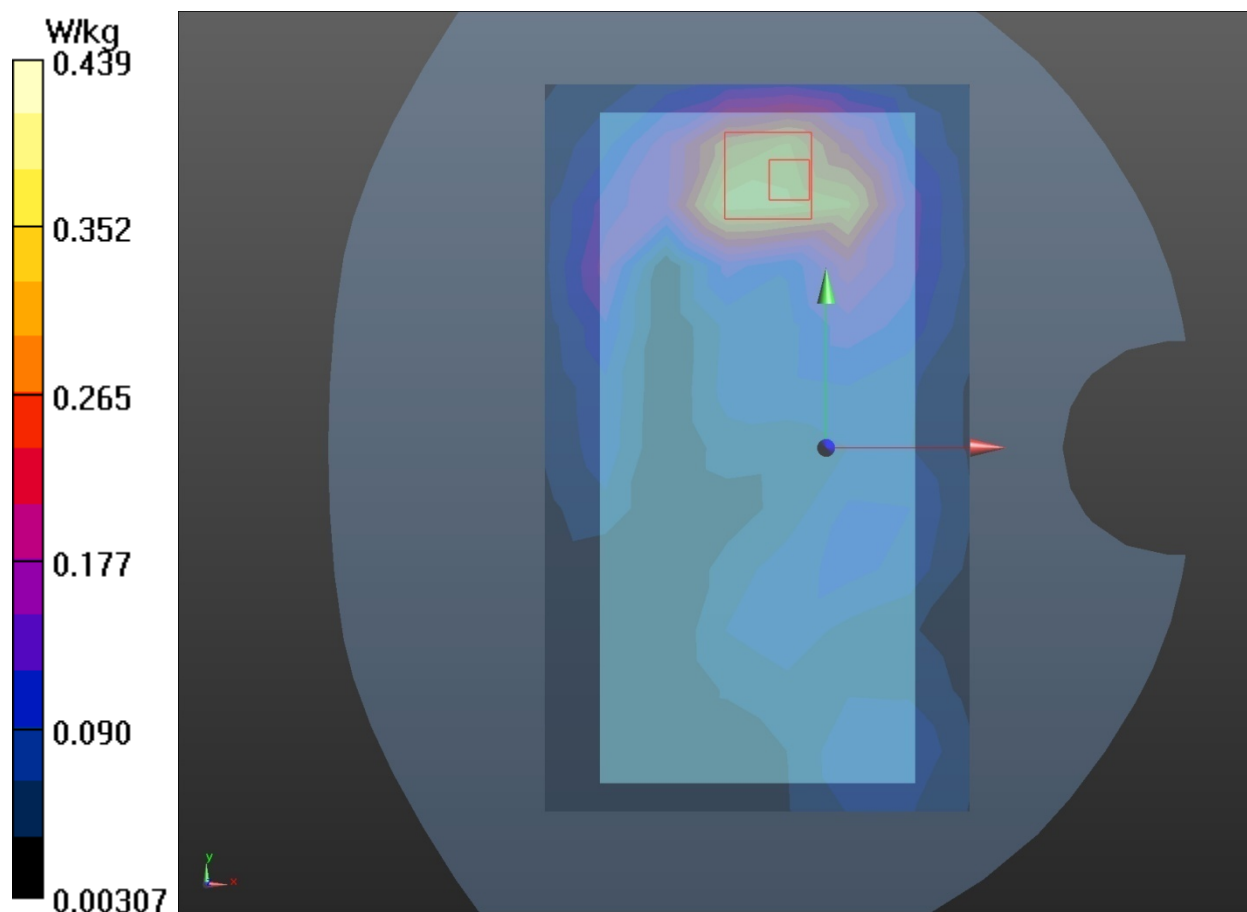
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.917 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 0.859 W/kg

SAR(1 g) = 0.400 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.439 W/kg



Plot 122 LTE Band 38 1RB Top Edge High (Distance 10mm)

Date: 1/21/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (5x10x1): Measurement grid: dx=12mm, dy=12mm

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

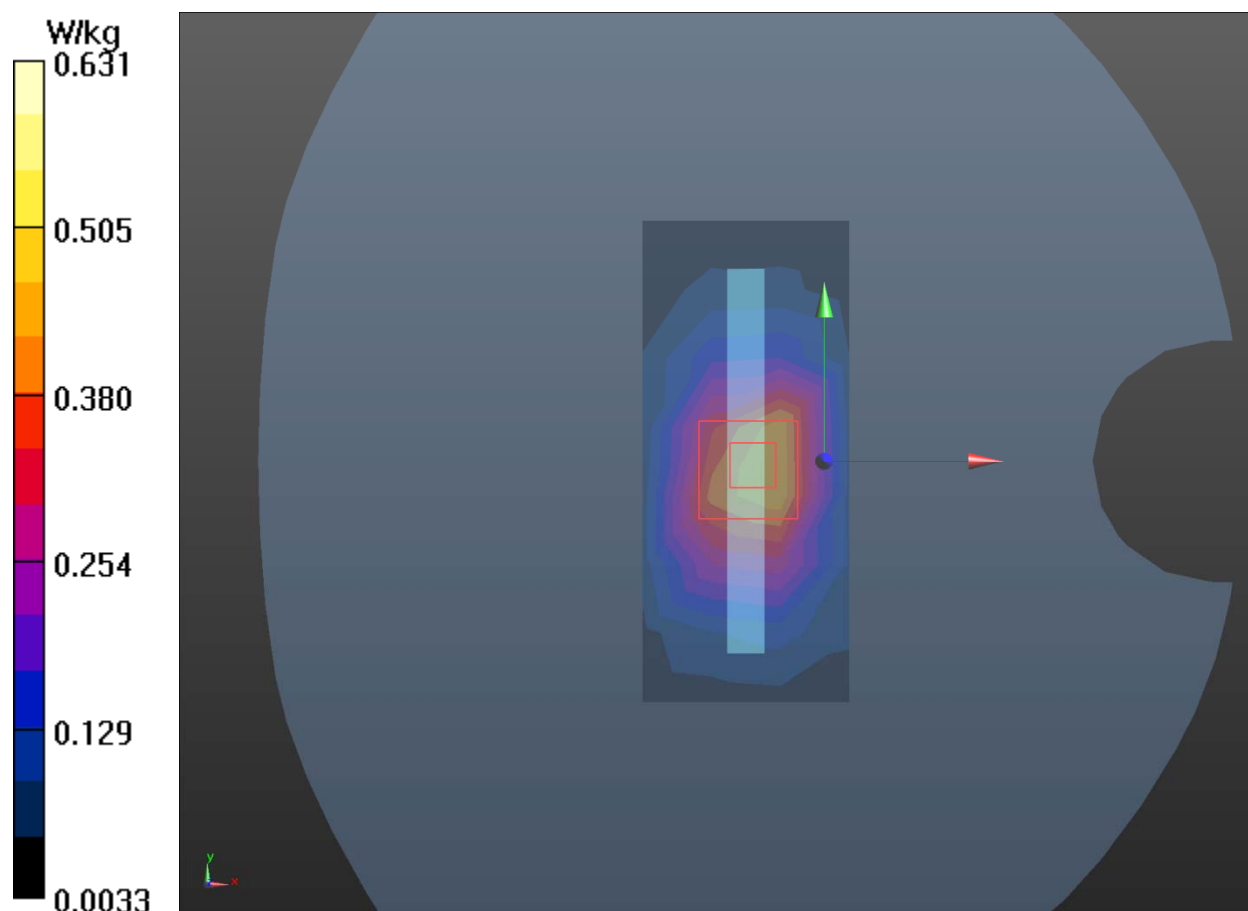
Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.27 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.622 W/kg; SAR(10 g) = 0.287 W/kg

Maximum value of SAR (measured) = 0.631 W/kg



Plot 122 LTE Band 38 1RB Top Edge High (Distance 0mm)

Date: 1/21/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 3.54 W/kg

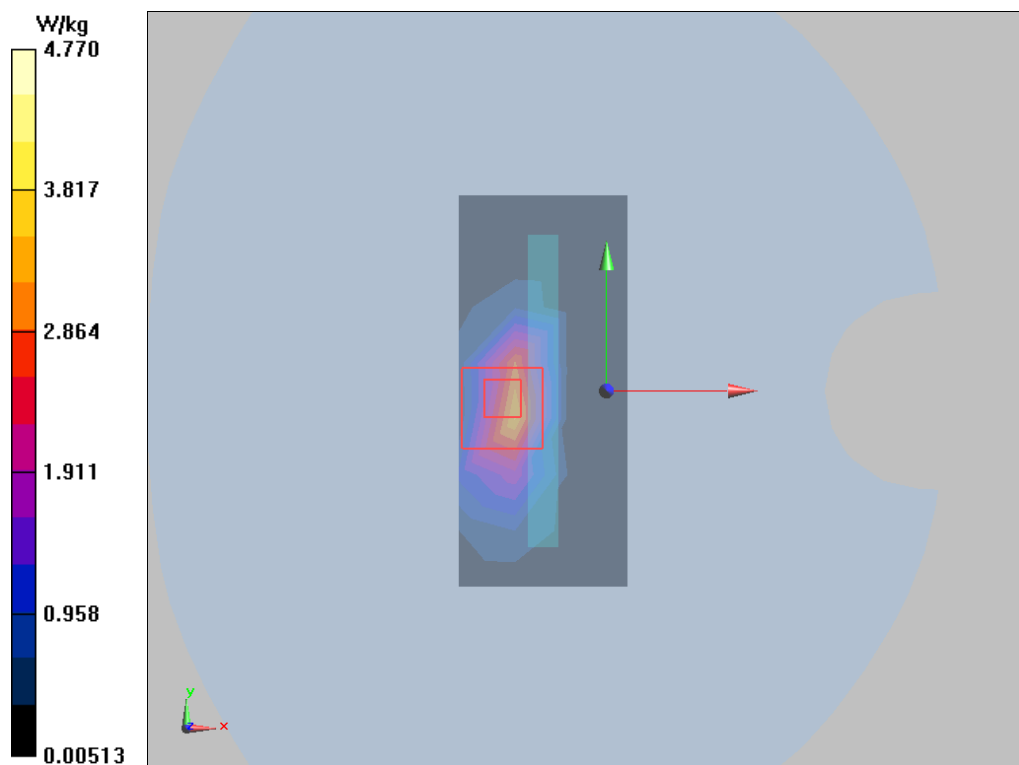
Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.72 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 11.1 W/kg

SAR(1 g) = 3.63 W/kg; SAR(10 g) = 1.22 W/kg

Maximum value of SAR (measured) = 4.77 W/kg



Plot 123 LTE Band 41 1RB Left Cheek High

Date: 2/9/2021

Communication System: UID 0, LTE (0); Frequency: 2665 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2665$ MHz; $\sigma = 2.051$ S/m; $\epsilon_r = 37.799$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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 (10x15x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.804 W/kg

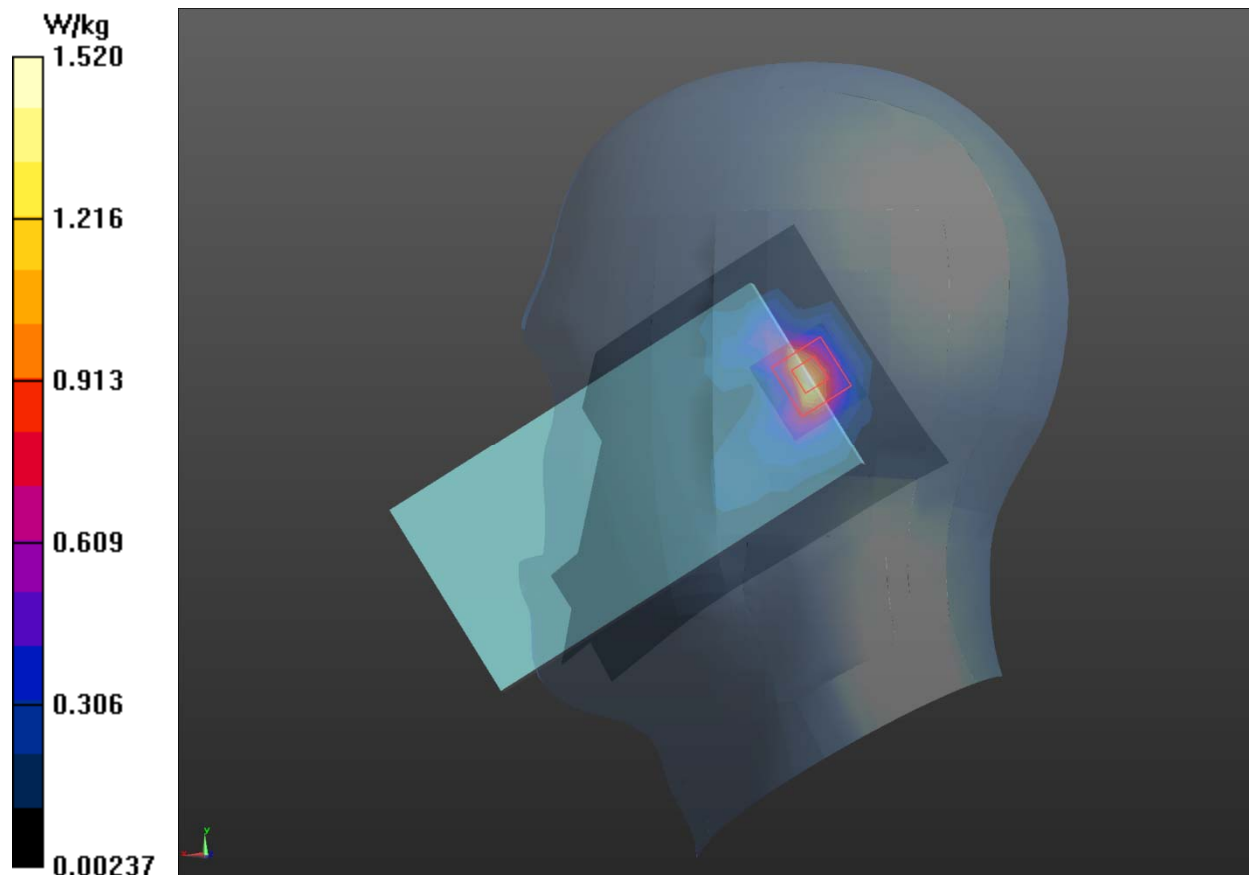
Left Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.26 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 2.54 W/kg

SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.232 W/kg

Maximum value of SAR (measured) = 1.52 W/kg



Plot 124 LTE Band 41 1RB Back Side High (Distance 15mm)

Date: 2/9/2021

Communication System: UID 0, LTE (0); Frequency: 2665 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2665$ MHz; $\sigma = 2.051$ S/m; $\epsilon_r = 37.799$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x15x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.482 W/kg

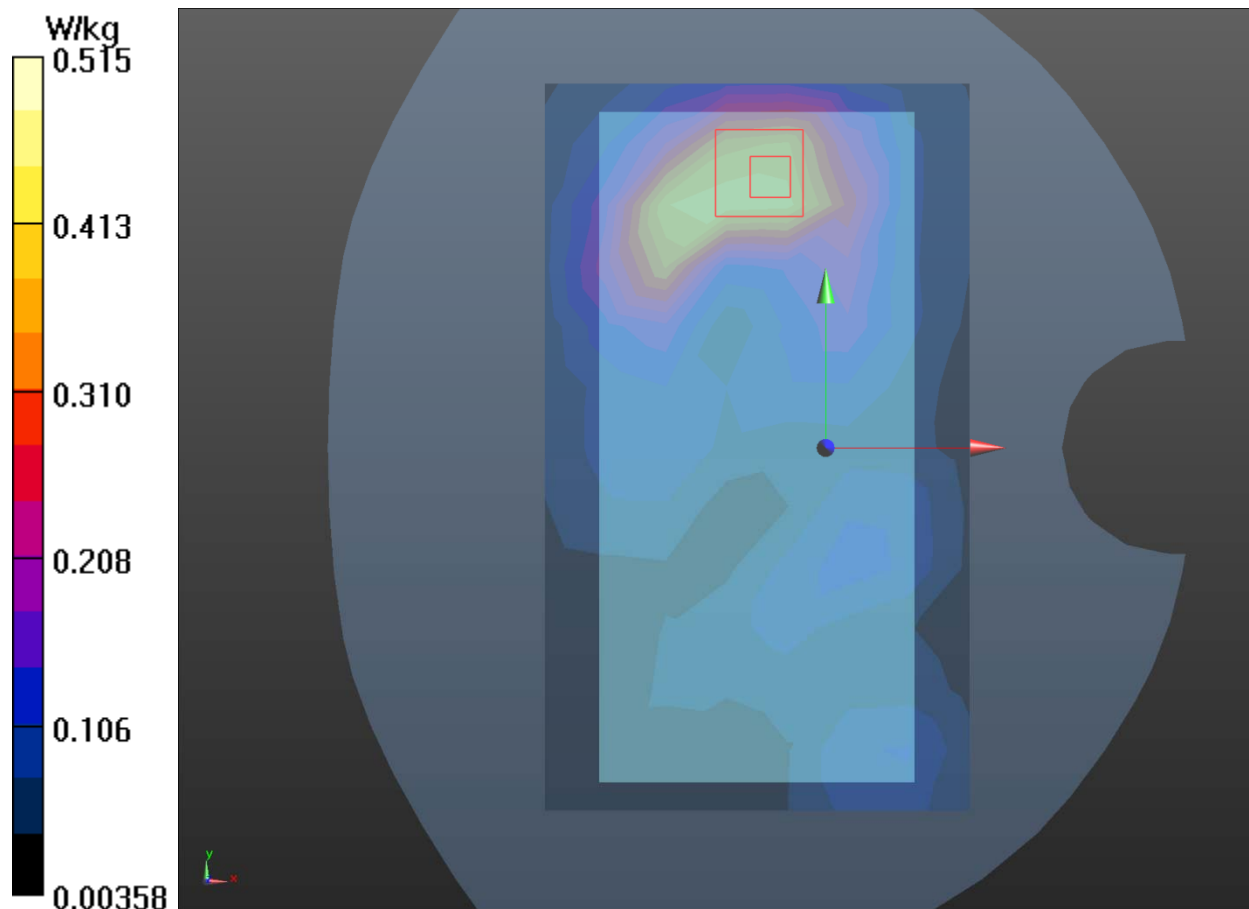
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.378 V/m; Power Drift = -0.048 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.478 W/kg; SAR(10 g) = 0.239 W/kg

Maximum value of SAR (measured) = 0.515 W/kg



Plot 125 LTE Band 41 1RB Top Edge High (Distance 10mm)

Date: 2/9/2021

Communication System: UID 0, LTE (0); Frequency: 2665 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2665$ MHz; $\sigma = 2.051$ S/m; $\epsilon_r = 37.799$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (5x10x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.624 W/kg

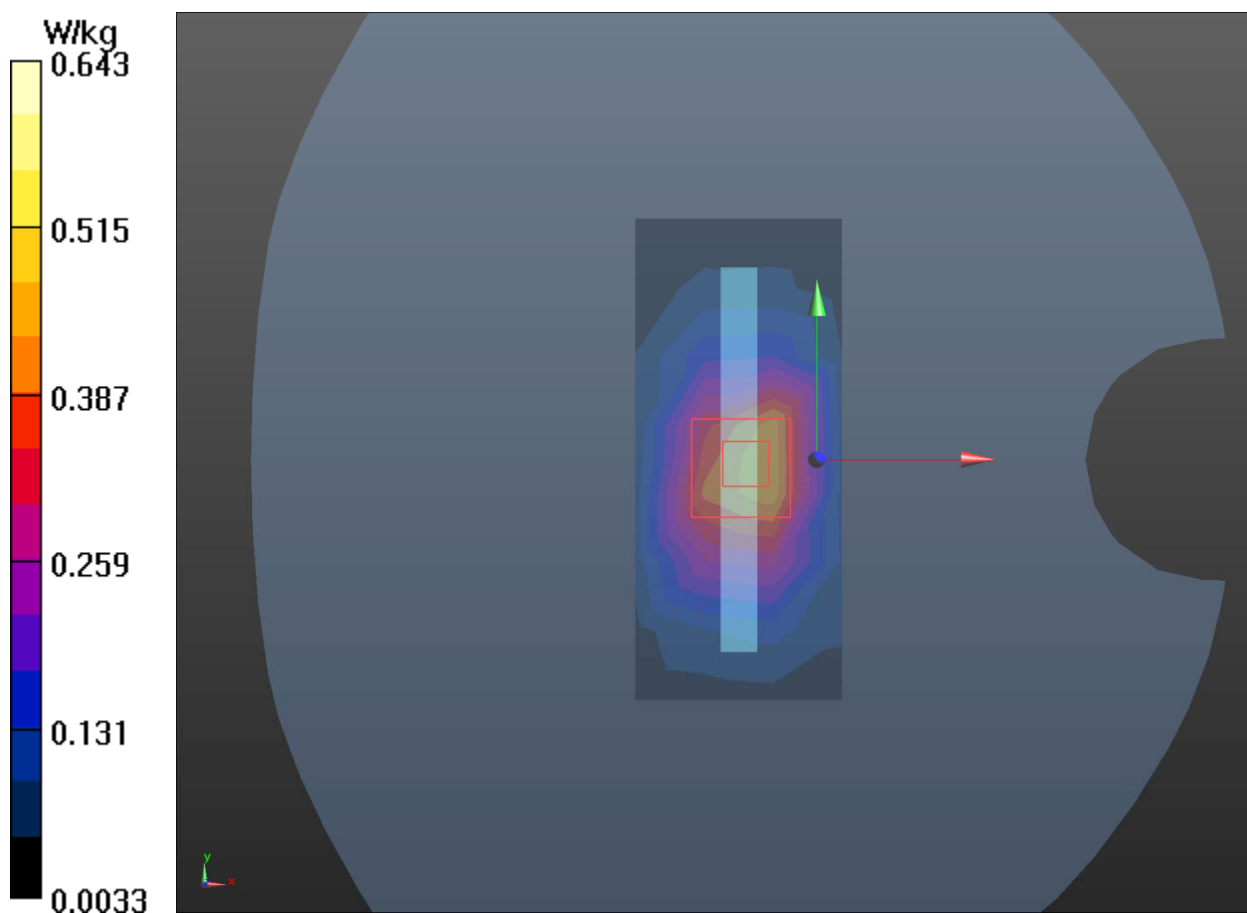
Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.27 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.269 W/kg

Maximum value of SAR (measured) = 0.643 W/kg



Plot 125 LTE Band 41 1RB Top Edge High (Distance 0mm)

Date: 2/9/2021

Communication System: UID 0, LTE (0); Frequency: 2665 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2665$ MHz; $\sigma = 2.051$ S/m; $\epsilon_r = 37.799$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (5x10x1): Measurement grid: dx=12mm, dy=12mm

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

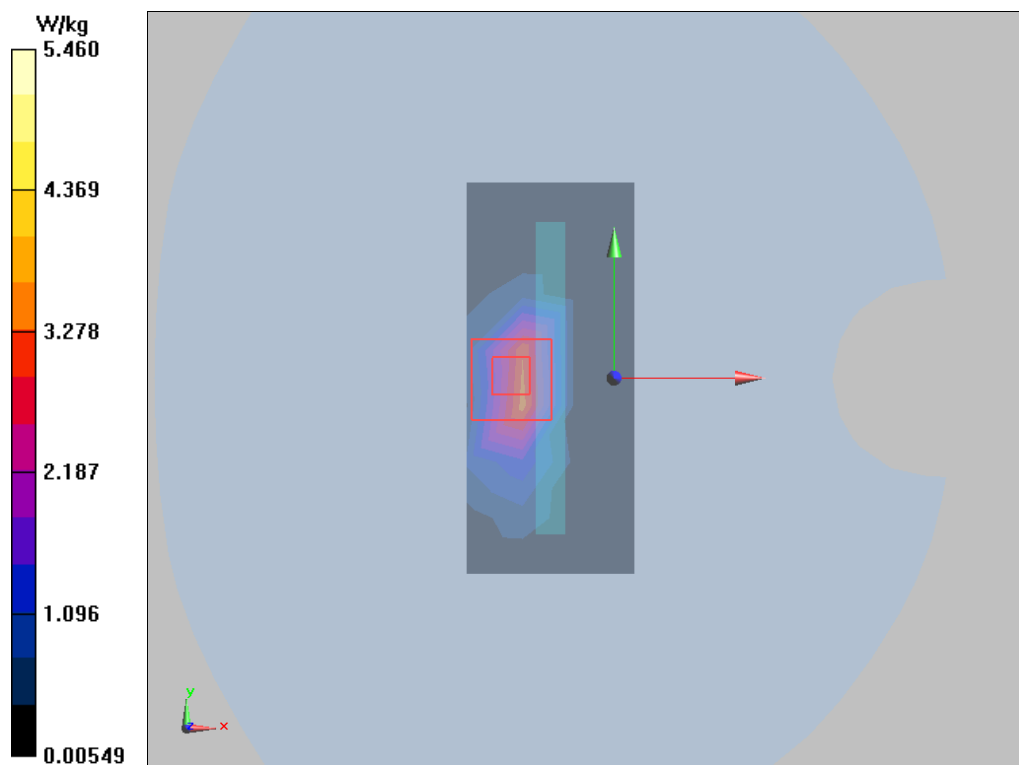
Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.68 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 13.2 W/kg

SAR(1 g) = 4.06 W/kg; SAR(10 g) = 1.29 W/kg

Maximum value of SAR (measured) = 5.46 W/kg



Plot 123 LTE Band 66 50%RB Right Tilt Middle

Date: 1/27/2021

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

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

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

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

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

Maximum value of SAR (measured) = 0.661 W/kg

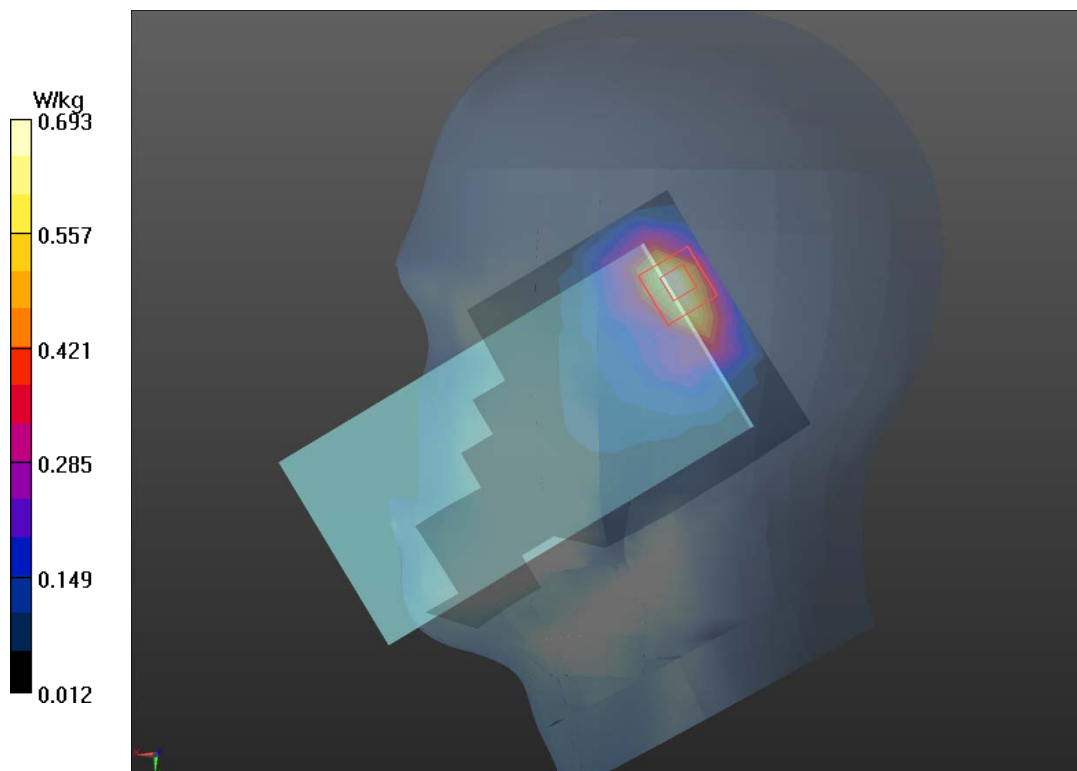
Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.63 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.659 W/kg; SAR(10 g) = 0.342 W/kg

Maximum value of SAR (measured) = 0.693 W/kg



Plot 124 LTE Band 66 1RB Back Side Middle (Distance 15mm)

Date: 1/27/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Maximum value of SAR (measured) = 0.382 W/kg

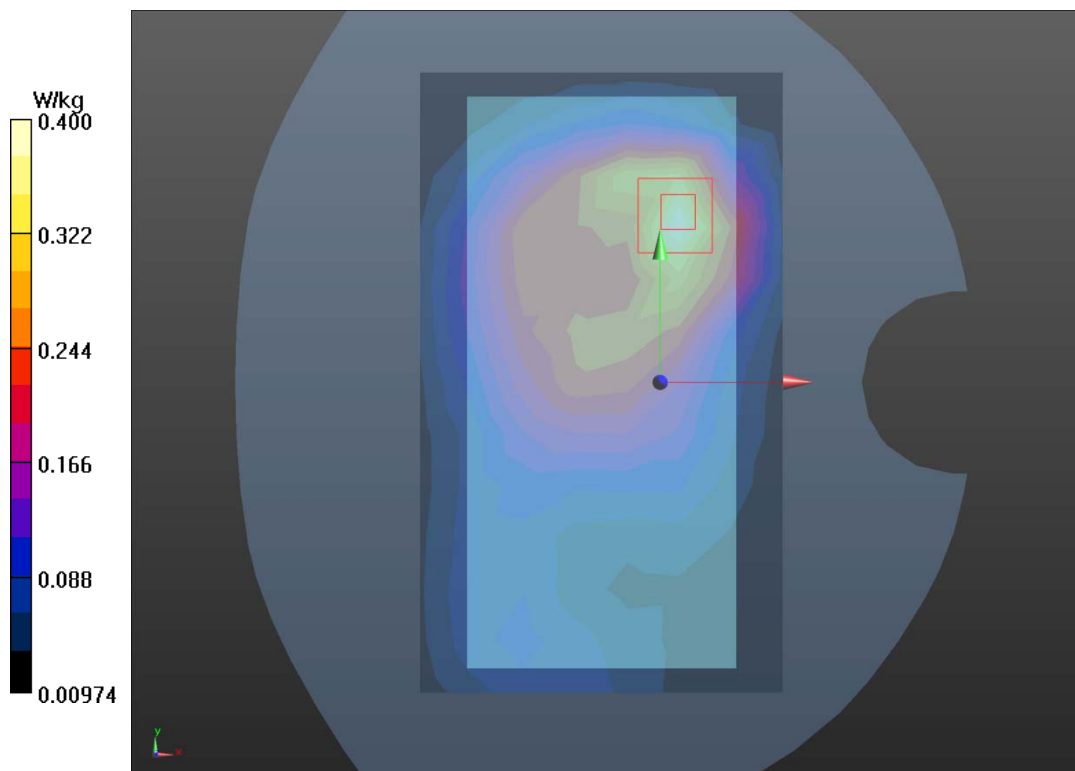
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.71 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.625 W/kg

SAR(1 g) = 0.376 W/kg; SAR(10 g) = 0.221 W/kg

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



Plot 125 LTE Band 66 50%RB Top Edge Middle (Distance 10mm)

Date: 1/27/2021

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

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

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.393 W/kg

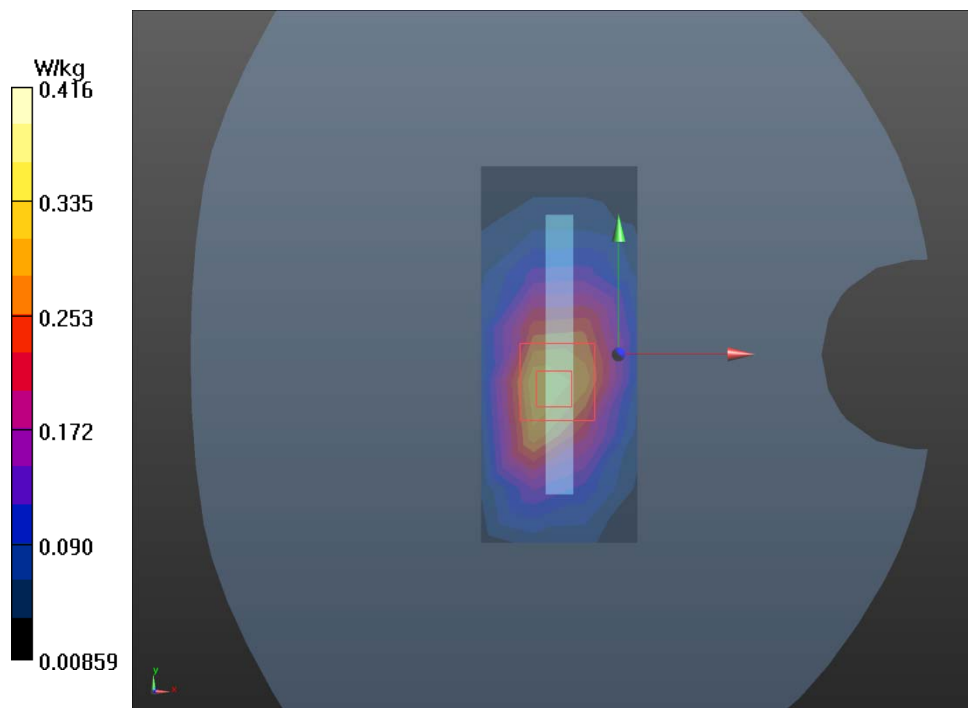
Top Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.79 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.648 W/kg

SAR(1 g) = 0.372 W/kg; SAR(10 g) = 0.205 W/kg

Maximum value of SAR (measured) = 0.416 W/kg



Wi-Fi-Antenna

Plot 126 802.11b Left Cheek Middle

Date: 2/1/2021

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.797$ S/m; $\epsilon_r = 38.629$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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) = 0.158 W/kg

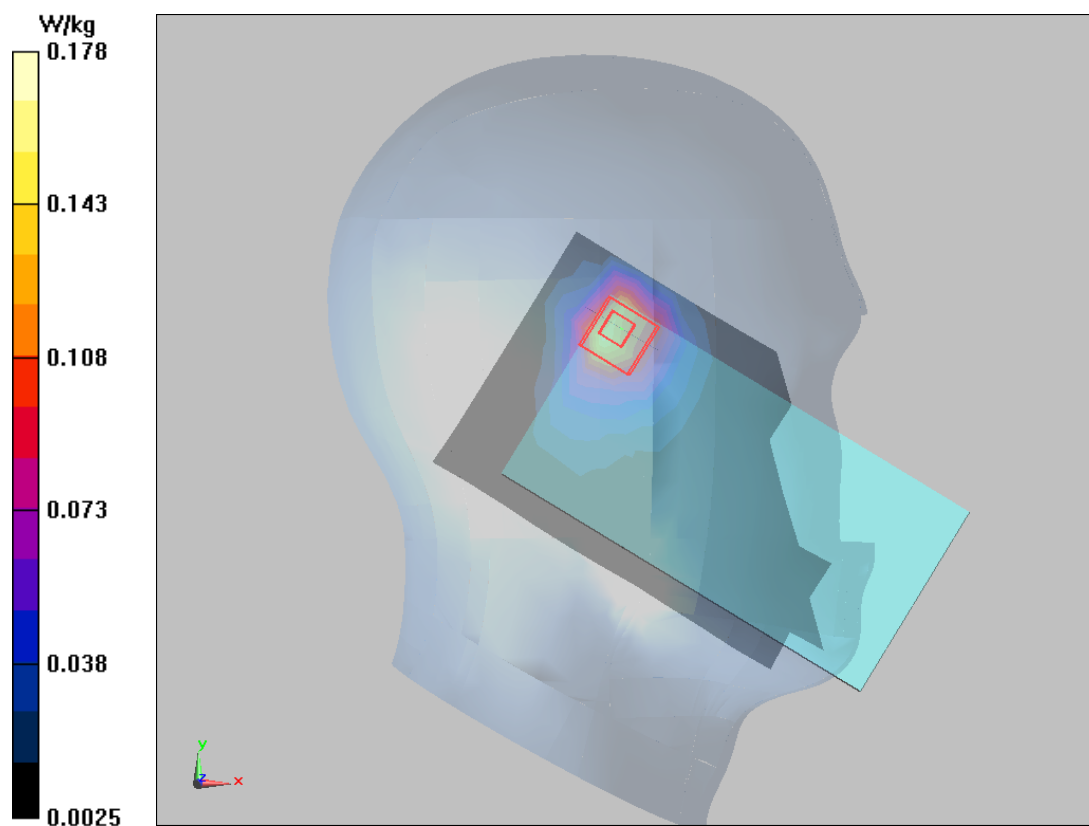
Left Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.083 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.364 W/kg

SAR(1 g) = 0.162 W/kg; SAR(10 g) = 0.078 W/kg

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



Plot 128 802.11b Back Side Middle (Distance 15mm)

Date: 2/1/2021

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.797$ S/m; $\epsilon_r = 38.629$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

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

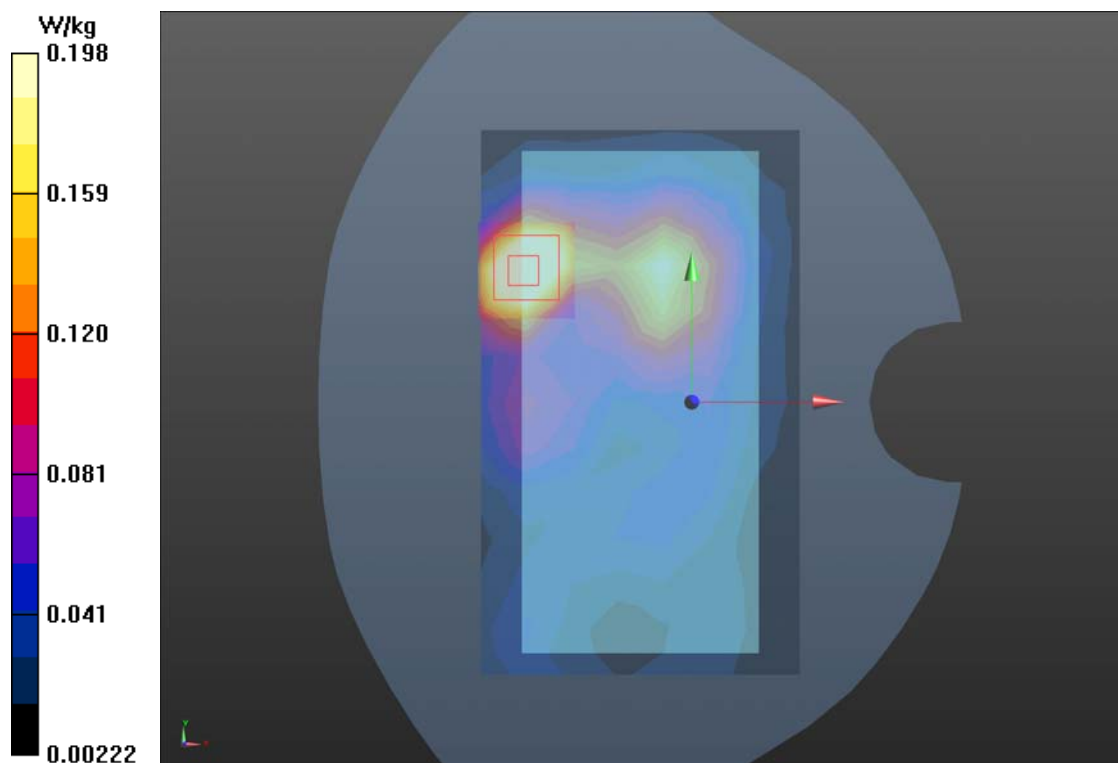
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.640 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 0.366 W/kg

SAR(1 g) = 0.168 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.198 W/kg



Plot 129 802.11b Back Side Middle (Distance 10mm)

Date: 2/1/2021

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

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.797$ S/m; $\epsilon_r = 38.629$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

Phantom: 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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.279 W/kg

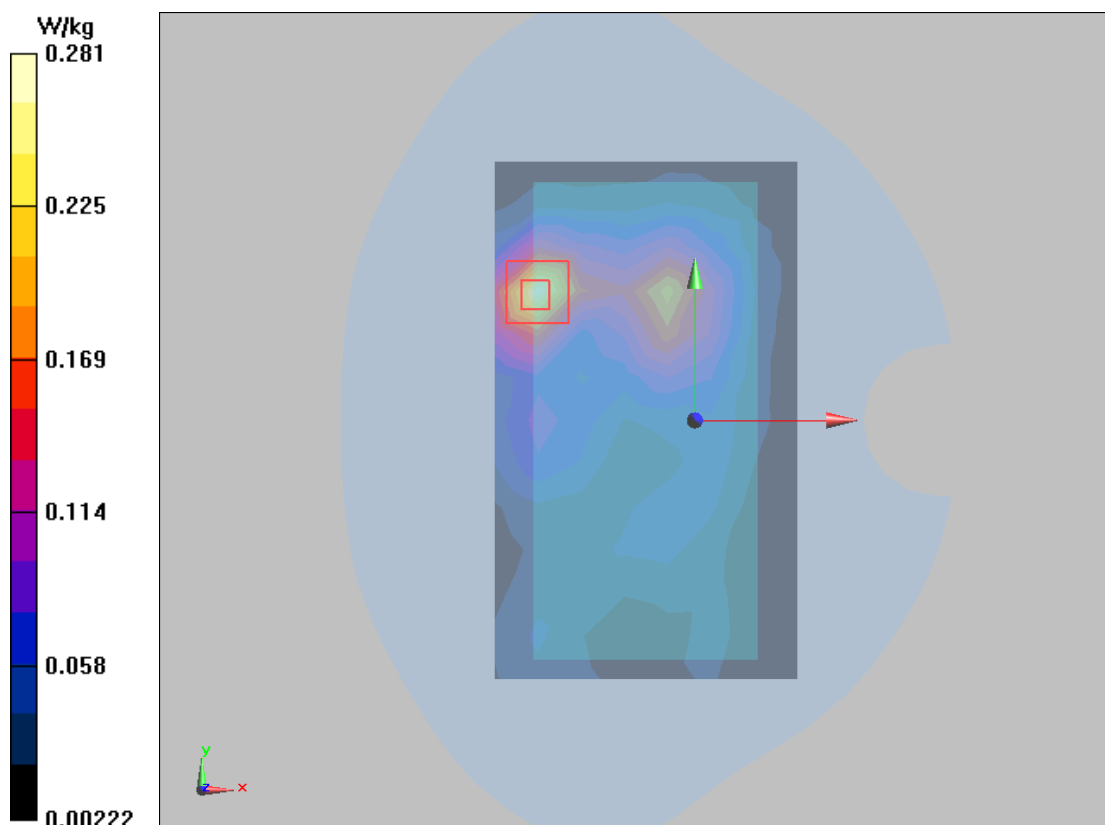
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.640 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 0.566 W/kg

SAR(1 g) = 0.255 W/kg; SAR(10 g) = 0.122 W/kg

Maximum value of SAR (measured) = 0.281 W/kg



Plot 126 BT Left Cheek High

Date: 2/1/2021

Communication System: UID 0, BT (0); Frequency: 2480 MHz; Duty Cycle: 1:1.3

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.843$ S/m; $\epsilon_r = 38.464$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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 (10x18x1): Measurement grid: dx=12mm, dy=12mm

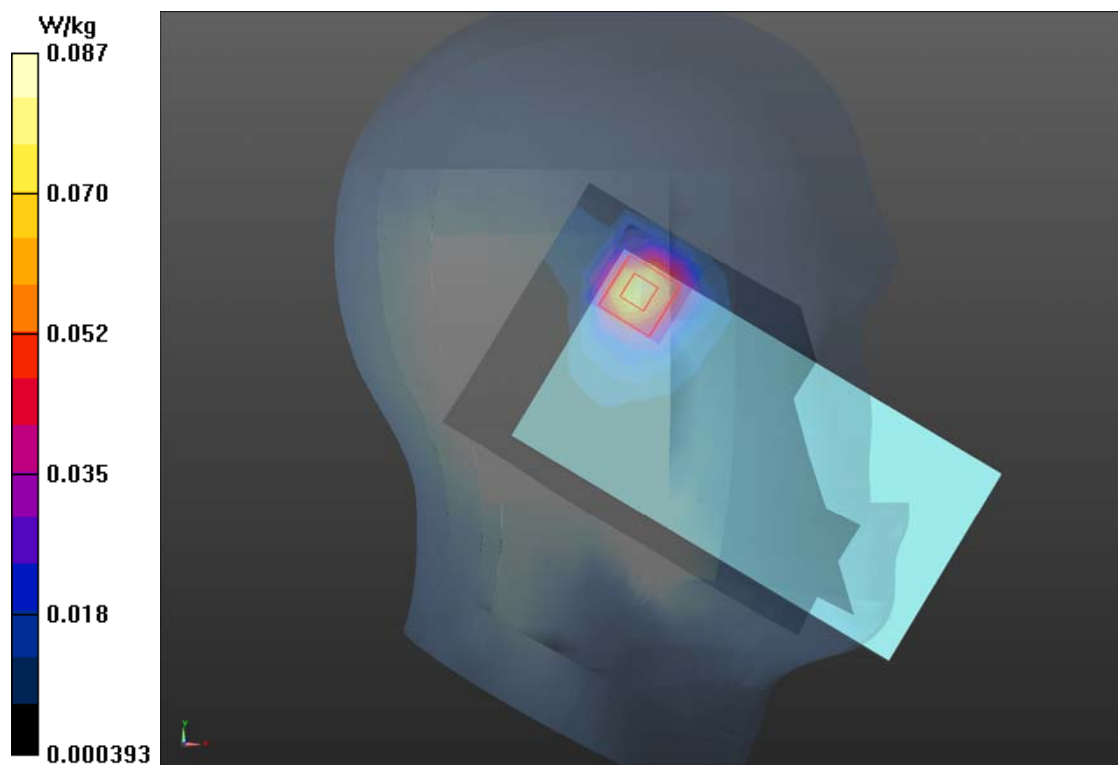
Maximum value of SAR (measured) = 0.084 W/kg

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

Reference Value = 1.274 V/m; Power Drift = 0.012 dB

Peak SAR (extrapolated) = 0.156 W/kg

SAR(1 g) = 0.081 W/kg; SAR(10 g) = 0.039 W/kg



Plot 88 BT Back Side Low (Distance 10mm)

Date: 2/1/2021

Communication System: UID 0, BT (0); Frequency: 2402 MHz; Duty Cycle: 1:1.3

Medium parameters used: $f = 2402$ MHz; $\sigma = 1.757$ S/m; $\epsilon_r = 38.759$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

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

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

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

Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

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

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

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

Reference Value = 4.613 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.021 W/kg

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

