TESTING
No. L2264

SAR TEST REPORT

Product Name	Smart Phone
Model Name	HUAWEI CRR-L09
FCC ID	QISCRR-L09
Applicant	Huawei Technologies Co., Ltd.
Manufacturer	Huawei Technologies Co., Ltd.
Date of issue	August 5, 2015

TA Technology (Shanghai) Co., Ltd.

GENERAL SUMMARY

Reference Standard(s)	**FCC 47CFR §2.1093** Radiofrequency Radiation Exposure Evaluation: Portable Devices **ANSI C95.1- 1992:** Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.(IEEE Std C95.1-1991) **IEEE Std 1528™-2003:** IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques. **IEEE Std 1528a-2005:** IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques. **KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r03:** SAR Measurement Requirements for 100 MHz to 6 GHz **KDB 447498 D01 Mobile Portable RF Exposure v05r02:** Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies **KDB 648474 D04 Handset SAR v01r02:** SAR Evaluation Considerations for Wireless Handsets. **KDB 941225 D01 SAR test for 3G devices v03:** SAR Measurement Procedures CDMA 20001x RTT, 1x Ev-Do, WCDMA, HSDPA/HSPA **KDB 941225 D05 SAR for LTE Devices v02r03** SAR Test Considerations for LTE Handsets and Data Modems **KDB 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r01** Rel. 10 LTE SAR Test Guidance and KDB Inquiries **KDB 941225 D06 Hotspot Mode SAR v02:** SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities **KDB 248227 D01 802.11 Wi-Fi SAR v02r01:** SAR Guidance for IEEE 802.11 (Wi-Fi) Transmitters
Conclusion	This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 7 of this test report are below limits specified in the relevant standards for the tested bands only. General Judgment: **Pass**
Comment	The test result only responds to the measured sample.

Approved by Kai Xu **Revised by** Jiangpeng Lan **Performed by** Liang Ye

Kai Xu	Jiangpeng Lan	Liang Ye
Director	SAR Manager	SAR Engineer

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1. General Information

1.1. Notes of the Test Report

TA Technology (Shanghai) Co., Ltd. has obtained the accreditation of China National Accreditation Service for Conformity Assessment (CNAS), and accreditation number: L2264.

TA Technology (Shanghai) Co., Ltd. guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and technical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

TA Technology (Shanghai) Co., Ltd. is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the items under test and the results of the test. The sample under test was selected by the Client. This report only refers to the item that has undergone the test.

The test results in this test report relate only to the devices specified in this report.This report shall n ot be reproduced except in full without the written approval of **TA Technology (Shanghai) Co., Ltd.**

If the electronic report is inconsistent with the printed one, it should be subject to the latter.

1.2. Testing Laboratory

Company: TA Technology (Shanghai) Co., Ltd.
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1.3. Applicant Information

Company: Huawei Technologies Co., Ltd.

Address: Administration Building, Headquarters of Huawei Techologies Co., Ltd., Bantian, Longgang District
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518129
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1.4. Manufacturer Information

Company: Huawei Technologies Co., Ltd.

Address: Administration Building, Headquarters of Huawei Techologies Co., Ltd., Bantian, Longgang District
Shenzhen
518129
P.R.China

1.5. Information of EUT

General Information

Device Type:	Portable Device		
Exposure Category:	Uncontrolled Environment / General Population		
State of Sample:	Prototype Unit		
Product IMEI:	867108020009612		
Hardware Version:	HL1CRRL09M		
Software Version:	CRR-L09V100R001C900B017		
Antenna Type:	Internal Antenna		
Device Operating Configurations :			
Test Mode(s):	GSM 850/GSM 1900; UMTS Band II/IV/V; LTE FDD Band 2/4/5/7/12/17/25/26; 802.11b/g/n HT20/HT40; Bluetooth/Bluetooth 4.1;		
Test Modulation:	(GSM)GMSK,8PSK; (UMTS)QPSK, (LTE) QPSK, 16QAM; (Bluetooth) GFSK, π/4DQPSK, 8DPSK (Bluetooth 4.1) GFSK (WiFi)DSSS,OFDM		
Device Class:	B		
HSDPA UE Category:	10		
HSUPA UE Category:	6		
DC-HSDPA UE Category:	24		
HSPA+ Downlink Category:	14		
LTE UE Category:	4		
GPRS Multislot Class(12):	Max Number of Timeslots in Uplink		4
	Max Number of Timeslots in Downlink		4
	Max Total Timeslot		5
EGPRS Multislot Class(12):	Max Number of Timeslots in Uplink		4
	Max Number of Timeslots in Downlink		4
	Max Total Timeslot		5
Operating Frequency Range(s):	Mode	Tx (MHz)	Rx (MHz)
	GSM 850	824 - 849	869 - 894
	GSM 1900	1850-1910	1930-1990
	UMTS Band II	1850-1910	1932-1988
	UMTS Band IV	1710–1755	2112–2153
	UMTS Band V	824 - 849	871 - 892
	LTE FDD 2	1850-1910	1930-1990
	LTE FDD 4	1710–1755	2110–2155
	LTE FDD 5	824 - 849	869 - 894

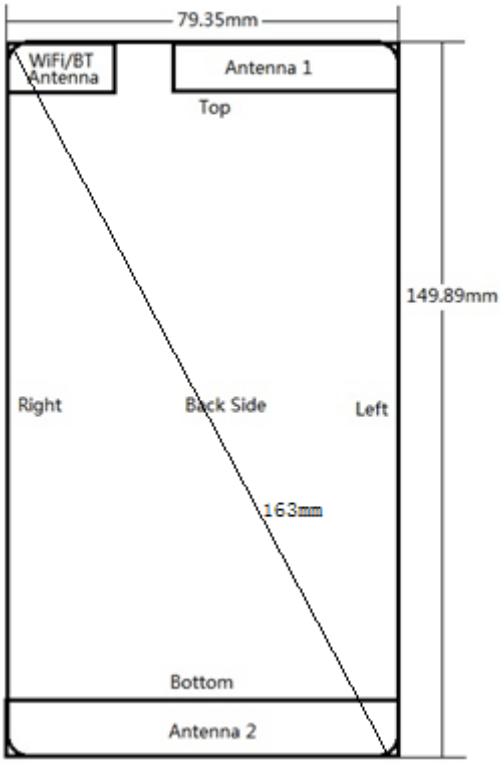
	LTE FDD 7	2500-2570	2625-2690
	LTE FDD 12	699-716	729-746
	LTE FDD 17	704-716	734-746
	LTE FDD 25	1850-1915	1930-1995
	LTE FDD 26	814-849	859-894
	Bluetooth/ Bluetooth 4.1	2400-2483.5	2400-2483.5
	WiFi	2402-2472	2402-2472
Power Class:	GSM 850: 4		
	GSM 1900: 1		
	UMTS Band II/IV/V: 3		
	LTE FDD 2/4/5/7/12/17/25/26: 3		
Power Level	GSM 850: level 5		
	GSM 1900: level 0		
	UMTS Band II/IV/V: all up bits		
	LTE FDD 2/4/5/7/12/17/25/26: max power		
LTE Bandwidth:	LTE FDD 2	1.4MHz,3MHz,5MHz,10MHz,15MHz,20MHz	
	LTE FDD 4	1.4MHz,3MHz,5MHz,10MHz,15MHz,20MHz	
	LTE FDD 5	1.4MHz,3MHz,5MHz,10MHz	
	LTE FDD 7	5MHz,10MHz,15MHz,20MHz	
	LTE FDD 12	1.4MHz,3MHz,5MHz,10MHz	
	LTE FDD 17	5MHz,10MHz	
	LTE FDD 25	1.4MHz,3MHz,5MHz,10MHz,15MHz,20MHz	
	LTE FDD 26	1.4MHz,3MHz,5MHz,10MHz,15MHz	

Auxiliary Equipment Details

Name	Model	Manufacturer	SN
Battery 1	HB436178EBW	Huawei Technologies Co., Ltd.	/
Battery 2	HB436178EBW	Huawei Technologies Co., Ltd.	/

Name	Model	Manufacturer	SN
Earphone 1	/	Boluo County Quancheng Electronic Co., Ltd.	#1
Earphone 2	/	Jiangxi Lianchuang Hongsheng Electronics	#2

1.6. EUT Antenna Locations



Note: 1. The device has NFC operation. The NFC antenna is integrated onto the Battery cover. The SAR tests were performed with the Battery cover. Phones with built-in NFC functions do not require separate SAR testing and can generally be tested according to the SAR measurement procedures normally required for the phone. Influences of the hardware introduced by the built-in NFC functions are inherently considered through testing of the other transmitters that require SAR.

2. 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 (Antenna 1 and Antenna 2). It can transmit from either Main Antenna or Second Antenna. But they can not transmit simultaneously. For SAR test, the Antenna 1 and Antenna 2 are set to the MAX transmit power level respectively and test the SAR respectively in all applicable RF exposure conditions.

Exact antenna separation distance are shown in the table

Antenna	Left side to edge (mm)	Right side to edge (mm)	Top side to edge (mm)	Bottom side to edge (mm)
Main Antenna (Antenna 2)	0	0	141.09	0
Secondary Antenna (Antenna 1)	0	34.37	0	141.09
WIFI/BT Antenna	57.77	0	0	141.09

Mobile Hotspot Sides for SAR Testing

Antenna	Mode	Back Side	Front Side	Left Edge	Right Edge	Top Edge	Bottom Edge
Antenna 1	GSM 850	Yes	Yes	Yes	N/A	Yes	N/A
	GSM 1900	Yes	Yes	Yes	N/A	Yes	N/A
	UMTS Band II	Yes	Yes	Yes	N/A	Yes	N/A
	UMTS Band IV	Yes	Yes	Yes	N/A	Yes	N/A
	UMTS Band V	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 2	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 4	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 5	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 7	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 12	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 17	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 25	Yes	Yes	Yes	N/A	Yes	N/A
	LTE FDD 26	Yes	Yes	Yes	N/A	Yes	N/A
Antenna 2	GSM 850	Yes	Yes	Yes	Yes	N/A	Yes
	GSM 1900	Yes	Yes	Yes	Yes	N/A	Yes
	UMTS Band II	Yes	Yes	Yes	Yes	N/A	Yes
	UMTS Band IV	Yes	Yes	Yes	Yes	N/A	Yes
	UMTS Band V	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 2	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 4	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 5	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 7	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 12	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 17	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 25	Yes	Yes	Yes	Yes	N/A	Yes
	LTE FDD 26	Yes	Yes	Yes	Yes	N/A	Yes
WiFi		Yes	Yes	N/A	Yes	Yes	N/A

Note: 1.When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
2.For smart phones with an overall diagonal dimension is 16.3 cm.Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm, it must be tested as a phablet to determine SAR compliance.

1.7. The Maximum Reported SAR_{1g}

Head SAR Configuration

Antenna	Mode	Test Position	Channel /Frequency(MHz)	Limit SAR_{1g} 1.6 W/kg	
				Measured SAR_{1g} (W/kg)	Reported SAR_{1g} (W/kg)
Antenna 1	GSM 850	Right Cheek	190/836.6	1.07	1.24
	GSM 1900	Right Cheek	512/1850.2	0.84	0.95
	UMTS Band II	Right Cheek	9538/1907.6	0.86	1.02
	UMTS Band IV	Right Tilt	1413/1732.6	0.66	0.71
	UMTS Band V	Right Tilt	4233/846.6	1.00	1.28
	LTE Band 2	Right Cheek	18700/1860	1.03	1.26
	LTE Band 4	Right Cheek	20300/1745	0.95	1.22
	LTE Band 5	Right Cheek	20600/844	1.12	1.24
	LTE Band 7	Right Cheek	21100/2535	0.99	1.01
	LTE Band 12	Right Tilt	23095/707.5	0.53	0.53
	LTE Band 17	Right Tilt	23800/711	0.53	0.53
	LTE Band 25	Right Cheek	26590/1905	1.02	1.17
	LTE Band 26	Right Cheek	26775/822.5	0.89	0.96
Antenna 2	GSM 850	Right Cheek	190/836.6	0.16	0.18
	GSM 1900	Left Cheek	661/1880	0.17	0.18
	UMTS Band II	Left Cheek	9400/1880	0.42	0.48
	UMTS Band IV	Left Cheek	1413/1732.6	0.36	0.37
	UMTS Band V	Right Cheek	4183/836.6	0.17	0.20
	LTE Band 2	Left Cheek	19100/1900	0.41	0.41
	LTE Band 4	Left Cheek	20300/1745	0.40	0.40
	LTE Band 5	Right Cheek	20525/836.5	0.23	0.23
	LTE Band 7	Left Cheek	21350/2560	0.37	0.38
	LTE Band 12	Left Cheek	23130/711	0.20	0.20
	LTE Band 17	Left Cheek	23790/710	0.20	0.20
	LTE Band 25	Left Cheek	26365/1882.5	0.42	0.54
	LTE Band 26	Right Cheek	26775/822.5	0.16	0.17
WiFi(802.11b)		Left Cheek	11/2462	1.19	1.35

Body Worn Configuration

Antenna	Mode	Test Position	Channel /Frequency(MHz)	Limit SAR_{1g} 1.6 W/kg	
				Measured SAR_{1g} (W/kg)	Reported SAR_{1g} (W/kg)
Antenna 1	GSM 850	Back Side	190/836.6	0.16	0.18
	GSM 1900	Front Side	661/1880	0.05	0.05
	UMTS Band II	Front Side	9400/1880	0.08	0.09
	UMTS Band IV	Back Side	1413/1732.6	0.06	0.07
	UMTS Band V	Back Side	4183/836.6	0.12	0.16
	LTE Band 2	Back Side	19100/1900	0.07	0.08
	LTE Band 4	Back Side	20300/1745	0.08	0.08
	LTE Band 5	Back Side	20525/836.5	0.19	0.19
	LTE Band 7	Back Side	21350/2560	0.18	0.18
	LTE Band 12	Back Side	23060/704	0.12	0.12
	LTE Band 17	Back Side	23800/711	0.10	0.10
	LTE Band 25	Back Side	26365/1882.5	0.08	0.09
	LTE Band 26	Back Side	26965/841.5	0.17	0.18
Antenna 2	GSM 850	Back Side	190/836.6	0.24	0.28
	GSM 1900	Back Side	661/1880	0.10	0.10
	UMTS Band II	Front Side	9400/1880	0.17	0.19
	UMTS Band IV	Back Side	1413/1732.6	0.37	0.38
	UMTS Band V	Back Side	4183/836.6	0.22	0.27
	LTE Band 2	Back Side	19100/1900	0.23	0.23
	LTE Band 4	Back Side	20300/1745	0.34	0.34
	LTE Band 5	Back Side	20525/836.5	0.22	0.22
	LTE Band 7	Back Side	21350/2560	0.20	0.20
	LTE Band 12	Back Side	23130/711	0.18	0.18
	LTE Band 17	Back Side	23790/710	0.23	0.24
	LTE Band 25	Back Side	26365/1882.5	0.34	0.42
	LTE Band 26	Back Side	26775/822.5	0.22	0.22
WiFi(802.11b)		Front Side	11/2462	0.10	0.11

Hotspot Configuration

Antenna	Mode	Test Position	Channel /Frequency(MHz)	Limit SAR_{1g} 1.6 W/kg	
				Measured SAR_{1g} (W/kg)	Reported SAR_{1g} (W/kg)
Antenna 1	GSM 850	Back Side	190/836.6	0.41	0.51
	GSM 1900	Top Edge	661/1880	0.15	0.19
	UMTS Band II	Back Side	9400/1880	0.16	0.18
	UMTS Band IV	Front Side	1413/1732.6	0.27	0.29
	UMTS Band V	Back Side	4183/836.6	0.27	0.34
	LTE Band 2	Back Side	19100/1900	0.34	0.40
	LTE Band 4	Back Side	20175/1732.5	0.34	0.39
	LTE Band 5	Back Side	20525/836.7	0.42	0.44
	LTE Band 7	Left Edge	21350/2560	0.15	0.16
	LTE Band 12	Back Side	23095/707.5	0.29	0.29
	LTE Band 17	Back Side	23780/709	0.27	0.27
	LTE Band 25	Back Side	26365/1882.5	0.31	0.35
	LTE Band 26	Back Side	26965/841.5	0.50	0.53
Antenna 2	GSM 850	Front Side	190/836.6	0.27	0.32
	GSM 1900	Left Edge	661/1880	0.45	0.48
	UMTS Band II	Back Side	9400/1880	0.54	0.61
	UMTS Band IV	Bottom Edge	1413/1732.6	0.63	0.65
	UMTS Band V	Back Side	4183/836.6	0.23	0.29
	LTE Band 2	Left Edge	18900/1880	0.43	0.45
	LTE Band 4	Bottom Edge	20300/1745	0.53	0.53
	LTE Band 5	Back Side	20525/836.5	0.25	0.25
	LTE Band 7	Back Side	21350/2560	0.33	0.33
	LTE Band 12	Front Side	23130/711	0.18	0.18
	LTE Band 17	Back Side	23780/709	0.31	0.31
	LTE Band 25	Back Side	26365/1882.5	0.72	0.91
	LTE Band 26	Back Side	26775/822.5	0.21	0.21
WiFi(802.11b)		Front Side	11/2462	0.24	0.28

1.8. Test Date

The test performed from June 25, 2015 to August 3, 2015.

2. SAR Measurements System Configuration

2.1. SAR Measurement Set-up

The DASY5 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (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.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
- The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 2003
- DASY5 software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System validation dipoles allowing to validate the proper functioning of the system.

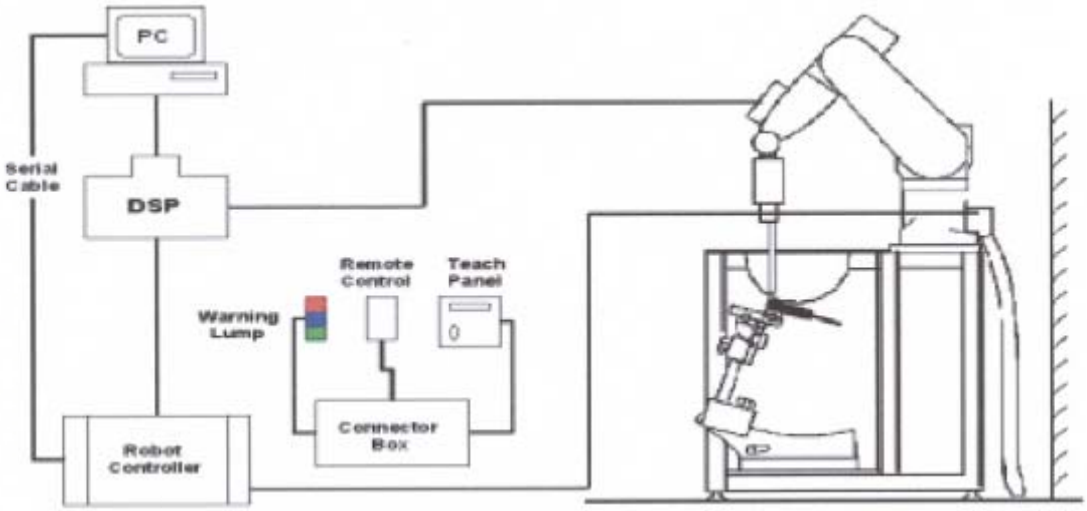


Figure 1 SAR Lab Test Measurement Set-up

2.2. 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.

2.2.1. 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)

Figure 2.EX3DV4 E-field Probe

Directivity: ± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)

Dynamic Range: 10 μW/g to > 100 mW/g Linearity:

± 0.2dB (noise: typically < 1 μW/g)

Dimensions: Overall length: 330 mm (Tip: 20 mm)
Tip diameter: 2.5 mm (Body: 12 mm)
Typical distance from probe tip to dipole centers: 1 mm

Application: High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields).
Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

Figure 3. EX3DV4 E-field probe

2.2.2. E-field Probe Calibration

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

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies bellow 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.
E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$\mathbf{SAR} = \mathbf{C}\frac{\Delta T}{\Delta t}$$

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

$$\mathbf{SAR} = \frac{|E|^2 \sigma}{\rho}$$

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

2.3. Other Test Equipment

2.3.1. Device Holder for Transmitters

The DASY device holder is designed to cope with the die rent positions given in the standard.
It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the inference of the clamp on the test results could thus be lowered.

Figure 4 Device Holder

2.3.2. Phantom

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden Figure. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90% of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot.

Shell Thickness 2±0.1 mm
Filling Volume Approx. 20 liters
Dimensions 810 x 1000 x 500 mm (H x L x W) Aailable Special

Figure 5 Generic Twin Phantom

2.4. Scanning Procedure

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

- The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. ± 5 %.

- The “surface check” measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above ± 0.1mm). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within ± 30°.)

- Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values before running a detailed measurement around the hot spot. Before starting the area scan a grid

spacing is set according to FCC KDB Publication 865664. During scan the distance of the probe to the phantom remains unchanged.
After finishing area scan, the field maxima within a range of 2 dB will be ascertained.

- Zoom Scan
  After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm.

- Spatial Peak Detection
  The procedure for spatial peak SAR evaluation has been implemented and can determine values of masses of 1g and 10g, as well as for user-specific masses.The DASY5 system allows evaluations that combine measured data and robot positions, such as:
  • maximum search
  • extrapolation
  • boundary correction
  • peak search for averaged SAR
  During a maximum search, global and local maxima searches are automatically performed in 2-D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2 dB of the global maxima for all SAR distributions.
  Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. Several measurements at different distances are necessary for the extrapolation. Extrapolation routines require at least 10 measurement points in 3-D space. They are used in the Zoom Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Shepard's method for extrapolation.
- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 5mm steps.

Table 1: Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01

Frequency	Maximum Area Scan Resolution (mm) (Δx_{area}, Δy_{area})	Maximum Zoom Scan Resolution (mm) (Δx_{zoom}, Δy_{zoom})	Maximum Zoom Scan Spatial Resolution (mm) $\Delta z_{zoom}(n)$	Minimum Zoom Scan Volume (mm) (x,y,z)
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≥ 22

2.5. Data Storage and Evaluation

2.5.1. Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DAE4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

2.5.2. Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Normi, a_{i0}, a_{i1}, a_{i2}
	- Conversion factor	$ConvF_i$
	- Diode compression point	Dcp_i
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	
	- Density	

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot c f / d c p_i$$

With V_i = compensated signal of channel i (i = x, y, z)

U_i = input signal of channel i (i = x, y, z)

cf = crest factor of exciting field (DASY parameter)

dcp_i = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes: $E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$

H-field probes: $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$

With V_i = compensated signal of channel i (i = x, y, z)

$Norm_i$ = sensor sensitivity of channel i (i = x, y, z)
[mV/(V/m)^2] for E-field Probes

$ConvF$ = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_Y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot})^2 \cdot \sigma / (\rho \cdot 1000)$$

with ***SAR*** = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

= conductivity in [mho/m] or [Siemens/m]

= equivalent tissue density in g/cm^3

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \quad \text{or} \quad P_{pwe} = H_{tot}^2 \cdot 37.7$$

with P_{pwe} = equivalent power density of a plane wave in mW/cm^2

E_{tot} = total electric field strength in V/m

H_{tot} = total magnetic field strength in A/m

3. Laboratory Environment

Table 2: The Requirements of the Ambient Conditions

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

4. Tissue-equivalent Liquid

4.1. Tissue-equivalent Liquid Ingredients

The liquid is consisted of water, salt, Glycol, Sugar, Preventol and Cellulose. The liquid has previously been proven to be suited for worst-case. The table 3 and table 4 show the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the KDB 865664 D01.

Table 3: Composition of the Head Tissue Equivalent Matter

MIXTURE%	FREQUENCY(Brain) 750MHz
Water	41.448
Sugar	56
Salt	1.452
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=750MHz ε=41.9 σ=0.89

MIXTURE%	FREQUENCY(Brain) 835MHz
Water	41.45
Sugar	56
Salt	1.45
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz ε=41.5 σ=0.9

MIXTURE%	FREQUENCY(Brain) 1750MHz
Water	55.24
Glycol	44.45
Salt	0.31
Dielectric Parameters Target Value	f=1750MHz ε=40.1 σ=1.37

MIXTURE%	FREQUENCY(Brain) 1900MHz
Water	55.242
Glycol monobutyl	44.452
Salt	0.306
Dielectric Parameters Target Value	f=1900MHz ε=40.0 σ=1.40

MIXTURE%	FREQUENCY(Brain) 2450MHz
Water	62.7
Glycol	36.8
Salt	0.5
Dielectric Parameters Target Value	f=2450MHz ε=39.2 σ=1.80

MIXTURE%	FREQUENCY(Brain) 2600MHz
Water	55.242
Glycol	44.452
Salt	0.306
Dielectric Parameters Target Value	f=2600MHz ε=39.0 σ=1.96

Table 4: Composition of the Body Tissue Equivalent Matter

MIXTURE%	FREQUENCY(Body) 750MHz
Water	52.49
Sugar	45
Salt	1.41
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=750MHz ε=55.5 σ=0.96

MIXTURE%	FREQUENCY(Body) 835MHz
Water	52.5
Sugar	45
Salt	1.4
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz ε=55.2 σ=0.97

MIXTURE%	FREQUENCY(Body) 1750MHz
Water	69.91
Glycol	29.97
Salt	0.12
Dielectric Parameters Target Value	f=1750MHz ε=53.4 σ=1.49

MIXTURE%	FREQUENCY (Body) 1900MHz
Water	69.91
Glycol monobutyl	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz ε=53.3 σ=1.52

MIXTURE%	FREQUENCY(Body) 2450MHz
Water	73.2
Glycol	26.7
Salt	0.1
Dielectric Parameters Target Value	f=2450MHz ε=52.7 σ=1.95

MIXTURE%	FREQUENCY (Body) 2600MHz
Water	72.6
Glycol monobutyl	27.3
Salt	0.1
Dielectric Parameters Target Value	f=2600MHz ε=52.5 σ=2.16

4.2. Tissue-equivalent Liquid Properties

Table 5: Dielectric Performance of Tissue Simulating Liquid

Frequency	Test Date	Temp ℃	Measured Dielectric Parameters		Target Dielectric Parameters		Limit (Within ±5%)	
			ε_r	σ(s/m)	ε_r	σ(s/m)	Dev ε_r(%)	Dev σ(%)
750MHz (head)	2015-6-25	21.5	42.3	0.87	41.9	0.89	0.95	-2.25
835MHz (head)	2015-6-30	21.5	41.4	0.88	41.5	0.90	-0.24	-2.22
	2015-7-2	21.5	41.6	0.89	41.5	0.90	0.24	-1.11
1750MHz (head)	2015-7-10	21.5	40.2	1.34	40.1	1.37	0.25	-2.19
1900MHz (head)	2015-7-13	21.5	40.7	1.41	40.0	1.40	1.75	0.71
	2015-7-16	21.5	40.4	1.43	40.0	1.40	1.00	2.14
2450MHz (head)	2015-7-5	21.5	38.3	1.83	39.2	1.80	-2.30	1.67
2600MHz (head)	2015-7-17	21.5	38.2	2.01	39.0	1.96	-2.05	2.55
750MHz (body)	2015-6-26	21.5	57.0	0.95	55.5	0.96	2.70	-1.04
	2015-6-27	21.5	56.5	0.97	55.5	0.96	1.80	1.04
835MHz (body)	2015-7-1	21.5	54.6	1.01	55.2	0.97	-1.09	4.12
	2015-7-3	21.5	55.1	0.98	55.2	0.97	-0.18	1.03
	2015-7-4	21.5	56.0	0.97	55.2	0.97	1.45	0.00
1750MHz (body)	2015-7-7	21.5	51.9	1.46	53.4	1.49	-2.81	-2.01
	2015-7-9	21.5	53.0	1.44	53.4	1.49	-0.75	-3.36
	2015-8-3	21.5	51.7	1.48	53.4	1.49	-3.18	-0.67
1900MHz (body)	2015-7-8	21.5	52.6	1.51	53.3	1.52	-1.31	-0.66
	2015-7-14	21.5	52.9	1.48	53.3	1.52	-0.75	-2.63
	2015-7-15	21.5	52.7	1.49	53.3	1.52	-1.13	-1.97
2450MHz (body)	2015-7-11	21.5	52.5	1.99	52.7	1.95	-0.38	2.05
2600MHz (body)	2015-7-18	21.5	51.5	2.22	52.5	2.16	-1.90	2.78

5. System Check

5.1. Description of System Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured every day using the dielectric probe kit and the network analyzer. A system check measurement was made following the determination of the dielectric parameters of the simulates, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system check results (dielectric parameters and SAR values) are given in the table 6 and table 7.

System check results have to be equal or near the values determined during dipole calibration with the relevant liquids and test system (±10 %).

System check is performed regularly on all frequency bands where tests are performed with the DASY5 system.

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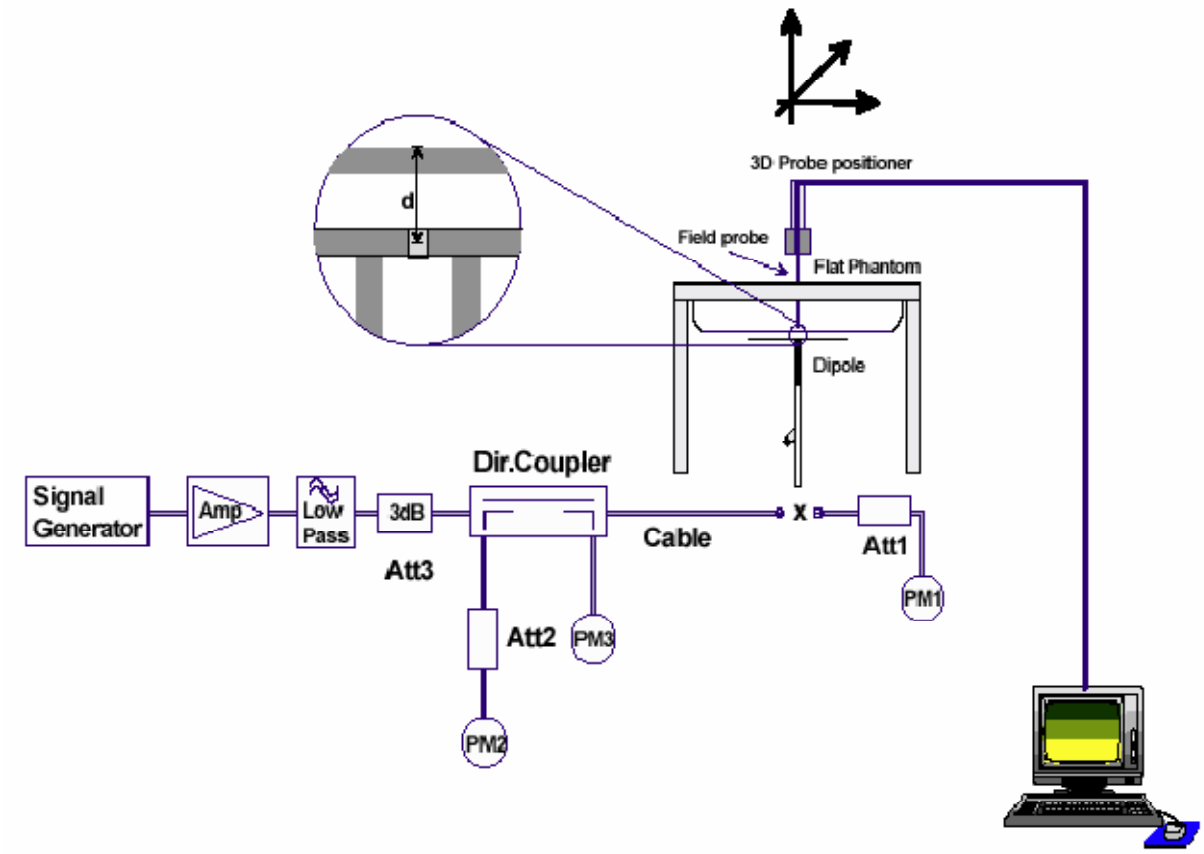


Figure 6 System Check Set-up

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 D1750V2 SN: 1033				
Head Liquid				
Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ
1/26/2014	-41.9	/	50.5	/
1/25/2015	-40.6	3.1%	52.4	1.9Ω
Body Liquid				
Date of Measurement	Return Loss(dB)	Δ %	Impedance (Ω)	ΔΩ
1/26/2014	-24.3	/	45.8	/
1/25/2015	-23.5	3.3%	48.5	2.7Ω

5.2. System Check Results

Table 6: System Check in Head Tissue Simulating Liquid

Frequency	Test Date	Dielectric Parameters		250mW Measured SAR_{1g}	1W Normalized SAR_{1g}	1W Target SAR_{1g}	Limit (±10% Deviation)
		ε_r	σ(s/m)	(W/kg)			
750MHz	2015-6-25	42.3	0.87	2.13	8.52	8.31	2.53
835MHz	2015-6-30	41.4	0.88	2.44	9.76	9.54	2.31
	2015-7-2	41.6	0.89	2.46	9.84	9.54	3.14
1750MHz	2015-7-10	40.2	1.34	8.95	35.80	37.20	-3.76
1900MHz	2015-7-13	40.7	1.41	9.48	37.92	39.20	-3.27
	2015-7-16	40.4	1.43	9.59	38.36	39.20	-2.14
2450MHz	2015-7-5	38.3	1.83	13.70	54.80	52.50	4.38
2600MHz	2015-7-17	38.2	2.01	13.90	55.60	56.90	-2.28

Note：1. The graph results see ANNEX B.
2. Target Values used derive from the calibration certificate

Table 7: System Check in Body Tissue Simulating Liquid

Frequency	Test Date	Dielectric Parameters		250mW Measured SAR_{1g}	1W Normalized SAR_{1g}	1W Target SAR_{1g}	Limit (±10% Deviation)
		ε_r	σ(s/m)	(W/kg)			
750MHz	2015-6-26	57.0	0.95	2.22	8.88	8.75	1.49
	2015-6-27	56.5	0.97	2.17	8.68	8.75	-0.80
835MHz	2015-7-1	54.6	1.01	2.41	9.64	9.54	1.05
	2015-7-3	55.1	0.98	2.46	9.84	9.54	3.14
	2015-7-4	56.0	0.97	2.49	9.96	9.54	4.40
1750MHz	2015-7-7	51.9	1.46	9.24	36.96	38.80	-4.74
	2015-7-9	53.0	1.44	9.27	37.08	38.80	-4.43
	2015-8-3	51.7	1.48	9.25	37.00	38.80	-4.64
1900MHz	2015-7-8	52.6	1.51	9.93	39.72	40.00	-0.70
	2015-7-14	52.9	1.48	9.82	39.28	40.00	-1.80
	2015-7-15	52.7	1.49	9.83	39.32	40.00	-1.70
2450MHz	2015-7-11	52.5	1.99	12.50	50.00	52.40	-4.58
2600MHz	2015-7-18	51.5	2.22	13.50	54.00	56.40	-4.26

Note：1. The graph results see ANNEX B.
2. Target Values used derive from the calibration certificate

6. Operational Conditions during Test

6.1. General Description of Test Procedures

A communication link is set up with a System Simulator (SS) by air link, and a call is established. The EUT is commanded to operate at maximum transmitting power.

Connection to the EUT is established via air interface with CMW 500, and the EUT is set to maximum output power by CMW 500. The EUT battery must be fully charged and checked periodically during the test to as certain uniform power output. The antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30 dB.

6.2. Test Positions

6.2.1. 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 - 2003 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

6.2.2. Body Worn Configuration

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

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

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are tested with the device with each accessory. If

multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

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

6.2.3. Phablet SAR test considerations

Per KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that 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.

1. The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.
2. The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg; however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold .

6.3. Measurement Variability

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

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

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

6.4. Power Reduction Operation

Antenna 1

Config. \ Mode		GSM 850	GSM 1900	UMTS B2	UMTS B4	UMTS B5	LTE B2	LTE B4	LTE B5	LTE B7	LTE B25	LTE B26	LTE B12	LTE B17	wifi
Power Reduction (dB)	WiFi only	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	WiFi on synchronous Transmission	4	2	2.5	3	2.5	3.5	3.5	2.5	3	2	1.5	0.5	0.5	1

Note: The device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation:

1) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with WiFi antenna. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction.

Tune up

Antenna 1(Wi-Fi off)

GSM/GPRS850（GMSK ）:
1TXslot:32.5 dBm [-1dB~~+0.8dB]
2TXslot:30.5 dBm [-2.0dB~~+1.0dB]
3TXslot:28.5 dBm [-2.0dB~~+1.0dB]
4TXslot:26.5 dBm [-2.0dB~~+1.0dB]
EDGE850（8PSK ）:
1TXslot: 26.5 dBm [-2dB~~+1.0dB]
2TXslot: 24.5 dBm [-2.0dB~~+1dB]
3TXslot: 22.5 dBm [-2.5dB~~+1.0dB]
4TXslot: 20.5 dBm [-2.5dB~~+1dB]
EDGE850（GMSK ）:
1TXslot:32.5 dBm [-1dB~~+1dB]
2TXslot:30.5 dBm [-2.0dB~~+1.0dB]
3TXslot:28.5 dBm [-2.0dB~~+1.0dB]
4TXslot:26.5 dBm [-2.0dB~~+1.0dB]

PCS/GPRS1900（GMSK ）:
1TXslot:29.5 dBm [-1dB~~+0.8dB]
2TXslot:27.5 dBm [-2dB~~+1.0dB]
3TXslot:25.5 dBm [-2dB~~+1dB]
4TXslot:23.5 dBm [-2dB~~+1.0dB]
EDGE1900（8PSK ）:
1TXslot: 25.5 dBm [-2.0dB~~+1dB]
2TXslot: 23.5 dBm [-2.0dB~~+1dB]
3TXslot: 21.5 dBm [-2.5dB~~+1dB]

4TXslot: 19.5 dBm [-2.5dB~~+1dB]
EDGE1900（GMSK ）:
1TXslot:29.5 dBm [-1dB~~+1dB]
2TXslot:27.5 dBm [-2dB~~+1.0dB]
3TXslot:25.5 dBm [-2dB~~+1dB]
4TXslot:23.5 dBm [-2dB~~+1.0dB]

WCDMA Band II
Output power of range：
WCDMA: 23.5 dBm [-1dB~~+1dB]
HSDPA:
case1：22.5dBm [-2dB~~+1dB]
case2：21 dBm [-2dB~~+1dB]
case3：20.5 dBm [-2dB~~+1dB]
case4：20.5 dBm [-2dB~~+1dB]
HSUPA:
case1:20.5dBm [-2dB~~+1dB]
case2:19 dBm [-2dB~~+1dB]
case3:21.5 dBm [-2dB~~+1dB]
case4:19 dBm [-2dB~~+1dB]
case5: 22dBm [-2dB~~+1dB]
DC-HSDPA:
case1：22.5dBm [-2dB~~+1dB]
case2：21 dBm [-2dB~~+1dB]
case3：20.5 dBm [-2dB~~+1dB]
case4：20.5 dBm [-2dB~~+1dB]

WCDMA Band IV
Output power of range：
WCDMA: 23.0 dBm [-1dB~~+1dB]
HSDPA:
case1：22.5dBm [-2dB~~+1dB]
case2：21 dBm [-2dB~~+1dB]
case3：21.5 dBm [-2dB~~+1dB]
case4：21.5 dBm [-2dB~~+1dB]
HSUPA:
case1:20.5dBm [-2dB~~+1dB]
case2:19 dBm [-2dB~~+1dB]
case3:21.5 dBm [-2dB~~+1dB]
case4:19 dBm [-2dB~~+1dB]
case5: 22dBm [-2dB~~+1dB]
DC-HSDPA:
case1：22.5dBm [-2dB~~+1dB]
case2：21 dBm [-2dB~~+1dB]
case3：21.5 dBm [-2dB~~+1dB]

case4：21.5 dBm [-2dB~~+1dB]

WCDMA Band V
Output power of range：
WCDMA: 23.5 dBm [-1dB~~+1dB]
HSDPA:
case1：22.5dBm [-2dB~~+1dB]
case2：22 dBm [-2dB~~+1dB]
case3：21.5 dBm [-2dB~~+1dB]
case4：21.5 dBm [-2dB~~+1dB]
HSUPA:
case1:21dBm [-2dB~~+1dB]
case2:20 dBm [-2dB~~+1dB]
case3:21.5 dBm [-2dB~~+1dB]
case4:20 dBm [-2dB~~+1dB]
case5: 22dBm [-2dB~~+1dB]
DC-HSDPA:
case1：22.5dBm [-2dB~~+1dB]
case2：22 dBm [-2dB~~+1dB]
case3：21.5 dBm [-2dB~~+1dB]
case4：21.5 dBm [-2dB~~+1dB]

LTE Band 2
Output power of range：

LTE_B2	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21.5+1/-2.5 dB
16 QAM	1	1	1	1	1	1	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20.5+1/-2.5 dB

LTE Band 4
Output power of range：

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	

QPSK	1	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20.5+1/-2.5 dB

LTE Band 5

Output power of range：

LTE_B5	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 7

Output power of range：

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	22+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	22+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	21+1/-2.5 dB
16 QAM	1	1	1	1	21+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	21+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	20+1/-2.5 dB

LTE Band 12

Output power of range：

LTE_B12	Channel bandwidth / Transmission bandwidth configuration [RB]	Power (dBm)

	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 17

Output power of range：

LTE_B17	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 25

Output power of range：

LTE_B25	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20.5+1/-2.5 dB

LTE Band 26

Output power of range：

LTE_B26	Channel bandwidth / Transmission bandwidth configuration [RB]	Power (dBm)

	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
QPSK	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	20.5+1/-2.5 dB

Antenna 1(Wi-Fi on)

GSM/GPRS850（GMSK ）:
1TXslot:28.5 dBm [-1dB~~+0.8dB]
2TXslot:26.5 dBm [-2.0dB~~+1.0dB]
3TXslot:24.5 dBm [-2.0dB~~+1.0dB]
4TXslot:22.5 dBm [-2.0dB~~+1.0dB]
EDGE850（8PSK ）:
1TXslot: 22.5 dBm [-2dB~~+1.0dB]
2TXslot: 20.5 dBm [-2.0dB~~+1dB]
3TXslot: 20 dBm [-2.5dB~~+1.0dB]
4TXslot: 18 dBm [-2.5dB~~+1dB]
EDGE850（GMSK ）:
1TXslot:28.5 dBm [-1dB~~+0.8dB]
2TXslot:26.5 dBm [-2.0dB~~+1.0dB]
3TXslot:24.5 dBm [-2.0dB~~+1.0dB]
4TXslot:22.5 dBm [-2.0dB~~+1.0dB]

PCS（GMSK ）:
1TXslot:27.5 dBm [-1dB~~+0.8dB]
2TXslot:25.5 dBm [-2dB~~+1dB]
3TXslot:23.5 dBm [-2dB~~+1dB]
4TXslot:21.5 dBm [-2dB~~+1dB]
EDGE1900（8PSK ）:
1TXslot: 23.5 dBm [-2.0dB~~+1dB]
2TXslot: 21.5 dBm [-2.0dB~~+1dB]
3TXslot: 19.5 dBm [-2.5dB~~+1dB]
4TXslot: 17.5 dBm [-2.5dB~~+1dB]
EDGE1900（GMSK ）:
1TXslot:27.5 dBm [-1dB~~+1dB]
2TXslot:25.5 dBm [-2dB~~+1.0dB]
3TXslot:23.5 dBm [-2dB~~+1dB]
4TXslot:21.5 dBm [-2dB~~+1.0dB]

WCDMA Band II
WCDMA: 21 dBm [-1dB~~+1dB]
HSDPA:
case1：18.5dBm [-2dB~~+1dB]
case2：17 dBm [-2dB~~+1dB]
case3：16.5 dBm [-2dB~~+1dB]
case4：16.5 dBm [-2dB~~+1dB]
HSUPA:
case1:16.5dBm [-2dB~~+1dB]
case2:15 dBm [-2dB~~+1dB]
case3:17.5 dBm [-2dB~~+1dB]
case4:15 dBm [-2dB~~+1dB]
case5: 18 dBm [-2dB~~+1dB]
DC-HSDPA:
case1：18.5dBm [-2dB~~+1dB]
case2：17 dBm [-2dB~~+1dB]
case3：16.5 dBm [-2dB~~+1dB]
case4：16.5 dBm [-2dB~~+1dB]

WCDMA Band IV
WCDMA: 20.0 dBm [-1dB~~+1dB]
HSDPA:
case1：19.5dBm [-2dB~~+1dB]
case2：18 dBm [-2dB~~+1dB]
case3：18.5 dBm [-2dB~~+1dB]
case4：18.5 dBm [-2dB~~+1dB]
HSUPA:
case1:17.5dBm [-2dB~~+1dB]
case2:16 dBm [-2dB~~+1dB]
case3:19.5 dBm [-2dB~~+1dB]
case4:16 dBm [-2dB~~+1dB]
case5: 19 dBm [-2dB~~+1dB]
DC-HSDPA:
case1：19.5dBm [-2dB~~+1dB]
case2：18 dBm [-2dB~~+1dB]
case3：18.5 dBm [-2dB~~+1dB]
case4：18.5 dBm [-2dB~~+1dB]

WCDMA Band V
WCDMA: 21 dBm [-1dB~~+1dB]
HSDPA:
case1：20 dBm [-2dB~~+1dB]
case2：19.5 dBm [-2dB~~+1dB]
case3：19 dBm [-2dB~~+1dB]
case4：19 dBm [-2dB~~+1dB]

HSUPA:
case1:18.5 dBm [-2dB~~+1dB]
case2:17.5 dBm [-2dB~~+1dB]
case3:19 dBm [-2dB~~+1dB]
case4:17.5 dBm [-2dB~~+1dB]
case5: 19.5 dBm [-2dB~~+1dB]
DC-HSDPA:
case1：20 dBm [-2dB~~+1dB]
case2：19.5 dBm [-2dB~~+1dB]
case3：19 dBm [-2dB~~+1dB]
case4：19 dBm [-2dB~~+1dB]

LTE Band 2

LTE_B2	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	19.0+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	19.0+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	18.0+1/-2.5 dB
16 QAM	1	1	1	1	1	1	18.0+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	18.0+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	17 +1/-2.5 dB

LTE Band 4

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	19.0+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	19.0+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	18.0+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	18.0+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	17.0+1/-2.5 dB

LTE Band 5

LTE_B5	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	20+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	20+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	19+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	19+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	18+1/-2.5 dB

LTE Band 7

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	19+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	19+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	18+1/-2.5 dB
16 QAM	1	1	1	1	18+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	18+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	17+1/-2.5 dB

LTE Band 12

LTE_B12	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 17

LTE_B17	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 25

LTE_B25	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	20.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	20.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	19.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	19.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	18.5+1/-2.5 dB

LTE Band 26

LTE_B26	Channel bandwidth / Transmission bandwidth configuration [RB]					Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
QPSK	1	1	1	1	1	21+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	21+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	20+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	20+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	19+1/-2.5 dB

Antenna 2

GSM/GPRS850（GMSK ）:
1TXslot: 32.5 dBm [-1dB~~+1.0dB]
2TXslot: 30.5 dBm [-2.0dB~~+1.0dB]
3TXslot: 28.5 dBm [-2.0dB~~+1.0dB]
4TXslot: 26.5 dBm [-2.0dB~~+1.0dB]
EDGE850（8PSK ）:
1TXslot: 26.5 dBm [-2dB~~+1.0dB]
2TXslot: 24.5 dBm [-2.0dB~~+1dB]
3TXslot: 22.5 dBm [-2.5dB~~+1.0dB]
4TXslot: 20.5 dBm [-2.5dB~~+1dB]
EDGE850（GMSK ）:
1TXslot: 32.5 dBm [-1dB~~+1dB]
2TXslot: 30.5 dBm [-2dB~~+1dB]
3TXslot: 28.5 dBm [-2dB~~+1dB]
4TXslot: 26.5 dBm [-2dB~~+1dB]

PCS（GMSK ）:
1TXslot: 29.5 dBm [-1dB~~+1dB]
2TXslot: 27.5 dBm [-2dB~~+1.0dB]
3TXslot: 25.5 dBm [-2dB~~+1dB]
4TXslot: 23.5 dBm [-2dB~~+1.0dB]
EDGE1900（8PSK ）:
1TXslot: 25.5 dBm [-2.0dB~~+1dB]
2TXslot: 23.5 dBm [-2.0dB~~+1dB]
3TXslot: 21.5 dBm [-2.5dB~~+1dB]
4TXslot: 19.5 dBm [-2.5dB~~+1dB]
EDGE1900（GMSK ）:
1TXslot: 29.5 dBm [-1dB~~+1dB]
2TXslot: 27.5 dBm [-2dB~~+1.0dB]
3TXslot: 25.5 dBm [-2dB~~+1dB]
4TXslot: 23.5 dBm [-2dB~~+1.0dB]

WCDMA Band II
WCDMA: 23.5 dBm [-1dB~~**+1**dB]
HSDPA:
case1：22.5dBm [-2dB~~**+1**dB]
case2：21 dBm [-2dB~~**+1**dB]
case3：20.5 dBm [-2dB~~**+1**dB]
case4：20.5 dBm [-2dB~~**+1**dB]
HSUPA:
case1: 20.5dBm [-2dB~~**+1**dB]
case2: 19 dBm [-2dB~~**+1**dB]
case3: 21.5 dBm [-2dB~~**+1**dB]

case4: 19 dBm [-2dB~~**+1**dB]
case5: 22dBm [-2dB~~**+1**dB]
DC-HSDPA:
case1：22.5dBm [-2dB~~**+1**dB]
case2：21 dBm [-2dB~~**+1**dB]
case3：20.5 dBm [-2dB~~**+1**dB]
case4：20.5 dBm [-2dB~~**+1**dB]

WCDMA Band IV
WCDMA: 23.0 dBm [-1dB~~**+1**dB]
HSDPA:
case1：22.5dBm [-2dB~~**+1**dB]
case2：21 dBm [-2dB~~**+1**dB]
case3：21.5 dBm [-2dB~~**+1**dB]
case4：21.5 dBm [-2dB~~**+1**dB]
HSUPA:
case1: 20.5dBm [-2dB~~**+1**dB]
case2: 19 dBm [-2dB~~**+1**dB]
case3: 21.5 dBm [-2dB~~**+1**dB]
case4: 19 dBm [-2dB~~**+1**dB]
case5: 22dBm [-2dB~~**+1**dB]
DC-HSDPA:
case1：22.5dBm [-2dB~~**+1**dB]
case2：21 dBm [-2dB~~**+1**dB]
case3：21.5 dBm [-2dB~~**+1**dB]
case4：21.5 dBm [-2dB~~**+1**dB]

WCDMA Band V
WCDMA: 23.5 dBm [-1dB~~**+1**dB]
HSDPA:
case1：22.5dBm [-2dB~~**+1**dB]
case2：22 dBm [-2dB~~**+1**dB]
case3：21.5 dBm [-2dB~~**+1**dB]
case4：21.5 dBm [-2dB~~**+1**dB]
HSUPA:
case1: 21dBm [-2dB~~**+1**dB]
case2: 20 dBm [-2dB~~**+1**dB]
case3: 21.5 dBm [-2dB~~**+1**dB]
case4: 20 dBm [-2dB~~**+1**dB]
case5: 22dBm [-2dB~~**+1**dB]
DC-HSDPA:
case1：22.5dBm [-2dB~~**+1**dB]
case2：22 dBm [-2dB~~**+1**dB]
case3：21.5 dBm [-2dB~~**+1**dB]
case4：21.5 dBm [-2dB~~**+1**dB]

LTE Band 2

LTE_B2	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21.5+1/-2.5 dB
16 QAM	1	1	1	1	1	1	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20.5+1/-2.5 dB

LTE Band 4

LTE_B4	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20.5+1/-2.5 dB

LTE Band 5

LTE_B5	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 7

LTE_B7	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	22+1/-2.5 dB
QPSK	≤ 8	≤ 12	≤ 16	≤ 18	22+1/-2.5 dB
QPSK	> 8	> 12	> 16	> 18	21+1/-2.5 dB
16 QAM	1	1	1	1	21+1/-2.5 dB
16 QAM	≤ 8	≤ 12	≤ 16	≤ 18	21+1/-2.5 dB
16 QAM	> 8	> 12	> 16	> 18	20+1/-2.5 dB

LTE Band 12

LTE_B12	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 17

LTE_B17	Channel bandwidth / Transmission bandwidth configuration [RB]				Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	
QPSK	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	20.5+1/-2.5 dB

LTE Band 25

LTE_B25	Channel bandwidth / Transmission bandwidth configuration [RB]						Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	1	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤18	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	20.5+1/-2.5 dB

LTE Band 26

LTE_B26	Channel bandwidth / Transmission bandwidth configuration [RB]					Power (dBm)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	
QPSK	1	1	1	1	1	22.5+1/-2.5 dB
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	22.5+1/-2.5 dB
QPSK	> 5	> 4	> 8	> 12	> 16	21.5+1/-2.5 dB
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	21.5+1/-2.5 dB
16 QAM	> 5	> 4	> 8	> 12	> 16	20.5+1/-2.5 dB

Bluetooth
BT Average Power: ≤8.5dBm

WiFi
WIFI Average Power:
802.11b: 15dBm [-1.0dB~~+0.5dB]
802.11g: 15dBm [-1.0dB~~+0.5dB]
802.11n： 14dBm[-1.0dB~~+0.5dB]

WIFI on Synchronous Transmission
802.11b: 14dBm [-1.0dB~~+0.5dB]
802.11g: 14dBm [-1.0dB~~+0.5dB]
802.11n： 14dBm[-1.0dB~~+0.5dB]

6.5. Test Configuration

6.5.1. GSM Test Configuration

SAR tests for GSM 850 and GSM 1900, a communication link is set up with a System Simulator (SS) by air link. Using E5515C the power level is set to “5” for GSM 850, set to “0” for GSM 1900. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslots is 5. The EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslots is 5.

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 8: 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

6.5.2. UMTS Test Configuration

6.5.2.1. 3G SAR Test Reduction Procedure

In the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.3 This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

6.5.2.2. Output power Verification

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1’s” for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) are requied in the SAR report. All configurations that are not supported by the handset or cannot be measured due to technical or equipment limitations must be clearly identified.

6.5.2.3. Head SAR

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

6.5.2.4. Body-Worn Accessory SAR

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

6.5.2.5. Handsets with Release 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body-worn accessory configurations with

12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the "Release 5 HSDPA Data Devices" section of this document, for the highest reported SAR body-worn accessory exposure configuration in 12.2 kbps RMC. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

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

Table 9: Subtests for UMTS Release 5 HSDPA

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

Note1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI}= 8 ⇔A_{hs} = β_{hs}/β_c=30/15 ⇔β_{hs}=30/15*β_c

Note2: CM=1 for β_c/β_d =12/15, β_{hs}/β_c=24/15.

Note3: For subtest 2 the $\beta_c\beta_d$ ratio of 12/15 for the TFC during the measurement period(TF1,TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1,TF1) to β_c=11/15 and β_d=15/15.

6.5.3. HSUPA Test Configuration

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

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

Table 10：Sub-Test 5 Setup for Release 6 HSUPA

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

Note 1: Δ_{ACK}, ΔNACK and Δ_{CQI} = 8 ⇔ $A_{hs} = \underline{\beta}_{hs}/\underline{\beta}_c$ = 30/15 ⇔ $\underline{\beta}_{hs}$= 30/15 *β_c.

Note 2: CM = 1 for βc/βd =12/15, $\underline{\beta}_{hs}/\underline{\beta}_c$ =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 βc/βd ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 10/15 and βd = 15/15.

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

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

Note 6: βed can not be set directly; it is set by Absolute Grant Value.

Table 11: HSUPA UE category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI (ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	11484	5.76
	4	4	10		20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?
	4	4	10		20000	?

NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4.
UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM. (TS25.306-7.3.0)

6.5.3.1. HSPA, HSPA+ and DC-HSDPA Test Configuration

measurement is required for HSPA, HSPA+ or DC-HSDPA, a KDB inquiry is required to confirm that the wireless mode configurations in the test setup have remained stable throughout the SAR measurements.35 Without prior KDB confirmation to determine the SAR results are acceptable, a PBA is required for TCB approval.
SAR test exclusion for HSPA, HSPA+ and DC-HSDPA is determined according to the following:
1) The HSPA procedures are applied to configure 3GPP Rel. 6 HSPA devices in the required sub-test mode(s) to determine SAR test exclusion.
2) SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode.36 Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.
3) SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.
4) Regardless of whether a PBA is required, the following information must be verified and included in the SAR report for devices supporting HSPA, HSPA+ or DC-HSDPA: a) The output power measurement results and applicable release version(s) of 3GPP TS 34.121.

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

b) The power measurement results are in agreement with the individual device implementation and specifications. When Enhanced MPR (E-MPR) applies, the normal MPR targets may be modified according to the Cubic Metric (CM) measured by the device, which must be taken into consideration.
c) The UE category, operating parameters, such as the β and Δ values used to configure the device for testing, power setback procedures described in 3GGPP TS 34.121 for the power measurements, and HSPA/HSPA+ channel conditions (active and stable) for the entire duration of the measurement according to the required E-TFCI and AG index values.

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

Table 12: HS-DSCH UE category

Table 5.1a: FDD HS-DSCH physical layer categories

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

6.5.4. LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

A)Spectrum Plots for RB Configurations

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

B)MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

C)A-MPR

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

D) Largest channel bandwidth standalone SAR test requirements

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

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

4) Higher order modulations

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

E) Other channel bandwidth standalone SAR test requirements

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

6.5.5. LTE Carrier Aggregation Test Configuration

The device supports downlink intra-band contiguous Release 10 LTE Carrier Aggregation(CA). This device is implemented for Carrier Aggregation downlink only. Other Release 10 features are not supported, including Uplink Carrier Aggregation, Enhanced SC-FDMA and Uplink MIMO or other antenna diversity configurations etc. All uplink communications are identical to the Release 8 Specifications.

The possible LTE CA combinations are as below table. The conducted power measurement results of downlink LTE CA are provided in chapter 7.1 of this report. According to KDB 941225 D05A, the downlink LTE CA SAR test is not required .

E-UTRA CA Band	CA Class	E-UTR A Band	Uplink (UL) operating band	Downlink (DL) operating band	Duplex Mode	CA Combinations	Maximum aggregated bandwidth (MHz)
CA_7	Class C	7	2500-2570 MHz	2620 -2690MHz	FDD	15MHz+15MHz 20MHz+20MHz	40

The channel number and frequency for the primary and secondary DL carriers are as below (Also refer to 3GPP TS 36.508 V12.3.1):

FDD test frequencies for CA in operating band 7

Table: Test frequencies for CA_7C

Range	CC-Combo / NRB_agg [RB]	CC1 Note1					CC2 Note1				
		BW [RB]	N_{UL}	f_{UL} [MHz]	N_{DL}	f_{DL} [MHz]	BW [RB]	N_{UL}	f_{UL} [MHz]	N_{DL}	f_{DL} [MHz]
Low	75+75	75	20825	2507.5	2825	2627.5	75	20975	2522.5	2975	2642.5
	100+100	100	20850	2510	2850	2630	100	21048	2529.8	3048	2649.8
Mid	75+75	75	21025	2527.5	3025	2647.5	75	21175	2542.5	3175	2662.5
	100+100	100	21000	2525	3000	2645	100	21198	2544.8	3198	2664.8
High	75+75	75	21225	2547.5	3225	2667.5	75	21375	2562.5	3375	2682.5
	100+100	100	21152	2540.2	3152	2660.2	100	21350	2560	3350	2680
Note 1: Carriers in increasing frequency order.											

6.5.6. WiFi 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.

7. Test Results

7.1. Conducted Power Results

Table 13: Conducted Power Measurement Results
Antenna 1

GSM 850 (WiFi Off)		**Burst Conducted Power(dBm)**			/	**Average power(dBm)**		
		Channel/Frequency(MHz)				Channel/Frequency(MHz)		
		128/824.2	190/836.6	251/848.8		128/824.2	190/836.6	251/848.8
GSM		32.75	32.66	32.54	-9.03dB	23.72	23.63	23.51
GPRS (GMSK)	1Txslot	32.72	32.58	32.48	-9.03dB	23.69	23.55	23.45
	2Txslots	30.67	30.54	30.44	-6.02dB	**24.65**	**24.52**	**24.42**
	3Txslots	28.61	28.51	28.39	-4.26dB	24.35	24.25	24.13
	4Txslots	26.60	26.51	26.39	-3.01dB	23.59	23.50	23.38
EGPRS (GMSK)	1Txslot	32.84	32.71	32.60	-9.03dB	23.81	23.68	23.57
	2Txslots	30.70	30.57	30.47	-6.02dB	**24.68**	**24.55**	**24.45**
	3Txslots	28.65	28.55	28.43	-4.26dB	24.39	24.29	24.17
	4Txslots	26.65	26.56	26.44	-3.01dB	23.64	23.55	23.43
EGPRS (8PSK)	1Txslot	26.28	26.38	26.80	-9.03dB	17.25	17.35	17.77
	2Txslots	23.95	24.24	24.35	-6.02dB	17.93	18.22	18.33
	3Txslots	21.92	22.24	22.23	-4.26dB	17.66	17.98	17.97
	4Txslots	20.06	20.30	20.29	-3.01dB	17.05	17.29	17.28
GSM 850 (WiFi On)		**Burst Conducted Power(dBm)**			/	**Average power(dBm)**		
		Channel/Frequency(MHz)				Channel/Frequency(MHz)		
		128/824.2	190/836.6	251/848.8		128/824.2	190/836.6	251/848.8
GSM		29.22	29.22	29.08	-9.03dB	20.19	20.19	20.05
GPRS (GMSK)	1Txslot	29.22	29.18	29.05	-9.03dB	20.19	20.15	20.02
	2Txslots	27.14	27.13	26.97	-6.02dB	**21.12**	**21.11**	**20.95**
	3Txslots	25.08	25.10	24.96	-4.26dB	20.82	20.84	20.70
	4Txslots	23.12	23.13	23.06	-3.01dB	20.11	20.12	20.05
EGPRS (GMSK)	1Txslot	29.22	29.23	29.07	-9.03dB	20.19	20.20	20.04
	2Txslots	27.13	27.14	27.00	-6.02dB	**21.11**	**21.12**	**20.98**
	3Txslots	25.09	25.11	24.99	-4.26dB	20.83	20.85	20.73
	4Txslots	23.12	23.14	23.07	-3.01dB	20.11	20.13	20.06
EGPRS (8PSK)	1Txslot	23.27	23.41	23.45	-9.03dB	14.24	14.38	14.42
	2Txslots	21.00	21.18	21.38	-6.02dB	14.98	15.16	15.36
	3Txslots	20.03	20.24	20.33	-4.26dB	15.77	15.98	16.07
	4Txslots	18.09	18.15	18.01	-3.01dB	15.08	15.14	15.00
GSM 1900 (WiFi Off)		**Burst Conducted Power(dBm)**			/	**Average power(dBm)**		
		Channel/Frequency(MHz)				Channel/Frequency(MHz)		

		512/1850.2	661/1880	810/1909.8		512/1850.2	661/1880	810/1909.8
GSM		29.75	29.54	29.73	-9.03dB	20.72	20.51	20.70
GPRS (GMSK)	1Txslot	29.74	29.50	29.68	-9.03dB	20.71	20.47	20.65
	2Txslots	27.68	27.48	27.62	-6.02dB	**21.66**	**21.46**	**21.60**
	3Txslots	25.65	25.41	25.60	-4.26dB	21.39	21.15	21.34
	4Txslots	23.67	23.47	23.70	-3.01dB	20.66	20.46	20.69
EGPRS (GMSK)	1Txslot	29.86	29.63	29.80	-9.03dB	20.83	20.60	20.77
	2Txslots	27.71	27.51	27.65	-6.02dB	**21.69**	**21.49**	**21.63**
	3Txslots	25.69	25.45	25.64	-4.26dB	21.43	21.19	21.38
	4Txslots	23.72	23.52	23.75	-3.01dB	20.71	20.51	20.74
EGPRS (8PSK)	1Txslot	24.98	25.45	25.89	-9.03dB	15.95	16.42	16.86
	2Txslots	23.00	23.09	22.98	-6.02dB	16.98	17.07	16.96
	3Txslots	20.99	20.86	21.08	-4.26dB	16.73	16.60	16.82
	4Txslots	19.07	19.16	19.01	-3.01dB	16.06	16.15	16.00
GSM 1900 (WiFi On)		**Burst Conducted Power(dBm)**			/	**Burst Conducted Power(dBm)**		
		Channel/Frequency(MHz)				Channel/Frequency(MHz)		
		512/1850.2	661/1880	810/1909.8		512/1850.2	661/1880	810/1909.8
GSM		27.88	28.04	28.29	-9.03dB	18.85	19.01	19.26
GPRS (GMSK)	1Txslot	27.89	28.02	28.28	-9.03dB	18.86	18.99	19.25
	2Txslots	26.02	26.15	26.49	-6.02dB	**20.00**	**20.13**	**20.47**
	3Txslots	23.99	24.16	24.48	-4.26dB	19.73	19.90	20.22
	4Txslots	21.95	22.14	22.42	-3.01dB	18.94	19.13	19.41
EGPRS (GMSK)	1Txslot	27.89	28.04	28.28	-9.03dB	18.86	19.01	19.25
	2Txslots	26.01	26.17	26.49	-6.02dB	**19.99**	**20.15**	**20.47**
	3Txslots	23.99	24.17	24.47	-4.26dB	19.73	19.91	20.21
	4Txslots	21.96	22.14	22.42	-3.01dB	18.95	19.13	19.41
EGPRS (8PSK)	1Txslot	23.30	23.68	23.63	-9.03dB	14.27	14.65	14.60
	2Txslots	21.41	21.57	21.50	-6.02dB	15.39	15.55	15.48
	3Txslots	19.22	19.05	19.22	-4.26dB	14.96	14.79	14.96
	4Txslots	17.56	16.82	17.48	-3.01dB	14.55	13.81	14.47

Note:

1) Division Factors

To average the power, the division factor is as follows:

1Txslot = 1 transmit time slot out of 8 time slots
=> conducted power divided by (8/1) => -9.03 dB

2Txslots = 2 transmit time slots out of 8 time slots
=> conducted power divided by (8/2) => -6.02 dB

3Txslots = 3 transmit time slots out of 8 time slots
=> conducted power divided by (8/3) => -4.26 dB

4Txslots = 4 transmit time slots out of 8 time slots
=> conducted power divided by (8/4) => -3.01 dB

2) Average power numbers
The maximum power numbers are marks in bold.

UMTS Band II (WiFi Off)		Conducted Power (dBm)		
		Channel/Frequency(MHz)		
		9262/1852.4	9400/1880	9538/1907.6
RMC	12.2kbps RMC	23.65	23.85	23.74
	64kbps RMC	23.57	23.72	23.65
	144kbps RMC	23.56	23.77	23.62
	384kbps RMC	23.58	23.76	23.62
HSDPA	Sub - Test 1	23.36	23.33	23.34
	Sub - Test 2	21.22	21.32	21.40
	Sub - Test 3	20.75	21.04	20.84
	Sub - Test 4	20.66	21.10	20.85
HSUPA	Sub - Test 1	21.13	21.46	21.15
	Sub - Test 2	19.51	19.86	19.54
	Sub - Test 3	21.55	21.77	21.32
	Sub - Test 4	19.54	19.95	19.49
	Sub - Test 5	22.19	22.49	22.31
DC-HSDPA	Sub - Test 1	23.07	23.25	23.20
	Sub - Test 2	21.51	21.71	21.65
	Sub - Test 3	20.85	21.02	21.05
	Sub - Test 4	20.88	21.06	21.08
UMTS Band II (WiFi On)		Conducted Power (dBm)		
		Channel/Frequency(MHz)		
		9262/1852.4	9400/1880	9538/1907.6
RMC	12.2kbps RMC	21.48	21.76	21.63
	64kbps RMC	21.37	21.63	21.51
	144kbps RMC	21.48	21.70	21.52
	384kbps RMC	21.35	21.71	21.56
HSDPA	Sub - Test 1	19.29	19.34	19.33
	Sub - Test 2	17.32	17.53	17.56
	Sub - Test 3	16.97	17.27	17.04
	Sub - Test 4	16.73	17.35	17.09
HSUPA	Sub - Test 1	16.66	17.07	16.74
	Sub - Test 2	15.34	15.77	15.43
	Sub - Test 3	18.08	18.38	17.91
	Sub - Test 4	15.37	15.86	15.38
	Sub - Test 5	18.22	18.60	18.40

DC-HSDPA	Sub - Test 1	19.10	19.36	19.29
	Sub - Test 2	17.54	17.82	17.74
	Sub - Test 3	17.18	17.43	17.44
	Sub - Test 4	17.21	17.47	17.47
UMTS Band IV (WiFi Off)		**Conducted Power (dBm)**		
		Channel/Frequency(MHz)		
		1312/1712.4	1413/1732.6	1513/1752.6
RMC	12.2kbps RMC	23.70	23.68	23.69
	64kbps RMC	23.74	23.67	23.65
	144kbps RMC	23.76	23.65	23.64
	384kbps RMC	23.75	23.72	23.63
HSDPA	Sub - Test 1	23.20	23.25	23.25
	Sub - Test 2	21.61	21.73	21.71
	Sub - Test 3	22.24	22.12	22.19
	Sub - Test 4	22.23	22.13	22.14
HSUPA	Sub - Test 1	21.09	21.06	21.20
	Sub - Test 2	19.76	19.77	19.92
	Sub - Test 3	21.33	21.23	21.41
	Sub - Test 4	19.59	19.68	19.81
	Sub - Test 5	22.15	22.11	22.23
DC-HSDPA	Sub - Test 1	22.97	23.03	23.00
	Sub - Test 2	21.94	21.96	21.94
	Sub - Test 3	22.31	22.39	22.36
	Sub - Test 4	22.33	22.37	22.37
UMTS Band IV (WiFi On)		**Conducted Power (dBm)**		
		Channel/Frequency(MHz)		
		1312/1712.4	1413/1732.6	1513/1752.6
RMC	12.2kbps RMC	20.50	20.40	20.52
	64kbps RMC	20.12	20.38	20.27
	144kbps RMC	20.16	20.37	20.24
	384kbps RMC	20.18	20.30	20.23
HSDPA	Sub - Test 1	20.21	20.26	20.26
	Sub - Test 2	18.62	18.74	18.72
	Sub - Test 3	19.25	19.13	19.20
	Sub - Test 4	19.24	19.14	19.15
HSUPA	Sub - Test 1	18.10	18.07	18.21
	Sub - Test 2	16.77	16.78	16.93
	Sub - Test 3	19.34	19.24	19.42
	Sub - Test 4	16.60	16.69	16.82

	Sub - Test 5	19.16	19.12	19.24
DC-HSDPA	Sub - Test 1	19.98	20.04	20.01
	Sub - Test 2	18.95	18.97	18.95
	Sub - Test 3	19.32	19.40	19.37
	Sub - Test 4	19.34	19.38	19.38
UMTS Band V (WiFi Off)		**Conducted Power (dBm)**		
		Channel/Frequency(MHz)		
		4132/826.4	4183/836.6	4233/846.6
RMC	12.2kbps RMC	23.52	23.47	23.42
	64kbps RMC	23.47	23.50	23.30
	144kbps RMC	23.46	23.49	23.32
	384kbps RMC	23.47	23.47	23.31
HSDPA	Sub - Test 1	23.12	23.14	22.98
	Sub - Test 2	22.53	22.62	22.44
	Sub - Test 3	22.16	22.01	21.92
	Sub - Test 4	22.15	22.02	21.87
HSUPA	Sub - Test 1	21.51	21.45	21.43
	Sub - Test 2	20.68	20.66	20.65
	Sub - Test 3	21.75	21.62	21.64
	Sub - Test 4	20.71	20.77	20.74
	Sub - Test 5	22.07	22.00	21.96
DC-HSDPA	Sub - Test 1	22.89	22.92	22.73
	Sub - Test 2	22.86	22.85	22.67
	Sub - Test 3	22.23	22.28	22.09
	Sub - Test 4	22.25	22.26	22.10
UMTS Band V (WiFi On)		**Conducted Power (dBm)**		
		Channel/Frequency(MHz)		
		4132/826.4	4132/826.4	4132/826.4
RMC	12.2kbps RMC	21.50	21.45	21.39
	64kbps RMC	21.18	21.12	20.91
	144kbps RMC	21.34	20.78	20.27
	384kbps RMC	21.48	20.60	20.67
HSDPA	Sub - Test 1	20.62	20.64	20.48
	Sub - Test 2	20.03	20.12	19.94
	Sub - Test 3	19.66	19.51	19.42
	Sub - Test 4	19.65	19.52	19.37
HSUPA	Sub - Test 1	19.01	18.95	18.93
	Sub - Test 2	18.18	18.16	18.15
	Sub - Test 3	19.25	19.12	19.14

	Sub - Test 4	18.21	18.27	18.24
	Sub - Test 5	19.57	19.50	19.46
DC-HSDPA	Sub - Test 1	20.39	20.42	20.23
	Sub - Test 2	20.36	20.35	20.17
	Sub - Test 3	19.73	19.78	19.59
	Sub - Test 4	19.75	19.76	19.60

LTE FDD Band 2 (WiFi Off)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
1.4MHz	QPSK	1	0	22.66	22.76	22.79
		1	2	22.65	22.76	22.88
		1	5	22.69	22.85	22.48
		3	0	22.37	22.44	22.37
		3	2	22.43	22.44	22.53
		3	3	22.48	22.50	22.66
		6	0	21.89	21.74	21.83
	16QAM	1	0	21.82	22.34	21.06
		1	2	21.41	22.07	22.15
		1	5	21.76	22.05	21.63
		3	0	21.81	21.76	21.84
		3	2	21.83	21.82	21.83
		3	3	21.82	21.85	22.15
		6	0	21.25	21.09	21.23
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
3MHz	QPSK	1	0	22.65	22.74	22.78
		1	7	22.63	22.74	22.86
		1	14	22.67	22.82	22.45
		8	0	22.36	22.43	22.35
		8	4	22.41	22.42	22.50
		8	7	22.45	22.49	22.64
		15	0	21.86	21.72	21.80
	16QAM	1	0	21.81	22.33	21.04
		1	7	21.39	22.05	22.14
		1	14	21.75	22.02	21.61
		8	0	21.79	21.75	21.81
		8	4	21.81	21.80	21.81
		8	7	21.81	21.84	22.12
		15	0	21.23	21.08	21.21
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		

				18625/1852.5	18900/1880	19175/1907.5
5MHz	QPSK	1	0	22.65	22.74	22.78
		1	13	22.63	22.74	22.86
		1	24	22.67	22.82	22.45
		12	0	21.61	21.68	21.60
		12	6	21.66	21.67	21.75
		12	13	21.70	21.74	21.89
		25	0	21.86	21.72	21.80
	16QAM	1	0	21.81	22.33	21.04
		1	13	21.39	22.05	22.14
		1	24	21.75	22.02	21.61
		12	0	21.09	21.05	21.11
		12	6	21.11	21.10	21.11
		12	13	21.11	21.14	21.42
		25	0	21.23	21.08	21.21
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
10MHz	QPSK	1	0	22.64	22.72	22.77
		1	25	22.61	22.72	22.84
		1	49	22.65	22.79	22.42
		25	0	21.60	21.67	21.58
		25	13	21.64	21.65	21.72
		25	25	21.67	21.73	21.87
		50	0	21.83	21.70	21.77
	16QAM	1	0	21.80	22.32	21.02
		1	25	21.37	22.03	22.13
		1	49	21.74	21.99	21.59
		25	0	21.07	21.04	21.08
		25	13	21.09	21.08	21.09
		25	25	21.10	21.13	21.39
		50	0	21.21	21.07	21.19
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
15MHz	QPSK	1	0	22.63	22.70	22.76
		1	38	22.59	22.70	22.82
		1	74	22.63	22.76	22.39
		36	0	21.59	21.66	21.56
		36	18	21.62	21.63	21.69
		36	39	21.64	21.72	21.85
		75	0	21.80	21.68	21.74
	16QAM	1	0	21.79	22.31	21.00
		1	38	21.35	22.01	22.12
		1	74	21.73	21.96	21.57
		36	0	21.05	21.03	21.05

		36	18	21.07	21.06	21.07
		36	39	21.09	21.12	21.36
		75	0	21.19	21.06	21.17
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
20MHz	QPSK	1	0	22.62	22.68	22.75
		1	50	22.57	22.68	22.80
		1	99	22.61	22.73	22.36
		50	0	21.58	21.65	21.54
		50	25	21.60	21.61	21.66
		50	50	21.61	21.71	21.83
		100	0	21.77	21.66	21.71
	16QAM	1	0	21.78	22.30	20.98
		1	50	21.33	21.99	22.11
		1	99	21.72	21.93	21.55
		50	0	21.03	21.02	21.02
		50	25	21.05	21.04	21.05
		50	50	21.08	21.11	21.33
		100	0	21.17	21.05	21.15

LTE FDD Band 2 (WiFi On)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
1.4MHz	QPSK	1	0	19.58	19.95	19.89
		1	2	19.81	19.79	19.80
		1	5	19.87	19.89	19.68
		3	0	18.63	18.67	18.70
		3	2	18.65	18.62	18.77
		3	3	18.62	18.67	18.96
		6	0	18.64	18.64	18.85
	16QAM	1	0	18.55	18.85	18.95
		1	2	18.81	18.73	18.78
		1	5	18.78	18.95	18.67
		3	0	17.81	17.81	17.81
		3	2	17.76	17.78	17.73
		3	3	17.76	17.76	17.77
		6	0	17.79	17.72	17.98
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
3MHz	QPSK	1	0	19.58	19.95	19.91

		1	7	19.81	19.79	19.83
		1	14	19.86	19.88	19.68
		8	0	18.65	18.66	18.70
		8	4	18.63	18.61	18.77
		8	7	18.61	18.70	18.95
		15	0	18.63	18.63	18.84
	16QAM	1	0	18.58	18.84	18.94
		1	7	18.80	18.72	18.81
		1	14	18.77	18.98	18.66
		8	0	17.79	17.80	17.80
		8	4	17.78	17.77	17.72
		8	7	17.75	17.75	17.77
		15	0	17.78	17.75	17.97
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
5MHz	QPSK	1	0	19.57	19.94	19.90
		1	13	19.80	19.82	19.81
		1	24	19.88	19.88	19.66
		12	0	18.64	18.66	18.72
		12	6	18.62	18.61	18.79
		12	13	18.63	18.70	18.94
		25	0	18.65	18.63	18.83
	16QAM	1	0	18.56	18.85	18.97
		1	13	18.78	18.73	18.80
		1	24	18.79	18.98	18.65
		12	0	17.81	17.81	17.79
		12	6	17.76	17.78	17.75
		12	13	17.76	17.75	17.76
		25	0	17.78	17.75	17.96
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
10MHz	QPSK	1	0	19.57	19.94	19.88
		1	25	19.81	19.82	19.82
		1	49	19.86	19.88	19.67
		25	0	18.66	18.66	18.69
		25	13	18.64	18.61	18.80
		25	25	18.61	18.70	18.95
		50	0	18.63	18.63	18.84
	16QAM	1	0	18.58	18.84	18.94
		1	25	18.80	18.72	18.81
		1	49	18.78	18.98	18.66
		25	0	17.80	17.80	17.80
		25	13	17.78	17.77	17.75
		25	25	17.76	17.75	17.77

		50	0	17.78	17.75	17.97
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
15MHz	QPSK	1	0	19.56	19.96	19.90
		1	38	19.80	19.80	19.81
		1	74	19.88	19.86	19.66
		36	0	18.64	18.68	18.71
		36	18	18.62	18.64	18.78
		36	39	18.62	18.69	18.94
		75	0	18.64	18.62	18.83
	16QAM	1	0	18.55	18.83	18.97
		1	38	18.81	18.74	18.80
		1	74	18.78	18.96	18.65
		36	0	17.80	17.78	17.79
		36	18	17.75	17.79	17.75
		36	39	17.76	17.77	17.76
		75	0	17.78	17.73	17.97
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
20MHz	QPSK	1	0	19.60	19.98	19.92
		1	50	19.84	19.83	19.84
		1	99	19.90	19.90	19.70
		50	0	18.67	18.69	18.73
		50	25	18.66	18.65	18.81
		50	50	18.64	18.71	18.97
		100	0	18.67	18.65	18.87
	16QAM	1	0	18.59	18.87	18.98
		1	50	18.82	18.76	18.82
		1	99	18.80	18.99	18.68
		50	0	17.83	17.82	17.83
		50	25	17.79	17.80	17.76
		50	50	17.77	17.79	17.78
		100	0	17.80	17.76	17.99

LTE FDD Band 4 (WiFi Off)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
1.4MHz	QPSK	1	0	22.27	22.86	22.14
		1	2	22.15	22.74	22.43
		1	5	22.17	22.86	22.28
		3	0	21.99	22.24	22.00

		3	2	22.03	22.31	22.10
		3	3	22.07	22.35	22.40
		6	0	22.03	22.39	22.10
	16QAM	1	0	22.20	22.48	22.40
		1	2	22.23	22.44	22.40
		1	5	21.43	22.12	22.38
		3	0	21.73	22.07	21.88
		3	2	21.87	22.20	22.02
		3	3	21.45	22.19	22.14
		6	0	21.06	21.36	21.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
3MHz	QPSK	1	0	22.26	22.84	22.13
		1	7	22.13	22.72	22.41
		1	14	22.15	22.83	22.25
		8	0	21.98	22.23	21.98
		8	4	22.01	22.29	22.07
		8	7	22.04	22.34	22.48
		15	0	22.00	22.37	22.07
	16QAM	1	0	22.19	22.47	22.48
		1	7	22.21	22.42	22.49
		1	14	21.42	22.09	22.36
		8	0	21.71	22.06	21.85
		8	4	21.85	22.18	22.00
		8	7	21.44	22.18	22.11
		15	0	21.04	21.35	21.28
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
5MHz	QPSK	1	0	22.26	22.84	22.13
		1	13	22.13	22.72	22.41
		1	24	22.15	22.83	22.25
		12	0	21.98	22.23	21.98
		12	6	22.01	22.29	22.07
		12	13	22.04	22.34	22.48
		25	0	22.00	22.37	22.07
	16QAM	1	0	22.19	22.47	22.48
		1	13	22.21	22.42	22.49
		1	24	21.42	22.09	22.36
		12	0	21.01	21.36	21.15
		12	6	21.15	21.48	21.30
		12	13	21.19	21.48	21.41
		25	0	21.04	21.35	21.28
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750

10MHz	QPSK	1	0	22.25	22.82	22.12
		1	25	22.11	22.70	22.39
		1	49	22.13	22.80	22.22
		25	0	21.97	22.22	21.96
		25	13	21.99	22.27	22.04
		25	25	22.01	22.33	22.46
		50	0	21.97	22.35	22.04
	16QAM	1	0	22.18	22.46	22.46
		1	25	22.19	22.40	22.48
		1	49	21.41	22.06	22.34
		25	0	20.99	21.35	21.12
		25	13	21.13	21.46	21.28
		25	25	21.18	21.47	21.38
		50	0	21.02	21.34	21.26
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	22.24	22.80	22.11
		1	38	22.09	22.68	22.37
		1	74	22.11	22.77	22.19
		36	0	21.96	22.21	21.94
		36	18	21.97	22.25	22.01
		36	39	21.98	22.32	22.44
		75	0	21.94	22.33	22.01
	16QAM	1	0	22.17	22.45	22.44
		1	38	22.17	22.48	22.47
		1	74	21.40	22.03	22.32
		36	0	20.97	21.34	21.09
		36	18	21.11	21.44	21.26
		36	39	21.17	21.46	21.35
		75	0	21.00	21.33	21.24
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
20MHz	QPSK	1	0	22.33	22.88	22.20
		1	50	22.17	22.76	22.45
		1	99	22.19	22.84	22.26
		50	0	22.06	22.30	22.02
		50	25	22.05	22.33	22.08
		50	50	22.05	22.41	22.42
		100	0	21.91	22.31	21.98
	16QAM	1	0	22.16	22.44	22.42
		1	50	22.15	22.46	22.46
		1	99	21.39	22.00	22.20
		50	0	20.95	21.33	21.06

		50	25	21.09	21.32	21.24
		50	50	21.16	21.34	21.32
		100	0	20.98	21.22	21.12

LTE FDD Band 4 (WiFi On)				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
1.4MHz	QPSK	1	0	19.64	19.74	19.96
		1	2	19.54	19.83	19.55
		1	5	19.76	19.79	19.67
		3	0	18.57	18.70	18.82
		3	2	18.63	18.76	18.70
		3	3	18.68	18.94	18.71
		6	0	18.62	18.83	18.76
	16QAM	1	0	18.43	18.70	18.96
		1	2	18.36	18.74	18.48
		1	5	18.66	18.73	18.62
		3	0	17.68	17.90	17.69
		3	2	17.77	17.97	17.82
		3	3	17.81	17.96	17.85
		6	0	17.84	17.63	17.62
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
3MHz	QPSK	1	0	19.64	19.74	19.98
		1	7	19.54	19.83	19.58
		1	14	19.75	19.78	19.67
		8	0	18.59	18.69	18.82
		8	4	18.61	18.75	18.70
		8	7	18.67	18.97	18.70
		15	0	18.61	18.82	18.75
	16QAM	1	0	18.46	18.69	18.95
		1	7	18.35	18.73	18.51
		1	14	18.65	18.76	18.61
		8	0	17.66	17.89	17.68
		8	4	17.79	17.96	17.81
		8	7	17.80	17.95	17.85
		15	0	17.83	17.66	17.61
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
5MHz	QPSK	1	0	19.63	19.73	19.97

		1	13	19.53	19.86	19.56
		1	24	19.77	19.78	19.65
		12	0	18.58	18.69	18.84
		12	6	18.60	18.75	18.72
		12	13	18.69	18.97	18.69
		25	0	18.63	18.82	18.74
	16QAM	1	0	18.44	18.70	18.98
		1	13	18.33	18.74	18.50
		1	24	18.67	18.76	18.60
		12	0	17.68	17.90	17.67
		12	6	17.77	17.97	17.84
		12	13	17.81	17.95	17.84
		25	0	17.83	17.66	17.60
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
10MHz	QPSK	1	0	19.63	19.73	19.95
		1	25	19.54	19.86	19.57
		1	49	19.75	19.78	19.66
		25	0	18.60	18.69	18.81
		25	13	18.62	18.75	18.73
		25	25	18.67	18.97	18.70
		50	0	18.61	18.82	18.75
	16QAM	1	0	18.46	18.69	18.95
		1	25	18.35	18.73	18.51
		1	49	18.66	18.76	18.61
		25	0	17.67	17.89	17.68
		25	13	17.79	17.96	17.84
		25	25	17.81	17.95	17.85
		50	0	17.83	17.66	17.61
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	19.62	19.75	19.97
		1	38	19.53	19.84	19.56
		1	74	19.77	19.76	19.65
		36	0	18.58	18.71	18.83
		36	18	18.60	18.78	18.71
		36	39	18.68	18.96	18.69
		75	0	18.62	18.81	18.74
	16QAM	1	0	18.43	18.68	18.98
		1	38	18.36	18.75	18.50
		1	74	18.66	18.74	18.60
		36	0	17.67	17.87	17.67
		36	18	17.76	17.98	17.84
		36	39	17.81	17.97	17.84

		75	0	17.83	17.64	17.61
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
20MHz	QPSK	1	0	19.66	19.99	19.59
		1	50	19.57	19.77	19.87
		1	99	19.79	19.80	19.69
		50	0	18.61	18.72	18.72
		50	25	18.64	18.79	18.74
		50	50	18.70	18.85	18.98
		100	0	18.65	18.84	18.78
	16QAM	1	0	18.47	18.72	18.99
		1	50	18.37	18.77	18.52
		1	99	18.68	18.77	18.63
		50	0	17.70	17.91	17.71
		50	25	17.80	17.99	17.85
		50	50	17.82	17.99	17.86
		100	0	17.85	17.67	17.63

LTE FDD Band 5 (WiFi Off)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20407/824.7	20525/836.5	20643/848.3
1.4MHz	QPSK	1	0	22.90	23.18	23.10
		1	2	23.16	23.45	23.04
		1	5	23.32	23.41	22.88
		3	0	22.05	22.17	22.36
		3	2	22.03	22.30	22.25
		3	3	22.06	22.39	22.21
		6	0	22.01	22.23	22.29
	16QAM	1	0	22.05	22.02	22.17
		1	2	22.17	22.16	22.45
		1	5	22.19	22.03	21.97
		3	0	20.66	20.79	21.00
		3	2	20.68	20.89	20.80
		3	3	20.66	20.99	20.92
		6	0	20.54	20.86	20.92
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20415/825.5	20525/836.5	20635/847.5
3MHz	QPSK	1	0	22.88	23.16	23.08
		1	7	23.14	23.43	23.02
		1	14	23.30	23.39	22.86
		8	0	22.03	22.15	22.34

		8	4	22.01	22.28	22.23
		8	7	22.04	22.37	22.19
		15	0	21.99	22.21	22.27
	16QAM	1	0	22.03	22.00	22.15
		1	7	22.15	22.14	22.43
		1	14	22.17	22.01	21.95
		8	0	20.64	20.77	20.98
		8	4	20.66	20.87	20.78
		8	7	20.64	20.97	20.90
		15	0	20.52	20.84	20.90
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20425/826.5	20525/836.5	20625/846.5
5MHz	QPSK	1	0	22.87	23.15	23.07
		1	13	23.13	23.42	23.01
		1	24	23.29	23.38	22.85
		12	0	22.02	22.14	22.33
		12	6	22.00	22.27	22.22
		12	13	22.03	22.36	22.18
		25	0	21.98	22.20	22.26
	16QAM	1	0	22.02	21.99	22.14
		1	13	22.14	22.13	22.42
		1	24	22.16	22.00	21.94
		12	0	20.63	20.76	20.97
		12	6	20.65	20.86	20.77
		12	13	20.63	20.96	20.89
		25	0	20.51	20.83	20.89
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20450/829	20525/836.5	20600/844
10MHz	QPSK	1	0	22.86	23.14	23.05
		1	25	23.11	23.40	22.99
		1	49	23.27	23.35	22.84
		25	0	21.99	22.13	22.30
		25	13	21.99	22.25	22.20
		25	25	21.99	22.33	22.17
		50	0	21.94	22.18	22.23
	16QAM	1	0	21.99	21.97	22.13
		1	25	22.12	22.12	22.40
		1	49	22.13	21.98	21.92
		25	0	20.60	20.73	20.94
		25	13	20.61	20.82	20.76
		25	25	20.61	20.94	20.86
		50	0	20.47	20.80	20.88

LTE FDD Band 5 (WiFi On)				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20407/824.7	20525/836.5	20643/848.3
1.4MHz	QPSK	1	0	20.32	20.40	20.51
		1	2	20.45	20.98	20.72
		1	5	20.59	20.89	20.46
		3	0	19.55	19.88	19.77
		3	2	19.51	19.76	19.67
		3	3	19.54	19.78	19.67
		6	0	19.41	19.59	19.64
	16QAM	1	0	19.48	19.51	19.78
		1	2	19.88	19.96	19.90
		1	5	19.83	19.85	19.64
		3	0	18.59	18.60	18.83
		3	2	18.72	18.87	18.98
		3	3	18.55	18.72	18.73
		6	0	18.44	18.64	18.72
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20415/825.5	20525/836.5	20635/847.5
3MHz	QPSK	1	0	20.32	20.40	20.49
		1	7	20.46	20.98	20.73
		1	14	20.57	20.89	20.47
		8	0	19.57	19.88	19.74
		8	4	19.53	19.76	19.68
		8	7	19.52	19.78	19.68
		15	0	19.39	19.59	19.65
	16QAM	1	0	19.50	19.50	19.75
		1	7	19.90	19.95	19.91
		1	14	19.82	19.85	19.65
		8	0	18.58	18.59	18.84
		8	4	18.74	18.86	18.98
		8	7	18.55	18.72	18.74
		15	0	18.44	18.64	18.73
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20425/826.5	20525/836.5	20625/846.5
5MHz	QPSK	1	0	20.31	20.42	20.51
		1	13	20.45	20.96	20.72
		1	24	20.59	20.87	20.46
		12	0	19.55	19.90	19.76
		12	6	19.51	19.79	19.66
		12	13	19.53	19.77	19.67

		25	0	19.40	19.58	19.64
	16QAM	1	0	19.47	19.49	19.78
		1	13	19.91	19.97	19.90
		1	24	19.82	19.83	19.64
		12	0	18.58	18.57	18.83
		12	6	18.71	18.88	18.98
		12	13	18.55	18.74	18.73
		25	0	18.44	18.62	18.73
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20450/829	20525/836.5	20600/844
10MHz	QPSK	1	0	20.35	20.44	20.53
		1	25	20.49	20.99	20.75
		1	49	20.61	20.91	20.50
		25	0	19.58	19.91	19.78
		25	13	19.55	19.80	19.69
		25	25	19.55	19.79	19.70
		50	0	19.43	19.61	19.68
	16QAM	1	0	19.51	19.53	19.79
		1	25	19.92	19.99	19.92
		1	49	19.84	19.86	19.67
		25	0	18.61	18.61	18.87
		25	13	18.75	18.89	18.99
		25	25	18.56	18.76	18.75
		50	0	18.46	18.65	18.75

LTE FDD Band 7 (WiFi Off)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20775/2502.5	21100/2535	21425/2567.5
5MHz	QPSK	1	0	22.79	22.66	22.92
		1	13	22.78	22.81	22.84
		1	24	22.89	22.91	22.88
		12	0	21.72	21.90	21.97
		12	6	21.69	21.86	21.84
		12	13	21.90	21.92	21.87
		25	0	21.73	21.86	21.94
	16QAM	1	0	21.79	22.00	21.95
		1	13	21.61	21.94	21.90
		1	24	21.82	21.97	21.82
		12	0	20.90	20.98	20.96
		12	6	20.55	20.84	20.85
		12	13	20.87	20.81	20.72

		25	0	20.67	20.85	20.94
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20800/2505	21100/2535	21400/2565
10MHz	QPSK	1	0	22.77	22.64	22.90
		1	25	22.76	22.79	22.82
		1	49	22.87	22.89	22.86
		25	0	21.70	21.88	21.95
		25	13	21.67	21.84	21.82
		25	25	21.88	21.90	21.85
		50	0	21.71	21.84	21.92
	16QAM	1	0	21.77	21.98	21.93
		1	25	21.59	21.92	21.88
		1	49	21.80	21.95	21.80
		25	0	20.88	20.96	20.94
		25	13	20.53	20.82	20.83
		25	25	20.85	20.79	20.70
		50	0	20.65	20.83	20.92
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20825/2507.5	21100/2535	21375/2562.5
15MHz	QPSK	1	0	22.76	22.63	22.89
		1	38	22.75	22.78	22.81
		1	74	22.86	22.88	22.85
		36	0	21.69	21.87	21.94
		36	18	21.66	21.83	21.81
		36	39	21.87	21.89	21.84
		75	0	21.70	21.83	21.91
	16QAM	1	0	21.76	21.97	21.92
		1	38	21.58	21.91	21.87
		1	74	21.79	21.94	21.79
		36	0	20.87	20.95	20.93
		36	18	20.52	20.81	20.82
		36	39	20.84	20.78	20.69
		75	0	20.64	20.82	20.91
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20850/2510	21100/2535	21350/2560
20MHz	QPSK	1	0	22.77	22.64	22.82
		1	50	22.76	22.79	22.90
		1	99	22.87	22.89	22.86
		50	0	21.70	21.88	21.95
		50	25	21.67	21.84	21.82
		50	50	21.88	21.90	21.85
		100	0	21.71	21.84	21.92
	16QAM	1	0	21.77	21.98	21.93

		1	50	21.59	21.92	21.88
		1	99	21.80	21.95	21.80
		50	0	20.88	20.96	20.94
		50	25	20.53	20.82	20.83
		50	50	20.85	20.79	20.70
		100	0	20.65	20.83	20.92

LTE FDD Band 7 (WiFi On)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20775/2502.5	21100/2535	21425/2567.5
5MHz	QPSK	1	0	18.89	19.47	19.71
		1	13	19.60	19.42	19.40
		1	24	19.40	19.79	19.42
		12	0	18.94	18.86	18.94
		12	6	18.72	18.87	18.93
		12	13	18.64	18.96	18.93
		25	0	18.78	18.85	18.88
	16QAM	1	0	18.15	18.75	18.98
		1	13	18.63	18.54	18.59
		1	24	18.95	18.86	18.75
		12	0	17.57	17.27	17.23
		12	6	17.72	17.15	17.19
		12	13	17.75	17.18	17.25
		25	0	16.98	17.15	17.29
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20800/2505	21100/2535	21400/2565
10MHz	QPSK	1	0	18.89	19.47	19.69
		1	25	19.61	19.42	19.41
		1	49	19.38	19.79	19.43
		25	0	18.96	18.86	18.91
		25	13	18.74	18.87	18.94
		25	25	18.62	18.96	18.94
		50	0	18.76	18.85	18.89
	16QAM	1	0	18.17	18.74	18.95
		1	25	18.65	18.53	18.60
		1	49	18.94	18.86	18.76
		25	0	17.56	17.26	17.24
		25	13	17.74	17.14	17.19
		25	25	17.75	17.18	17.26
		50	0	16.98	17.15	17.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		

				20825/2507.5	21100/2535	21375/2562.5
15MHz	QPSK	1	0	18.88	19.49	19.71
		1	38	19.60	19.40	19.40
		1	74	19.40	19.77	19.42
		36	0	18.94	18.88	18.93
		36	18	18.72	18.90	18.92
		36	39	18.63	18.95	18.93
		75	0	18.77	18.84	18.88
	16QAM	1	0	18.14	18.73	18.98
		1	38	18.66	18.55	18.59
		1	74	18.94	18.84	18.75
		36	0	17.56	17.24	17.23
		36	18	17.71	17.16	17.19
		36	39	17.75	17.20	17.25
		75	0	16.98	17.13	17.30
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20850/2510	21100/2535	21350/2560
20MHz	QPSK	1	0	18.92	19.51	19.73
		1	50	19.64	19.43	19.43
		1	99	19.42	19.81	19.46
		50	0	18.97	18.89	18.95
		50	25	18.76	18.91	18.95
		50	50	18.65	18.97	18.96
		100	0	18.80	18.87	18.92
	16QAM	1	0	18.18	18.77	18.99
		1	50	18.67	18.57	18.61
		1	99	18.96	18.87	18.78
		50	0	17.59	17.28	17.27
		50	25	17.75	17.17	17.20
		50	50	17.76	17.22	17.27
		100	0	17.00	17.16	17.32

Conducted power measurement results of LTE CA- Band 7(PCC) + Band 7(SCC)

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
15M+15M	QPSK	1	0	75	0	21375CH	3375CH + 3225CH	22.96	23.00	Inactive
								22.53		Active
20M+20M	QPSK	1	50	100	0	21350CH	3350CH + 3152CH	22.97	23.00	Inactive
								22.93		Active

LTE FDD Band 12 (WiFi Off)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23017/699.7	23095/707.5	23173/715.3
1.4MHz	QPSK	1	0	23.06	23.02	22.98
		1	2	23.49	23.26	23.44
		1	5	23.22	23.25	23.27
		3	0	22.37	22.44	22.36
		3	2	22.39	22.44	22.37
		3	3	22.40	22.42	22.37
		6	0	22.40	22.33	22.42
	16QAM	1	0	22.20	22.06	22.16
		1	2	22.30	22.33	22.46
		1	5	22.20	22.26	22.31
		3	0	21.33	21.22	21.42
		3	2	21.34	21.35	21.39
		3	3	21.37	21.49	21.34
		6	0	21.33	21.25	21.24
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23025/700.5	23095/707.5	23165/714.5
3MHz	QPSK	1	0	23.03	22.99	22.95
		1	7	23.46	23.23	23.41
		1	14	23.19	23.22	23.24
		8	0	22.34	22.41	22.33
		8	4	22.36	22.41	22.34
		8	7	22.37	22.39	22.34
		15	0	22.37	22.30	22.39
	16QAM	1	0	22.17	22.03	22.13
		1	7	22.27	22.30	22.43

		1	14	22.17	22.23	22.28
		8	0	21.30	21.19	21.39
		8	4	21.31	21.32	21.36
		8	7	21.34	21.46	21.31
		15	0	21.30	21.22	21.21
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23035/701.5	23095/707.5	23155/713.5
5MHz	QPSK	1	0	23.04	23.00	22.96
		1	13	23.47	23.24	23.42
		1	24	23.20	23.23	23.25
		12	0	22.35	22.42	22.34
		12	6	22.37	22.42	22.35
		12	13	22.38	22.40	22.35
		25	0	22.38	22.31	22.40
	16QAM	1	0	22.18	22.04	22.14
		1	13	22.28	22.31	22.44
		1	24	22.18	22.24	22.29
		12	0	21.31	21.20	21.40
		12	6	21.32	21.33	21.37
		12	13	21.35	21.47	21.32
		25	0	21.31	21.23	21.22
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23060/704	23095/707.5	23130/711
10MHz	QPSK	1	0	23.05	23.01	22.97
		1	25	23.48	23.25	23.43
		1	49	23.21	23.24	23.26
		25	0	22.36	22.43	22.35
		25	13	22.38	22.43	22.36
		25	25	22.39	22.41	22.36
		50	0	22.39	22.32	22.41
	16QAM	1	0	22.19	22.05	22.15
		1	25	22.29	22.32	22.45
		1	49	22.19	22.25	22.30
		25	0	21.32	21.21	21.41
		25	13	21.33	21.34	21.38
		25	25	21.36	21.48	21.33
		50	0	21.32	21.24	21.23

LTE FDD Band 12 (WiFi On)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23017/699.7	23095/707.5	23173/715.3

1.4MHz	QPSK	1	0	22.60	22.70	22.79
		1	2	22.93	22.86	22.77
		1	5	22.88	22.85	22.89
		3	0	21.57	21.74	21.64
		3	2	21.58	21.66	21.68
		3	3	21.63	21.62	21.69
		6	0	21.61	21.59	21.64
	16QAM	1	0	21.37	21.53	21.57
		1	2	21.60	21.70	21.97
		1	5	21.76	21.81	21.71
		3	0	21.28	21.31	21.37
		3	2	21.42	21.41	21.48
		3	3	21.36	21.41	21.28
		6	0	21.27	21.24	21.32
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23025/700.5	23095/707.5	23165/714.5
3MHz	QPSK	1	0	22.60	22.70	22.77
		1	7	22.94	22.86	22.78
		1	14	22.86	22.85	22.90
		8	0	21.59	21.74	21.61
		8	4	21.60	21.66	21.69
		8	7	21.61	21.62	21.70
		15	0	21.59	21.59	21.65
	16QAM	1	0	21.39	21.52	21.54
		1	7	21.62	21.69	21.98
		1	14	21.75	21.81	21.72
		8	0	21.27	21.30	21.38
		8	4	21.44	21.40	21.48
		8	7	21.36	21.41	21.29
		15	0	21.27	21.24	21.33
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23035/701.5	23095/707.5	23155/713.5
5MHz	QPSK	1	0	22.59	22.72	22.79
		1	13	22.93	22.84	22.77
		1	24	22.88	22.83	22.89
		12	0	21.57	21.76	21.63
		12	6	21.58	21.69	21.67
		12	13	21.62	21.61	21.69
		25	0	21.60	21.58	21.64
	16QAM	1	0	21.36	21.51	21.57
		1	13	21.63	21.71	21.97
		1	24	21.75	21.79	21.71
		12	0	21.27	21.28	21.37
		12	6	21.41	21.42	21.48

		12	13	21.36	21.43	21.28
		25	0	21.27	21.22	21.33
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23060/704	23095/707.5	23130/711
10MHz	QPSK	1	0	22.63	22.74	22.81
		1	25	22.97	22.87	22.80
		1	49	22.90	22.87	22.93
		25	0	21.60	21.77	21.65
		25	13	21.62	21.70	21.70
		25	25	21.64	21.63	21.72
		50	0	21.63	21.61	21.68
	16QAM	1	0	21.40	21.55	21.58
		1	25	21.64	21.73	21.99
		1	49	21.77	21.82	21.74
		25	0	21.30	21.32	21.41
		25	13	21.45	21.43	21.49
		25	25	21.37	21.45	21.30
		50	0	21.29	21.25	21.35

LTE FDD Band 17 (WiFi Off)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23755/706.5	23790/710	23825/713.5
5MHz	QPSK	1	0	23.47	23.51	23.39
		1	13	23.53	23.80	23.90
		1	24	23.77	23.61	23.62
		12	0	22.49	22.44	22.37
		12	6	22.46	22.44	22.38
		12	13	22.44	22.43	22.47
		25	0	22.32	22.27	22.25
	16QAM	1	0	22.40	22.81	22.88
		1	13	22.75	22.95	22.95
		1	24	22.83	22.99	22.89
		12	0	21.60	21.52	21.37
		12	6	21.67	21.56	21.43
		12	13	21.60	21.59	21.47
		25	0	21.44	21.37	21.26
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23780/709	23790/710	23800/711
10MHz	QPSK	1	0	23.06	23.10	22.97
		1	25	23.11	23.38	23.48
		1	49	23.35	23.19	23.21
		25	0	22.46	22.43	22.34

		25	13	22.45	22.43	22.36
		25	25	22.40	22.41	22.46
		50	0	22.29	22.25	22.23
	16QAM	1	0	21.88	22.30	22.37
		1	25	22.23	22.44	22.43
		1	49	22.30	22.47	22.38
		25	0	21.38	21.29	21.15
		25	13	21.43	21.32	21.22
		25	25	21.38	21.37	21.25
		50	0	21.21	21.14	21.05

LTE FDD Band 17 (WiFi On)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23755/706.5	23790/710	23825/713.5
5MHz	QPSK	1	0	22.57	22.49	22.61
		1	13	22.71	22.81	22.96
		1	24	22.84	22.70	22.70
		12	0	21.94	21.92	21.81
		12	6	21.87	21.91	21.79
		12	13	21.89	21.93	21.88
		25	0	21.85	21.68	21.78
	16QAM	1	0	21.59	21.49	21.73
		1	13	21.81	21.95	21.96
		1	24	21.96	21.74	21.81
		12	0	21.34	21.34	21.24
		12	6	21.35	21.41	21.45
		12	13	21.35	21.39	21.32
		25	0	21.27	21.09	21.22
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23780/709	23790/710	23800/711
10MHz	QPSK	1	0	22.61	22.51	22.63
		1	25	22.75	22.84	22.99
		1	49	22.86	22.74	22.74
		25	0	21.97	21.93	21.83
		25	13	21.91	21.92	21.82
		25	25	21.91	21.95	21.91
		50	0	21.88	21.71	21.82
	16QAM	1	0	21.63	21.53	21.74
		1	25	21.82	21.97	21.98
		1	49	21.98	21.77	21.84
		25	0	21.37	21.38	21.28
		25	13	21.39	21.42	21.46

		25	25	21.36	21.41	21.34
		50	0	21.29	21.12	21.24

LTE FDD Band 25 (WiFi Off)				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26047/1850.7	26365/1882.5	26683/1914.3
1.4MHz	QPSK	1	0	22.62	23.03	22.92
		1	2	22.88	22.83	22.71
		1	5	22.94	22.82	22.33
		3	0	21.75	21.98	21.73
		3	2	21.73	21.84	21.76
		3	3	21.70	21.76	21.81
		6	0	21.86	21.86	21.92
	16QAM	1	0	21.86	21.99	21.93
		1	2	21.92	21.89	21.83
		1	5	21.91	21.87	21.59
		3	0	21.03	21.48	20.97
		3	2	21.01	21.34	21.00
		3	3	20.99	21.26	21.02
		6	0	21.02	21.10	21.12
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26055/1851.5	26365/1882.5	26675/1913.5
3MHz	QPSK	1	0	22.57	22.98	22.87
		1	13	22.83	22.78	22.66
		1	24	22.89	22.77	22.28
		12	0	21.70	21.93	21.68
		12	6	21.68	21.79	21.71
		12	13	21.65	21.71	21.76
		25	0	21.81	21.81	21.87
	16QAM	1	0	21.81	21.94	21.88
		1	13	21.87	21.84	21.78
		1	24	21.86	21.82	21.54
		12	0	20.98	21.43	20.92
		12	6	20.96	21.29	20.95
		12	13	20.94	21.21	20.97
		25	0	20.97	21.05	21.07
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
5MHz	QPSK	1	0	22.58	22.99	22.88
		1	13	22.84	22.79	22.67
		1	24	22.90	22.78	22.29

		12	0	21.71	21.94	21.69
		12	6	21.69	21.80	21.72
		12	13	21.66	21.72	21.77
		25	0	21.82	21.82	21.88
	16QAM	1	0	21.82	21.95	21.89
		1	13	21.88	21.85	21.79
		1	24	21.87	21.83	21.55
		12	0	20.99	21.44	20.93
		12	6	20.97	21.30	20.96
		12	13	20.95	21.22	20.98
		25	0	20.98	21.06	21.08
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
10MHz	QPSK	1	0	22.59	23.00	22.89
		1	25	22.85	22.80	22.68
		1	49	22.91	22.79	22.30
		25	0	21.72	21.95	21.70
		25	13	21.70	21.81	21.73
		25	25	21.67	21.73	21.78
		50	0	21.83	21.83	21.89
	16QAM	1	0	21.83	21.96	21.90
		1	25	21.89	21.86	21.80
		1	49	21.88	21.84	21.56
		25	0	21.00	21.45	20.94
		25	13	20.98	21.31	20.97
		25	25	20.96	21.23	20.99
		50	0	20.99	21.07	21.09
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26115/1857.5	26365/1882.5	26615/1907.5
15MHz	QPSK	1	0	22.60	23.01	22.90
		1	25	22.86	22.81	22.69
		1	49	22.92	22.80	22.31
		25	0	21.73	21.96	21.71
		25	13	21.71	21.82	21.74
		25	25	21.68	21.74	21.79
		50	0	21.84	21.84	21.90
	16QAM	1	0	21.84	21.97	21.91
		1	25	21.90	21.87	21.81
		1	49	21.89	21.85	21.57
		25	0	21.01	21.46	20.95
		25	13	20.99	21.32	20.98
		25	25	20.97	21.24	21.00
		50	0	21.00	21.08	21.10
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		

				26140/1860	26365/1882.5	26590/1905
20MHz	QPSK	1	0	22.61	23.02	22.91
		1	50	22.87	22.82	22.70
		1	99	22.93	22.81	22.32
		50	0	21.74	21.97	21.72
		50	25	21.72	21.83	21.75
		50	50	21.69	21.75	21.80
		100	0	21.85	21.85	21.91
	16QAM	1	0	21.85	21.98	21.92
		1	50	21.91	21.88	21.82
		1	99	21.90	21.86	21.58
		50	0	21.02	21.47	20.96
		50	25	21.00	21.33	20.99
		50	50	20.98	21.25	21.01
		100	0	21.01	21.09	21.11

LTE FDD Band 25 (WiFi On)				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26047/1850.7	26365/1882.5	26683/1914.3
1.4MHz	QPSK	1	0	21.14	21.36	21.33
		1	2	21.22	21.23	21.19
		1	5	21.27	21.24	20.97
		3	0	20.25	20.46	20.27
		3	2	20.27	20.40	20.33
		3	3	20.25	20.36	20.35
		6	0	20.27	20.37	20.44
	16QAM	1	0	20.06	20.18	20.44
		1	2	20.17	20.14	20.27
		1	5	20.17	20.15	20.06
		3	0	19.27	19.44	19.30
		3	2	19.07	19.31	19.15
		3	3	19.25	19.38	19.21
		6	0	19.36	19.41	19.43
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26055/1851.5	26365/1882.5	26675/1913.5
3MHz	QPSK	1	0	21.14	21.36	21.35
		1	13	21.22	21.23	21.22
		1	24	21.26	21.23	20.97
		12	0	20.27	20.45	20.27
		12	6	20.25	20.39	20.33
		12	13	20.24	20.39	20.34
		25	0	20.26	20.36	20.43

	16QAM	1	0	20.09	20.17	20.43
		1	13	20.16	20.13	20.30
		1	24	20.16	20.18	20.05
		12	0	19.25	19.43	19.29
		12	6	19.09	19.30	19.14
		12	13	19.24	19.37	19.21
		25	0	19.35	19.44	19.42
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
5MHz	QPSK	1	0	21.13	21.35	21.34
		1	13	21.21	21.26	21.20
		1	24	21.28	21.23	20.95
		12	0	20.26	20.45	20.29
		12	6	20.24	20.39	20.35
		12	13	20.26	20.39	20.33
		25	0	20.28	20.36	20.42
	16QAM	1	0	20.07	20.18	20.46
		1	13	20.14	20.14	20.29
		1	24	20.18	20.18	20.04
		12	0	19.27	19.44	19.28
		12	6	19.07	19.31	19.17
		12	13	19.25	19.37	19.20
		25	0	19.35	19.44	19.41
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
10MHz	QPSK	1	0	21.13	21.35	21.32
		1	25	21.22	21.26	21.21
		1	49	21.26	21.23	20.96
		25	0	20.28	20.45	20.26
		25	13	20.26	20.39	20.36
		25	25	20.24	20.39	20.34
		50	0	20.26	20.36	20.43
	16QAM	1	0	20.09	20.17	20.43
		1	25	20.16	20.13	20.30
		1	49	20.17	20.18	20.05
		25	0	19.26	19.43	19.29
		25	13	19.09	19.30	19.17
		25	25	19.25	19.37	19.21
		50	0	19.35	19.44	19.42
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26115/1857.5	26365/1882.5	26615/1907.5
15MHz	QPSK	1	0	21.12	21.37	21.34
		1	25	21.21	21.24	21.20
		1	49	21.28	21.21	20.95

		25	0	20.26	20.47	20.28
		25	13	20.24	20.42	20.34
		25	25	20.25	20.38	20.33
		50	0	20.27	20.35	20.42
	16QAM	1	0	20.06	20.16	20.46
		1	25	20.17	20.15	20.29
		1	49	20.17	20.16	20.04
		25	0	19.26	19.41	19.28
		25	13	19.06	19.32	19.17
		25	25	19.25	19.39	19.20
		50	0	19.35	19.42	19.42
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26140/1860	26365/1882.5	26590/1905
20MHz	QPSK	1	0	21.16	21.39	21.36
		1	50	21.25	21.27	21.23
		1	99	21.30	21.25	20.99
		50	0	20.29	20.48	20.30
		50	25	20.28	20.43	20.37
		50	50	20.27	20.40	20.36
		100	0	20.30	20.38	20.46
	16QAM	1	0	20.10	20.20	20.47
		1	50	20.18	20.17	20.31
		1	99	20.19	20.19	20.07
		50	0	19.29	19.45	19.32
		50	25	19.10	19.33	19.18
		50	50	19.26	19.41	19.22
		100	0	19.37	19.45	19.44

LTE FDD Band 26 (WiFi Off)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26697/814.7	26865/831.5	27033/848.3
1.4MHz	QPSK	1	0	23.10	23.17	23.19
		1	2	23.16	23.22	23.26
		1	5	23.15	23.20	23.06
		3	0	22.17	22.22	22.23
		3	2	22.20	22.14	22.16
		3	3	22.22	22.22	22.18
		6	0	22.09	22.15	22.14
	16QAM	1	0	22.21	22.29	22.36
		1	2	22.33	22.24	22.35
		1	5	22.23	22.22	22.19
		3	0	21.18	21.23	21.28

		3	2	21.28	21.27	21.22
		3	3	21.23	21.20	21.29
		6	0	21.07	21.25	21.31
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26705/815.5	26865/831.5	27025/847.5
3MHz	QPSK	1	0	23.06	23.13	23.15
		1	13	23.12	23.18	23.22
		1	24	23.11	23.15	23.02
		12	0	22.12	22.17	22.18
		12	6	22.16	22.09	22.11
		12	13	22.17	22.18	22.15
		25	0	22.05	22.10	22.09
	16QAM	1	0	22.20	22.27	22.33
		1	13	22.28	22.26	22.27
		1	24	22.18	22.28	22.15
		12	0	21.14	21.18	21.35
		12	6	21.24	21.23	21.33
		12	13	21.19	21.31	21.24
		25	0	21.02	21.20	21.27
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26715/816.5	26865/831.5	27015/846.5
5MHz	QPSK	1	0	23.07	23.14	23.16
		1	13	23.13	23.19	23.22
		1	24	23.12	23.17	23.03
		12	0	22.14	22.19	22.19
		12	6	22.17	22.10	22.12
		12	13	22.18	22.19	22.15
		25	0	22.06	22.11	22.10
	16QAM	1	0	22.21	22.29	22.34
		1	13	22.19	22.21	22.28
		1	24	22.12	22.36	22.16
		12	0	21.12	21.19	21.25
		12	6	21.22	21.24	21.28
		12	13	21.20	21.22	21.26
		25	0	21.03	21.22	21.28
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26750/820	26865/831.5	26990/844
10MHz	QPSK	1	0	23.08	23.15	23.17
		1	25	23.14	23.20	23.24
		1	49	23.13	23.18	23.04
		25	0	22.15	22.20	22.20
		25	13	22.18	22.11	22.13
		25	25	22.20	22.20	22.16
		50	0	22.07	22.13	22.11

	16QAM	1	0	22.22	22.30	22.15
		1	25	22.31	22.32	22.35
		1	49	22.20	22.30	22.17
		25	0	21.16	21.20	21.26
		25	13	21.26	21.25	21.30
		25	25	21.21	21.23	21.27
		50	0	21.05	21.23	21.29
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26775/822.5	26865/831.5	26965/841.5
15MHz	QPSK	1	0	23.09	23.16	23.18
		1	38	23.16	23.21	23.25
		1	74	23.14	23.19	23.05
		36	0	22.16	22.21	22.22
		36	18	22.19	22.13	22.15
		36	39	22.21	22.21	22.18
		75	0	22.08	22.14	22.13
	16QAM	1	0	22.24	22.31	22.36
		1	38	22.12	22.23	22.30
		1	74	22.22	22.21	22.28
		36	0	21.17	21.12	21.27
		36	18	21.27	21.26	21.21
		36	39	21.22	21.25	21.28
		75	0	21.06	21.24	21.30

LTE FDD Band 26 (WiFi On)				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26697/814.7	26865/831.5	27033/848.3
1.4MHz	QPSK	1	0	21.46	21.72	21.83
		1	2	21.93	21.86	21.98
		1	5	21.46	21.64	21.39
		3	0	20.59	20.60	20.82
		3	2	20.59	20.55	20.69
		3	3	20.58	20.72	20.67
		6	0	20.46	20.70	20.81
	16QAM	1	0	20.47	20.69	20.83
		1	2	20.97	20.83	20.98
		1	5	20.53	20.62	20.46
		3	0	19.63	19.60	19.85
		3	2	19.79	19.66	19.79
		3	3	19.64	19.68	19.66
		6	0	19.52	19.73	19.75
Bandwidth	Modulation	RB	RB offset	Channel/Frequency(MHz)		

		size		26705/815.5	26865/831.5	27025/847.5
3MHz	QPSK	1	0	21.45	21.71	21.82
		1	13	21.92	21.89	21.96
		1	24	21.48	21.64	21.37
		12	0	20.58	20.60	20.84
		12	6	20.58	20.55	20.71
		12	13	20.60	20.72	20.66
		25	0	20.48	20.70	20.80
	16QAM	1	0	20.45	20.70	20.86
		1	13	20.95	20.84	20.97
		1	24	20.55	20.62	20.45
		12	0	19.65	19.61	19.84
		12	6	19.77	19.67	19.82
		12	13	19.65	19.68	19.65
		25	0	19.52	19.73	19.74
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26715/816.5	26865/831.5	27015/846.5
5MHz	QPSK	1	0	21.45	21.71	21.80
		1	13	21.93	21.89	21.97
		1	24	21.46	21.64	21.38
		12	0	20.60	20.60	20.81
		12	6	20.60	20.55	20.72
		12	13	20.58	20.72	20.67
		25	0	20.46	20.70	20.81
	16QAM	1	0	20.47	20.69	20.83
		1	13	20.97	20.83	20.98
		1	24	20.54	20.62	20.46
		12	0	19.64	19.60	19.85
		12	6	19.79	19.66	19.82
		12	13	19.65	19.68	19.66
		25	0	19.52	19.73	19.75
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26750/820	26865/831.5	26990/844
10MHz	QPSK	1	0	21.44	21.73	21.82
		1	25	21.92	21.87	21.96
		1	49	21.48	21.62	21.37
		25	0	20.58	20.62	20.83
		25	13	20.58	20.58	20.70
		25	25	20.59	20.71	20.66
		50	0	20.47	20.69	20.80
	16QAM	1	0	20.44	20.68	20.86
		1	25	20.98	20.85	20.97
		1	49	20.54	20.60	20.45
		25	0	19.64	19.58	19.84

		25	13	19.76	19.68	19.82
		25	25	19.65	19.70	19.65
		50	0	19.52	19.71	19.75
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26775/822.5	26865/831.5	26965/841.5
15MHz	QPSK	1	0	21.48	21.75	21.84
		1	38	21.96	21.90	21.99
		1	74	21.50	21.66	21.41
		36	0	20.61	20.63	20.85
		36	18	20.62	20.59	20.73
		36	39	20.61	20.73	20.69
		75	0	20.50	20.72	20.84
	16QAM	1	0	20.48	20.72	20.87
		1	38	20.99	20.87	20.99
		1	74	20.56	20.63	20.48
		36	0	19.67	19.62	19.88
		36	18	19.80	19.69	19.83
		36	39	19.66	19.72	19.67
		75	0	19.54	19.74	19.77

Antenna 2

GSM 850		Burst Conducted Power(dBm)			/	Average power(dBm)		
		Channel/Frequency(MHz)				Channel/Frequency(MHz)		
		128/824.2	190/836.6	251/848.8		128/824.2	190/836.6	251/848.8
GSM		32.88	32.89	32.76	-9.03dB	23.85	23.86	23.73
GPRS (GMSK)	1Txslot	32.82	32.82	32.72	-9.03dB	23.79	23.79	23.69
	2Txslots	30.86	30.83	30.73	-6.02dB	**24.84**	**24.81**	**24.71**
	3Txslots	28.81	28.80	28.68	-4.26dB	24.55	24.54	24.42
	4Txslots	26.75	26.75	26.65	-3.01dB	23.74	23.74	23.64
EGPRS (GMSK)	1Txslot	32.85	32.87	32.74	-9.03dB	23.82	23.84	23.71
	2Txslots	30.87	30.88	30.73	-6.02dB	**24.85**	**24.86**	**24.71**
	3Txslots	28.80	28.84	28.68	-4.26dB	24.54	24.58	24.42
	4Txslots	26.74	26.78	26.65	-3.01dB	23.73	23.77	23.64
EGPRS (8PSK)	1Txslot	26.02	26.42	26.77	-9.03dB	16.99	17.39	17.74
	2Txslots	24.03	24.33	24.42	-6.02dB	18.01	18.31	18.40
	3Txslots	22.08	22.56	22.40	-4.26dB	17.82	18.30	18.14
	4Txslots	20.06	20.19	19.82	-3.01dB	17.05	17.18	16.81

GSM 1900		Burst Conducted Power(dBm)			/	Average power(dBm)		
		Channel/Frequency(MHz)				Channel/Frequency(MHz)		
		512/1850.2	661/1880	810/1909.8		512/1850.2	661/1880	810/1909.8
GSM		30.16	30.22	30.39	-9.03dB	21.13	21.19	21.36
GPRS (GMSK)	1Txslot	30.17	30.20	30.38	-9.03dB	21.14	21.17	21.35
	2Txslots	28.12	28.17	28.39	-6.02dB	**22.10**	**22.15**	**22.37**
	3Txslots	26.11	26.17	26.34	-4.26dB	21.85	21.91	22.08
	4Txslots	24.10	24.20	24.42	-3.01dB	21.09	21.19	21.41
EGPRS (GMSK)	1Txslot	30.16	30.22	30.38	-9.03dB	21.13	21.19	21.35
	2Txslots	28.12	28.19	28.38	-6.02dB	**22.10**	**22.17**	**22.36**
	3Txslots	26.11	26.19	26.35	-4.26dB	21.85	21.93	22.09
	4Txslots	24.10	24.21	24.42	-3.01dB	21.09	21.20	21.41
EGPRS (8PSK)	1Txslot	26.17	26.06	26.19	-9.03dB	17.14	17.03	17.16
	2Txslots	23.64	23.62	23.96	-6.02dB	17.62	17.60	17.94
	3Txslots	21.67	22.21	21.46	-4.26dB	17.41	17.95	17.20
	4Txslots	19.41	19.67	19.40	-3.01dB	16.40	16.66	16.39

Note:

2) Division Factors

To average the power, the division factor is as follows:

1Txslot = 1 transmit time slot out of 8 time slots

=> conducted power divided by (8/1) => -9.03 dB

2Txslots = 2 transmit time slots out of 8 time slots

=> conducted power divided by (8/2) => -6.02 dB

3Txslots = 3 transmit time slots out of 8 time slots

=> conducted power divided by (8/3) => -4.26 dB
4Txslots = 4 transmit time slots out of 8 time slots
=> conducted power divided by (8/4) => -3.01 dB
2) Average power numbers
The maximum power numbers are marks in bold.

UMTS Band II		Conducted Power (dBm)		
		Channel/Frequency(MHz)		
		9262/1852.4	9400/1880	9538/1907.6
RMC	12.2kbps RMC	23.83	23.96	24.02
	64kbps RMC	23.82	23.84	23.99
	144kbps RMC	23.81	23.83	23.97
	384kbps RMC	23.80	23.82	24.05
HSDPA	Sub - Test 1	22.92	22.73	22.87
	Sub - Test 2	21.35	21.46	21.37
	Sub - Test 3	20.91	20.74	20.83
	Sub - Test 4	20.92	20.80	20.78
HSUPA	Sub - Test 1	20.93	20.89	20.91
	Sub - Test 2	19.33	19.37	19.42
	Sub - Test 3	21.92	21.89	21.91
	Sub - Test 4	19.43	19.46	19.37
	Sub - Test 5	22.27	22.44	22.49
DC-HSDPA	Sub - Test 1	22.89	22.95	22.91
	Sub - Test 2	21.44	21.43	21.44
	Sub - Test 3	20.73	20.65	20.89
	Sub - Test 4	20.84	20.79	20.86
UMTS Band IV		Conducted Power (dBm)		
		Channel/Frequency(MHz)		
		1312/1712.4	1413/1732.6	1513/1752.6
RMC	12.2kbps RMC	23.86	23.84	23.62
	64kbps RMC	23.89	23.88	23.66
	144kbps RMC	23.88	23.87	23.64
	384kbps RMC	23.87	23.86	23.67
HSDPA	Sub - Test 1	22.95	22.61	22.47
	Sub - Test 2	21.42	21.50	21.04
	Sub - Test 3	20.98	20.78	20.50
	Sub - Test 4	20.99	20.84	20.40
HSUPA	Sub - Test 1	20.96	20.77	20.51

	Sub - Test 2	19.40	19.41	19.09
	Sub - Test 3	21.99	21.93	21.58
	Sub - Test 4	19.50	19.50	18.99
	Sub - Test 5	22.32	22.53	22.25
DC-HSDPA	Sub - Test 1	22.92	22.83	22.51
	Sub - Test 2	21.51	21.47	21.11
	Sub - Test 3	20.80	20.69	20.56
	Sub - Test 4	20.91	20.83	20.48
UMTS Band V		**Conducted Power (dBm)**		
		Channel/Frequency(MHz)		
		4132/826.4	4183/836.6	4233/846.6
RMC	12.2kbps RMC	23.67	23.62	23.55
	64kbps RMC	23.72	23.56	23.54
	144kbps RMC	23.65	23.54	23.48
	384kbps RMC	23.73	23.63	23.53
HSDPA	Sub - Test 1	22.98	22.49	22.07
	Sub - Test 2	21.49	21.54	20.71
	Sub - Test 3	21.05	20.82	20.17
	Sub - Test 4	21.06	20.88	20.02
HSUPA	Sub - Test 1	20.99	20.65	20.11
	Sub - Test 2	19.47	19.45	18.76
	Sub - Test 3	22.06	21.97	21.25
	Sub - Test 4	19.57	19.54	18.61
	Sub - Test 5	22.37	22.62	22.01
DC-HSDPA	Sub - Test 1	22.95	22.71	22.11
	Sub - Test 2	21.58	21.51	20.78
	Sub - Test 3	20.87	20.73	20.23
	Sub - Test 4	20.98	20.87	20.10

LTE FDD Band 2				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18607/1850.7	18900/1880	19193/1909.3
1.4MHz	QPSK	1	0	23.19	23.33	23.35
		1	2	23.26	23.30	23.33
		1	5	23.24	23.38	23.15
		3	0	23.10	23.31	23.26
		3	2	23.11	23.30	23.33
		3	3	23.12	23.29	23.47
		6	0	22.24	22.34	22.51

	16QAM	1	0	22.14	22.46	22.51
		1	2	22.51	22.40	22.53
		1	5	22.45	22.56	22.12
		3	0	22.10	22.27	22.29
		3	2	21.99	22.27	22.22
		3	3	22.13	22.28	22.48
		6	0	21.19	21.30	21.49
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18615/1851.5	18900/1880	19185/1908.5
3MHz	QPSK	1	0	23.05	23.15	23.13
		1	7	23.12	23.12	23.15
		1	14	23.06	23.24	22.89
		8	0	22.02	22.19	22.18
		8	4	22.03	22.26	22.25
		8	7	22.00	22.09	22.43
		15	0	21.98	22.08	22.29
	16QAM	1	0	21.92	22.08	22.17
		1	7	22.37	22.06	22.27
		1	14	22.27	22.38	21.94
		8	0	20.94	21.23	21.21
		8	4	20.91	21.11	21.18
		8	7	21.01	21.12	21.40
		15	0	20.93	21.08	21.31
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18625/1852.5	18900/1880	19175/1907.5
5MHz	QPSK	1	0	23.06	23.13	23.16
		1	13	23.13	23.14	23.17
		1	24	23.08	23.25	22.93
		12	0	22.04	22.22	22.20
		12	6	22.05	22.27	22.27
		12	13	22.03	22.14	22.44
		25	0	22.02	22.12	22.32
	16QAM	1	0	21.95	22.15	22.23
		1	13	22.38	22.12	22.31
		1	24	22.29	22.40	21.96
		12	0	20.98	21.24	21.23
		12	6	20.93	21.15	21.19
		12	13	21.04	21.16	21.42
		25	0	20.97	21.11	21.33
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18650/1855	18900/1880	19150/1905
10MHz	QPSK	1	0	23.07	23.11	23.19
		1	25	23.14	23.16	23.19
		1	49	23.10	23.26	22.97

		25	0	22.06	22.25	22.22
		25	13	22.07	22.28	22.29
		25	25	22.06	22.19	22.45
		50	0	22.06	22.16	22.35
	16QAM	1	0	21.98	22.22	22.29
		1	25	22.39	22.18	22.35
		1	49	22.31	22.42	21.98
		25	0	21.02	21.25	21.25
		25	13	20.95	21.19	21.20
		25	25	21.07	21.20	21.44
		50	0	21.01	21.14	21.35
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18675/1857.5	18900/1880	19125/1902.5
15MHz	QPSK	1	0	23.08	23.18	23.22
		1	38	23.15	23.18	23.21
		1	74	23.12	23.27	23.01
		36	0	22.08	22.28	22.24
		36	18	22.09	22.29	22.31
		36	39	22.09	22.24	22.46
		75	0	22.10	22.20	22.38
	16QAM	1	0	22.01	22.29	22.35
		1	38	22.40	22.24	22.39
		1	74	22.33	22.44	22.00
		36	0	21.06	21.26	21.27
		36	18	20.97	21.23	21.21
		36	39	21.10	21.24	21.46
		75	0	21.05	21.17	21.37
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				18700/1860	18900/1880	19100/1900
20MHz	QPSK	1	0	23.09	23.23	23.25
		1	50	23.16	23.20	23.23
		1	99	23.14	23.28	23.05
		50	0	22.10	22.31	22.26
		50	25	22.11	22.30	22.33
		50	50	22.12	22.29	22.47
		100	0	22.14	22.24	22.41
	16QAM	1	0	22.04	22.36	22.41
		1	50	22.41	22.30	22.43
		1	99	22.35	22.46	22.02
		50	0	21.10	21.27	21.29
		50	25	20.99	21.27	21.22
		50	50	21.13	21.28	21.48
		100	0	21.09	21.20	21.39

LTE FDD Band 4				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19957/1710.7	20175/1732.5	20393/1754.3
1.4MHz	QPSK	1	0	23.93	24.06	24.18
		1	2	23.96	24.17	23.95
		1	5	24.08	24.09	23.92
		3	0	23.59	23.64	23.82
		3	2	23.60	23.83	23.75
		3	3	23.64	23.90	23.73
		6	0	22.80	22.97	22.97
	16QAM	1	0	23.09	23.20	23.46
		1	2	23.05	23.31	23.07
		1	5	23.12	23.23	23.10
		3	0	22.88	22.95	23.12
		3	2	22.87	23.00	22.96
		3	3	22.97	23.20	23.02
		6	0	21.79	21.96	21.95
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19965/1711.5	20175/1732.5	20385/1753.5
3MHz	QPSK	1	0	23.19	23.28	23.36
		1	7	23.22	23.39	23.17
		1	14	23.30	23.35	23.06
		8	0	22.01	22.02	22.24
		8	4	22.02	22.29	22.17
		8	7	22.02	22.20	22.19
		15	0	21.94	22.11	22.15
	16QAM	1	0	22.27	22.22	22.52
		1	7	22.31	22.37	22.21
		1	14	22.34	22.45	22.32
		8	0	20.92	21.11	21.24
		8	4	20.99	21.04	21.12
		8	7	21.05	21.24	21.14
		15	0	20.93	21.14	21.17
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				19975/1712.5	20175/1732.5	20375/1752.5
5MHz	QPSK	1	0	23.20	23.30	23.39
		1	13	23.23	23.41	23.19
		1	24	23.32	23.36	23.10
		12	0	22.03	22.05	22.26
		12	6	22.04	22.30	22.19
		12	13	22.05	22.25	22.20
		25	0	21.98	22.15	22.18

	16QAM	1	0	22.30	22.29	22.58
		1	13	22.32	22.43	22.25
		1	24	22.36	22.47	22.34
		12	0	20.96	21.12	21.26
		12	6	21.01	21.08	21.13
		12	13	21.08	21.28	21.16
		25	0	20.97	21.17	21.19
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20000/1715	20175/1732.5	20350/1750
10MHz	QPSK	1	0	23.21	23.32	23.42
		1	25	23.24	23.43	23.21
		1	49	23.34	23.37	23.14
		25	0	22.05	22.08	22.28
		25	13	22.06	22.31	22.21
		25	25	22.08	22.30	22.21
		50	0	22.02	22.19	22.21
	16QAM	1	0	22.33	22.36	22.64
		1	25	22.33	22.49	22.29
		1	49	22.38	22.49	22.36
		25	0	21.00	21.13	21.28
		25	13	21.03	21.12	21.14
		25	25	21.11	21.32	21.18
		50	0	21.01	21.20	21.21
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	23.22	23.34	23.45
		1	38	23.25	23.45	23.23
		1	74	23.36	23.38	23.18
		36	0	22.07	22.11	22.30
		36	18	22.08	22.32	22.23
		36	39	22.11	22.35	22.22
		75	0	22.06	22.23	22.24
	16QAM	1	0	22.36	22.43	22.70
		1	38	22.34	22.55	22.33
		1	74	22.40	22.51	22.38
		36	0	21.04	21.14	21.30
		36	18	21.05	21.16	21.15
		36	39	21.14	21.36	21.20
		75	0	21.05	21.23	21.23
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20050/1720	20175/1732.5	20300/1745
20MHz	QPSK	1	0	23.23	23.36	23.48
		1	50	23.26	23.47	23.25

		1	99	23.38	23.39	23.22
		50	0	22.09	22.14	22.32
		50	25	22.10	22.33	22.25
		50	50	22.14	22.40	22.23
		100	0	22.10	22.27	22.27
	16QAM	1	0	22.39	22.50	22.76
		1	50	22.35	22.61	22.37
		1	99	22.42	22.53	22.40
		50	0	21.08	21.15	21.32
		50	25	21.07	21.20	21.16
		50	50	21.17	21.40	21.22
		100	0	21.09	21.26	21.25

LTE FDD Band 5				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20407/824.7	20525/836.5	20643/848.3
1.4MHz	QPSK	1	0	22.91	23.26	23.23
		1	2	23.54	23.58	23.43
		1	5	23.44	23.37	23.24
		3	0	22.40	22.43	22.55
		3	2	22.39	22.50	22.54
		3	3	22.30	22.58	22.56
		6	0	22.28	22.49	22.54
	16QAM	1	0	21.99	22.08	22.36
		1	2	22.49	22.58	22.40
		1	5	22.29	22.56	22.33
		3	0	21.26	21.27	21.46
		3	2	21.38	21.51	21.55
		3	3	21.26	21.40	21.40
		6	0	21.08	21.29	21.35
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20415/825.5	20525/836.5	20635/847.5
3MHz	QPSK	1	0	22.79	23.12	23.07
		1	7	23.42	23.44	23.29
		1	14	23.30	23.25	23.06
		8	0	22.26	22.27	22.41
		8	4	22.25	22.38	22.40
		8	7	22.14	22.38	22.44
		15	0	22.10	22.31	22.38
	16QAM	1	0	21.83	21.84	22.14
		1	7	22.37	22.36	22.22
		1	14	22.15	22.42	22.19

		8	0	21.08	21.15	21.32
		8	4	21.24	21.33	21.43
		8	7	21.10	21.22	21.26
		15	0	20.90	21.13	21.21
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20425/826.5	20525/836.5	20625/846.5
5MHz	QPSK	1	0	22.80	23.14	23.10
		1	13	23.43	23.46	23.31
		1	24	23.32	23.26	23.10
		12	0	22.28	22.30	22.43
		12	6	22.27	22.39	22.42
		12	13	22.17	22.43	22.45
		25	0	22.14	22.35	22.41
	16QAM	1	0	21.86	21.91	22.20
		1	13	22.38	22.42	22.26
		1	24	22.17	22.44	22.21
		12	0	21.12	21.16	21.34
		12	6	21.26	21.37	21.44
		12	13	21.13	21.26	21.28
		25	0	20.94	21.16	21.23
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20450/829	20525/836.5	20600/844
10MHz	QPSK	1	0	22.81	23.16	23.13
		1	25	23.44	23.48	23.33
		1	49	23.34	23.27	23.14
		25	0	22.30	22.33	22.45
		25	13	22.29	22.40	22.44
		25	25	22.20	22.48	22.46
		50	0	22.18	22.39	22.44
	16QAM	1	0	21.89	21.98	22.26
		1	25	22.39	22.48	22.30
		1	49	22.19	22.46	22.23
		25	0	21.16	21.17	21.36
		25	13	21.28	21.41	21.45
		25	25	21.16	21.30	21.30
		50	0	20.98	21.19	21.25

LTE FDD Band 7				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20775/2502.5	21100/2535	21425/2567.5
5MHz	QPSK	1	0	22.77	22.86	22.97
		1	13	22.78	22.75	22.90
		1	24	22.99	22.89	22.86

		12	0	21.76	21.97	21.86
		12	6	21.68	21.75	21.95
		12	13	21.90	21.57	21.99
		25	0	21.79	21.83	21.98
	16QAM	1	0	21.98	21.47	21.70
		1	13	21.56	21.20	21.50
		1	24	21.88	21.41	21.48
		12	0	20.79	20.57	20.86
		12	6	20.57	20.68	20.77
		12	13	20.68	20.79	20.61
		25	0	20.93	20.87	20.67
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20800/2505	21100/2535	21400/2565
10MHz	QPSK	1	0	22.73	22.82	22.93
		1	25	22.74	22.71	22.86
		1	49	22.95	22.85	22.82
		25	0	21.72	21.93	21.82
		25	13	21.64	21.71	21.91
		25	25	21.86	21.53	21.95
		50	0	21.75	21.79	21.94
	16QAM	1	0	21.94	21.43	21.66
		1	25	21.52	21.16	21.46
		1	49	21.84	21.37	21.44
		25	0	20.75	20.53	20.82
		25	13	20.53	20.64	20.73
		25	25	20.64	20.75	20.57
		50	0	20.89	20.83	20.63
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				20825/2507.5	21100/2535	21375/2562.5
15MHz	QPSK	1	0	22.84	22.83	22.96
		1	38	22.75	22.72	22.87
		1	74	22.94	22.86	22.83
		36	0	21.73	21.94	21.83
		36	18	21.65	21.72	21.92
		36	39	21.87	21.54	21.96
		75	0	21.76	21.80	21.95
	16QAM	1	0	21.95	21.44	21.67
		1	38	21.53	21.17	21.47
		1	74	21.85	21.38	21.45
		36	0	20.76	20.54	20.83
		36	18	20.54	20.65	20.74
		36	39	20.65	20.76	20.58
		75	0	20.90	20.84	20.64
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		

				20850/2510	21100/2535	21350/2560
20MHz	QPSK	1	0	22.75	22.84	22.95
		1	50	22.76	22.73	22.97
		1	99	22.88	22.87	22.84
		50	0	21.74	21.95	21.84
		50	25	21.66	21.73	21.93
		50	50	21.88	21.85	21.97
		100	0	21.77	21.81	21.96
	16QAM	1	0	21.96	21.45	21.68
		1	50	21.54	21.18	21.48
		1	99	21.86	21.39	21.46
		50	0	20.77	20.55	20.84
		50	25	20.55	20.66	20.75
		50	50	20.66	20.77	20.59
		100	0	20.91	20.85	20.65

Conducted power measurement results of LTE CA- Band 7(PCC) + Band 7(SCC)

Bandwidth	Modulation	PCC UL RB size	PCC UL RB offset	PCC DL RB size	PCC DL RB offset	UL Channel	DL Channel	Tx. Power (dBm)	Tune-up (dBm)	Downlink LTE CA configuration
15M+15M	QPSK	1	0	75	0	21375CH	3375CH + 3225CH	22.89	23.00	Inactive
								22.52		Active
20M+20M	QPSK	1	50	100	0	21350CH	3350CH + 3152CH	22.90	23.00	Inactive
								22.94		Active

LTE FDD Band 12				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23017/699.7	23095/707.5	23173/715.3
1.4MHz	QPSK	1	0	23.15	23.29	23.22
		1	2	23.40	23.40	23.57
		1	5	23.43	23.35	23.38
		3	0	23.07	23.13	23.15
		3	2	23.11	23.16	23.11
		3	3	23.14	23.19	23.08
		6	0	22.40	22.36	22.39
	16QAM	1	0	22.15	22.25	22.28
		1	2	22.39	22.31	22.50
		1	5	22.48	22.46	22.46

		3	0	22.05	22.12	22.16
		3	2	22.24	22.21	22.24
		3	3	22.12	22.24	22.12
		6	0	21.34	21.31	21.35
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23025/700.5	23095/707.5	23165/714.5
3MHz	QPSK	1	0	23.04	23.16	23.07
		1	7	23.29	23.27	23.44
		1	14	23.30	23.24	23.21
		8	0	22.23	22.27	22.31
		8	4	22.27	22.34	22.27
		8	7	22.28	22.29	22.26
		15	0	22.23	22.19	22.24
	16QAM	1	0	22.00	22.02	22.07
		1	7	22.28	22.10	22.33
		1	14	22.35	22.33	22.33
		8	0	21.16	21.29	21.31
		8	4	21.39	21.32	21.41
		8	7	21.25	21.35	21.27
		15	0	21.17	21.16	21.22
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23035/701.5	23095/707.5	23155/713.5
5MHz	QPSK	1	0	23.05	23.18	23.10
		1	13	23.30	23.29	23.46
		1	24	23.32	23.25	23.25
		12	0	22.25	22.30	22.33
		12	6	22.29	22.35	22.29
		12	13	22.31	22.34	22.27
		25	0	22.27	22.23	22.27
	16QAM	1	0	22.03	22.09	22.13
		1	13	22.29	22.16	22.37
		1	24	22.37	22.35	22.35
		12	0	21.20	21.30	21.33
		12	6	21.41	21.36	21.42
		12	13	21.28	21.39	21.29
		25	0	21.21	21.19	21.24
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23060/704	23095/707.5	23130/711
10MHz	QPSK	1	0	23.06	23.20	23.13
		1	25	23.31	23.31	23.48
		1	49	23.34	23.26	23.29
		25	0	22.27	22.33	22.35
		25	13	22.31	22.36	22.31

		25	25	22.34	22.39	22.28
		50	0	22.31	22.27	22.30
	16QAM	1	0	22.06	22.16	22.19
		1	25	22.30	22.22	22.41
		1	49	22.39	22.37	22.37
		25	0	21.24	21.31	21.35
		25	13	21.43	21.40	21.43
		25	25	21.31	21.43	21.31
		50	0	21.25	21.22	21.26

LTE FDD Band 17				**Conducted Power(dBm)**		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23755/706.5	23790/710	23825/713.5
5MHz	QPSK	1	0	23.13	23.10	23.14
		1	13	23.47	23.40	23.45
		1	24	23.26	23.27	23.25
		12	0	22.39	22.42	22.31
		12	6	22.35	22.42	22.34
		12	13	22.33	22.39	22.37
		25	0	22.32	22.18	22.30
	16QAM	1	0	22.06	21.95	22.01
		1	13	22.19	22.09	22.27
		1	24	22.39	22.23	22.22
		12	0	21.28	21.33	21.21
		12	6	21.28	21.32	21.44
		12	13	21.26	21.31	21.29
		25	0	21.18	21.05	21.17
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				23780/709	23790/710	23800/711
10MHz	QPSK	1	0	23.14	23.12	23.17
		1	25	23.48	23.42	23.47
		1	49	23.28	23.28	23.29
		25	0	22.41	22.45	22.33
		25	13	22.37	22.43	22.36
		25	25	22.36	22.44	22.38
		50	0	22.36	22.22	22.33
	16QAM	1	0	22.09	22.02	22.07
		1	25	22.20	22.15	22.31
		1	49	22.41	22.25	22.24
		25	0	21.32	21.34	21.23
		25	13	21.30	21.36	21.45

		25	25	21.29	21.35	21.31
		50	0	21.22	21.08	21.19

LTE FDD Band 25				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26047/1850.7	26365/1882.5	26683/1914.3
1.4MHz	QPSK	1	0	22.12	22.59	22.45
		1	2	22.53	22.46	22.44
		1	5	22.51	22.56	22.00
		3	0	22.25	22.33	22.15
		3	2	22.13	22.27	22.23
		3	3	22.04	22.23	22.30
		6	0	21.77	21.71	21.92
	16QAM	1	0	22.19	22.44	22.39
		1	2	22.55	22.34	22.36
		1	5	22.35	22.28	21.99
		3	0	22.36	22.36	22.26
		3	2	22.03	22.27	22.13
		3	3	22.13	22.29	22.46
		6	0	21.13	21.26	21.33
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26055/1851.5	26365/1882.5	26675/1913.5
3MHz	QPSK	1	0	21.97	22.40	22.22
		1	13	22.38	22.27	22.25
		1	24	22.32	22.41	21.73
		12	0	22.06	22.10	21.96
		12	6	21.94	22.12	22.04
		12	13	21.81	21.92	22.15
		25	0	22.10	22.04	22.29
	16QAM	1	0	21.96	22.05	22.04
		1	13	22.40	21.99	22.09
		1	24	22.16	22.09	21.80
		12	0	20.99	21.11	20.97
		12	6	20.74	20.90	20.88
		12	13	20.80	20.92	21.17
		25	0	20.86	21.03	21.14
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26065/1852.5	26365/1882.5	26665/1912.5
5MHz	QPSK	1	0	21.98	22.42	22.25
		1	13	22.39	22.29	22.27
		1	24	22.34	22.42	21.77
		12	0	22.08	22.13	21.98

		12	6	21.96	22.13	22.06
		12	13	21.84	21.97	22.16
		25	0	22.14	22.08	22.32
	16QAM	1	0	21.99	22.12	22.10
		1	13	22.41	22.05	22.13
		1	24	22.18	22.11	21.82
		12	0	21.03	21.12	20.99
		12	6	20.76	20.94	20.89
		12	13	20.83	20.96	21.19
		25	0	20.90	21.06	21.16
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26090/1855	26365/1882.5	26640/1910
10MHz	QPSK	1	0	21.99	22.44	22.28
		1	25	22.40	22.31	22.29
		1	49	22.36	22.43	21.81
		25	0	22.10	22.16	22.00
		25	13	21.98	22.14	22.08
		25	25	21.87	22.02	22.17
		50	0	22.18	22.12	22.35
	16QAM	1	0	22.02	22.19	22.16
		1	25	22.42	22.11	22.17
		1	49	22.20	22.13	21.84
		25	0	21.07	21.13	21.01
		25	13	20.78	20.98	20.90
		25	25	20.86	21.00	21.21
		50	0	20.94	21.09	21.18
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26115/1857.5	26365/1882.5	26615/1907.5
15MHz	QPSK	1	0	22.00	22.46	22.31
		1	25	22.41	22.33	22.31
		1	49	22.38	22.44	21.85
		25	0	22.12	22.19	22.02
		25	13	22.00	22.15	22.10
		25	25	21.90	22.07	22.18
		50	0	22.22	22.16	22.38
	16QAM	1	0	22.05	22.26	22.22
		1	25	22.43	22.17	22.21
		1	49	22.22	22.15	21.86
		25	0	21.11	21.14	21.03
		25	13	20.80	21.02	20.91
		25	25	20.89	21.04	21.23
		50	0	20.98	21.12	21.20
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26140/1860	26365/1882.5	26590/1905

20MHz	QPSK	1	0	22.01	22.48	22.34
		1	50	22.42	22.35	22.33
		1	99	22.40	22.45	21.89
		50	0	22.14	22.22	22.04
		50	25	22.02	22.16	22.12
		50	50	21.93	22.12	22.19
		100	0	22.26	22.20	22.41
	16QAM	1	0	22.08	22.33	22.28
		1	50	22.44	22.23	22.25
		1	99	22.24	22.17	21.88
		50	0	21.15	21.15	21.05
		50	25	20.82	21.06	20.92
		50	50	20.92	21.08	21.25
		100	0	21.02	21.15	21.22

LTE FDD Band 26				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26697/814.7	26865/831.5	27033/848.3
1.4MHz	QPSK	1	0	22.83	23.18	23.21
		1	2	23.55	23.37	23.35
		1	5	23.09	23.09	22.73
		3	0	23.01	22.92	23.01
		3	2	23.02	22.97	22.89
		3	3	23.03	23.02	22.85
		6	0	22.38	22.48	22.52
	16QAM	1	0	22.03	22.23	22.24
		1	2	22.54	22.38	22.36
		1	5	22.06	22.14	21.70
		3	0	22.00	22.09	22.22
		3	2	22.15	22.19	22.23
		3	3	22.26	22.19	22.04
		6	0	21.37	21.46	21.46
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26705/815.5	26865/831.5	27025/847.5
3MHz	QPSK	1	0	22.73	23.05	23.05
		1	13	23.33	23.24	23.22
		1	24	22.90	22.99	22.54
		12	0	22.21	22.24	22.36
		12	6	22.37	22.35	22.24
		12	13	22.35	22.28	22.23
		25	0	22.19	22.29	22.36
	16QAM	1	0	21.87	21.95	21.99
		1	13	22.44	22.13	22.17
		1	24	21.93	22.01	21.57
		12	0	21.09	21.27	21.37
		12	6	21.30	21.28	21.41
		12	13	21.38	21.28	21.19
		25	0	21.18	21.30	21.33
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26715/816.5	26865/831.5	27015/846.5
5MHz	QPSK	1	0	22.74	23.07	23.08
		1	13	23.38	23.26	23.24
		1	24	22.94	23.00	22.58
		12	0	22.28	22.27	22.38
		12	6	22.39	22.36	22.26
		12	13	22.38	22.33	22.24
		25	0	22.23	22.33	22.39

	16QAM	1	0	21.90	22.02	22.05
		1	13	22.45	22.19	22.21
		1	24	21.95	22.03	21.59
		12	0	21.13	21.28	21.39
		12	6	21.32	21.32	21.42
		12	13	21.41	21.32	21.21
		25	0	21.22	21.33	21.35
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26750/820	26865/831.5	26990/844
10MHz	QPSK	1	0	22.75	23.09	23.11
		1	25	23.43	23.28	23.26
		1	49	22.98	23.01	22.62
		25	0	22.35	22.30	22.40
		25	13	22.41	22.37	22.28
		25	25	22.41	22.38	22.25
		50	0	22.27	22.37	22.42
	16QAM	1	0	21.93	22.09	22.11
		1	25	22.46	22.25	22.25
		1	49	21.97	22.05	21.61
		25	0	21.17	21.29	21.41
		25	13	21.34	21.36	21.43
		25	25	21.44	21.36	21.23
		50	0	21.26	21.36	21.37
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency(MHz)		
				26775/822.5	26865/831.5	26965/841.5
15MHz	QPSK	1	0	22.76	23.11	23.14
		1	38	23.48	23.30	23.28
		1	74	23.02	23.02	22.66
		36	0	22.42	22.33	22.42
		36	18	22.43	22.38	22.30
		36	39	22.44	22.43	22.26
		75	0	22.31	22.41	22.45
	16QAM	1	0	21.96	22.16	22.17
		1	38	22.47	22.31	22.29
		1	74	21.99	22.07	21.63
		36	0	21.21	21.30	21.43
		36	18	21.36	21.40	21.44
		36	39	21.47	21.40	21.25
		75	0	21.30	21.39	21.39

BT	AV Power (dBm)		
	Channel/Frequency(MHz)		
	0/2402	39/2441	78/2480
GFSK	6.50	7.50	5.90
π/4DQPSK	3.30	4.10	2.70
8DPSK	3.30	4.10	2.70
BT LE	0/2402	19/2440	39/2480
Test Results	6.23	7.30	5.77

Mode (WiFi Only)	Channel/ Frequency(MHz)	Data rate (Mbps)	AV Power (dBm)
802.11b	1/2412	1	14.82
		2	14.58
		5.5	14.62
		11	14.44
	6/2437	1	14.84
		2	14.61
		5.5	14.62
		11	14.35
	11/2462	1	14.96
		2	14.65
		5.5	14.40
		11	14.39
802.11g	1/2412	6	14.73
		9	14.61
		12	14.36
		18	14.26
		24	14.34
		36	14.23
		48	14.23
		54	14.19
	6/2437	6	14.81
		9	14.55
		12	14.65
		18	14.36
		24	14.38
		36	14.39
		48	14.27

		54	14.27
	11/2462	6	14.87
		9	14.60
		12	14.42
		18	14.56
		24	14.44
		36	14.54
		48	14.50
		54	14.39
802.11n HT20	1/2412	MCS0	13.67
		MCS1	13.54
		MCS2	13.28
		MCS3	13.21
		MCS4	13.28
		MCS5	13.17
		MCS6	13.16
		MCS7	13.21
	6/2437	MCS0	13.75
		MCS1	13.47
		MCS2	13.57
		MCS3	13.28
		MCS4	13.32
		MCS5	13.33
		MCS6	13.20
		MCS7	13.29
	11/2462	MCS0	13.81
		MCS1	13.53
		MCS2	13.36
		MCS3	13.29
		MCS4	13.39
		MCS5	13.48
		MCS6	13.43
		MCS7	13.41
802.11n HT40	3/2422	MCS0	13.63
		MCS1	13.49
		MCS2	13.22
		MCS3	13.16
		MCS4	13.23
		MCS5	13.13
		MCS6	13.12
		MCS7	13.16
	6/2437	MCS0	13.72
		MCS1	13.45

		MCS2	13.55
		MCS3	13.20
		MCS4	13.24
		MCS5	13.27
		MCS6	13.21
		MCS7	13.17
	9/2452	MCS0	13.79
		MCS1	13.52
		MCS2	13.33
		MCS3	13.45
		MCS4	13.37
		MCS5	13.45
		MCS6	13.41
		MCS7	13.39

Mode (WiFi on synchronous transmission)	Channel/ Frequency(MHz)	Data rate (Mbps)	AV Power (dBm)
802.11b	1/2412	1	14.22
		2	14.08
		5.5	14.12
		11	13.94
	6/2437	1	14.26
		2	14.11
		5.5	14.12
		11	13.85
	11/2462	1	14.37
		2	14.15
		5.5	13.90
		11	13.89
802.11g	1/2412	6	14.28
		9	14.31
		12	14.06
		18	13.96
		24	14.04
		36	13.93
		48	13.93
		54	13.89
	6/2437	6	14.44
		9	14.25
		12	14.35
		18	14.06

		24	14.08
		36	14.09
		48	13.97
		54	13.97
	11/2462	6	14.38
		9	14.30
		12	14.12
		18	14.26
		24	14.14
		36	14.24
		48	14.20
		54	14.09
802.11n HT20	1/2412	MCS0	13.18
		MCS1	13.14
		MCS2	12.88
		MCS3	12.81
		MCS4	12.88
		MCS5	12.77
		MCS6	12.76
		MCS7	12.81
	6/2437	MCS0	13.16
		MCS1	13.07
		MCS2	13.17
		MCS3	12.88
		MCS4	12.92
		MCS5	12.93
		MCS6	12.80
		MCS7	12.89
	11/2462	MCS0	13.22
		MCS1	13.13
		MCS2	12.96
		MCS3	12.89
		MCS4	12.99
		MCS5	13.08
		MCS6	13.03
		MCS7	13.01
802.11n HT40	3/2422	MCS0	12.68
		MCS1	12.59
		MCS2	12.32
		MCS3	12.26
		MCS4	12.33
		MCS5	12.23
		MCS6	12.22

		MCS7	12.26
	6/2437	MCS0	12.66
		MCS1	12.55
		MCS2	12.65
		MCS3	12.30
		MCS4	12.34
		MCS5	12.37
		MCS6	12.31
		MCS7	12.27
	9/2452	MCS0	12.53
		MCS1	12.62
		MCS2	12.43
		MCS3	12.55
		MCS4	12.47
		MCS5	12.55
		MCS6	12.51
		MCS7	12.49

7.2. Standalone SAR Test Exclusion Considerations

Per FCC KDB 447498 D01, the SAR exclusion threshold for distances <50mm is defined by the following equation:

$$\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} * \sqrt{\text{Frequency (GHz)}} \leq$$

3.0 for 1g SAR, 7.5 for 10g SAR

Band	Configuration	Frequency (MHz)	Maximum Power (dBm)	Separation Distance (mm)	Calculation Result	SAR Exclusion Thresholds	Standalone SAR
Bluetooth	Body Worn	2480	8.5	15	0.74	3.0	No
	Body 10-g Extremity SAR	2480	8.5	5	2.22	7.5	No
Wifi 2.4GHz	Head	2462	15.5	5	11.13	3.0	Yes
	Hotspot	2462	15.5	10	5.56	3.0	Yes
	Body Worn	2462	15.5	15	3.71	3.0	Yes

7.3. SAR Test Results

7.3.1. GSM 850 (Antenna 1, WiFi Off)

Table 14: SAR Values [GSM 850 (GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Time slot	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	190/836.6	GSM	1:8.3	33.30	32.66	-0.084	0.548	1.16	0.635	/
Left/Tilt	190/836.6	GSM	1:8.3	33.30	32.66	0.111	0.559	1.16	0.648	/
Right/Cheek	251/848.8	GSM	1:8.3	33.30	32.54	0.005	0.990	1.19	1.179	/
	190/836.6	GSM	1:8.3	33.30	32.66	-0.002	1.070	1.16	1.240	Figure.28
	128/824.2	GSM	1:8.3	33.30	32.75	0.035	0.993	1.14	1.127	/
Right/Tilt	251/848.8	GSM	1:8.3	33.30	32.54	-0.032	0.961	1.19	1.145	/
	190/836.6	GSM	1:8.3	33.30	32.66	-0.060	0.922	1.16	1.068	/
	128/824.2	GSM	1:8.3	33.30	32.75	0.042	0.932	1.14	1.058	/
Worst position of Head With Battery 2										
Right/Cheek	190/836.6	GSM	1:8.3	33.30	32.66	0.058	0.878	1.16	1.017	/
Worst Case Position of Head (1st Repeated SAR)										
Right/Cheek	190/836.6	GSM	1:8.3	33.30	32.66	-0.024	1.010	1.16	1.170	/
Test position of Body-worn (Distance 15mm)										
Back Side	190/836.6	GSM	1:8.3	33.30	32.66	-0.068	0.157	1.16	0.182	Figure.29
Front Side	190/836.6	GSM	1:8.3	33.30	32.66	0.061	0.115	1.16	0.133	/
Test position of Hotspot (Distance 10mm)										
Back Side	190/836.6	2Txslots	1:4.15	31.50	30.54	0.018	0.408	1.25	0.509	Figure.30
Front Side	190/836.6	2Txslots	1:4.15	31.50	30.54	0.009	0.109	1.25	0.136	/
Left Edge	190/836.6	2Txslots	1:4.15	31.50	30.54	-0.028	0.148	1.25	0.185	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	190/836.6	2Txslots	1:4.15	31.50	30.54	-0.050	0.241	1.25	0.301	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst case test Position With Battery 2 (Distance 10mm)										
Back Side	190/836.6	2Txslots	1:4.15	31.50	30.54	-0.061	0.386	1.25	0.481	/

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.

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 15: SAR Measurement Variability Results [GSM 850(GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	190/836.6	1.070	1.010	1.06	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.2. GSM 1900 (Antenna 1, WiFi Off)

Table 16: SAR Values [GSM 1900(GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Time slot	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	661/1880	GSM	1:8.3	30.30	29.54	-0.105	0.231	1.19	0.275	/
Left/Tilt	661/1880	GSM	1:8.3	30.30	29.54	0.118	0.196	1.19	0.233	/
Right/Cheek	810/1909.8	GSM	1:8.3	30.30	29.73	-0.070	0.637	1.14	0.726	/
	661/1880	GSM	1:8.3	30.30	29.54	0.147	0.721	1.19	0.859	/
	512/1850.2	GSM	1:8.3	30.30	29.75	-0.024	0.785	1.14	0.891	/
Right/Tilt	661/1880	GSM	1:8.3	30.30	29.54	0.012	0.633	1.19	0.754	/
Worst position of Head With Battery 2										
Right/Cheek	512/1850.2	GSM	1:8.3	30.30	29.75	0.033	0.837	1.14	0.950	Figure.31
Worst Case Position of Head (1st Repeated SAR)										
Right/Cheek	512/1850.2	GSM	1:8.3	30.30	29.75	-0.088	0.720	1.14	0.817	/
Test position of Body-worn (Distance 15mm)										
Back Side	661/1880	GSM	1:8.3	30.30	29.54	-0.020	0.041	1.19	0.049	/
Front Side	661/1880	GSM	1:8.3	30.30	29.54	0.028	0.045	1.19	0.054	Figure.32
Test position of Hotspot (Distance 10mm)										
Back Side	661/1880	2Txslots	1:4.15	28.50	27.48	-0.037	0.118	1.26	0.149	/
Front Side	661/1880	2Txslots	1:4.15	28.50	27.48	-0.013	0.149	1.26	0.188	/
Left Edge	661/1880	2Txslots	1:4.15	28.50	27.48	-0.187	0.116	1.26	0.147	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	661/1880	2Txslots	1:4.15	28.50	27.48	-0.161	0.152	1.26	0.192	Figure.33
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst case test Position With Battery 2 (Distance 10mm)										
Top Edge	661/1880	2Txslots	1:4.15	28.50	27.48	0.029	0.146	1.26	0.185	/

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.

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 17: SAR Measurement Variability Results [GSM 1900(GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	512/1850.2	0.837	0.720	1.16	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.3. UMTS Band II (Antenna 1, WiFi Off)

Table 18: SAR Values [UMTS Band II (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	9400/1880	RMC 12.2K	1:1	24.50	23.85	0.199	0.285	1.16	0.331	/
Left/Tilt	9400/1880	RMC 12.2K	1:1	24.50	23.85	-0.045	0.286	1.16	0.332	/
Right/Cheek	9538/1907.6	RMC 12.2K	1:1	24.50	23.74	0.130	0.857	1.19	1.021	Figure.34
	9400/1880	RMC 12.2K	1:1	24.50	23.85	-0.044	0.723	1.16	0.840	/
	9262/1852.4	RMC 12.2K	1:1	24.50	23.65	0.018	0.741	1.22	0.901	/
Right/Tilt	9538/1907.6	RMC 12.2K	1:1	24.50	23.74	0.052	0.745	1.19	0.887	/
	9400/1880	RMC 12.2K	1:1	24.50	23.85	-0.119	0.857	1.16	0.995	/
	9262/1852.4	RMC 12.2K	1:1	24.50	23.65	-0.114	0.748	1.22	0.910	/
Worst position of Head with Battery 2										
Right/Cheek	9538/1907.6	RMC 12.2K	1:1	24.50	23.74	-0.184	0.746	1.19	0.889	/
Worst Case Position of Head (1st Repeated SAR)										
Right/Cheek	9538/1907.6	RMC 12.2K	1:1	24.50	23.74	-0.102	0.813	1.19	0.968	/
Test position of Body-worn (Distance 15mm)										
Back Side	9400/1880	RMC 12.2K	1:1	24.50	23.85	-0.118	0.072	1.16	0.084	/
Front Side	9400/1880	RMC 12.2K	1:1	24.50	23.85	0.031	0.078	1.16	0.091	Figure.35
Test position of Hotspot (Distance 10mm)										
Back Side	9400/1880	RMC 12.2K	1:1	24.50	23.85	-0.015	0.156	1.16	0.181	Figure.36
Front Side	9400/1880	RMC 12.2K	1:1	24.50	23.85	-0.048	0.131	1.16	0.152	/
Left Edge	9400/1880	RMC 12.2K	1:1	24.50	23.85	0.004	0.151	1.16	0.175	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	9400/1880	RMC 12.2K	1:1	24.50	23.85	0.090	0.113	1.16	0.131	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (Distance 10mm)										
Back Side	9400/1880	RMC 12.2K	1:1	24.50	23.85	0.002	0.144	1.16	0.167	/

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

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 19: SAR Measurement Variability Results [UMTS Band II (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	9538/1907.6	0.857	0.813	1.05	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.4. UMTS Band IV (Antenna 1, WiFi Off)

Table 20: SAR Values [UMTS Band IV (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	-0.031	0.302	1.08	0.325	/
Left/Tilt	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	-0.181	0.196	1.08	0.211	/
Right/Cheek	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	0.022	0.527	1.08	0.567	/
Right/Tilt	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	0.030	0.662	1.08	0.713	Figure.37
Worst position of Head with Battery 2										
Right/Tilt	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	-0.168	0.576	1.21	0.620	/
Test position of Body-worn (Distance 15mm)										
Back Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	-0.008	0.061	1.08	0.066	Figure.38
Front Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	-0.089	0.044	1.08	0.048	/
Test position of Hotspot (Distance 10mm)										
Back Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	0.028	0.147	1.08	0.158	/
Front Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	-0.020	0.266	1.08	0.286	Figure.39
Left Edge	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	0.050	0.164	1.08	0.177	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	0.033	0.118	1.08	0.127	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (Distance 10mm)										
Front Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.68	0.060	0.162	1.08	0.174	/

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

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.5. UMTS Band V (Antenna 1, WiFi Off)

Table 21: SAR Values [UMTS Band V (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	4183/836.6	RMC 12.2K	1:1	24.50	23.47	0.026	0.458	1.27	0.581	/
Left/Tilt	4183/836.6	RMC 12.2K	1:1	24.50	23.47	0.010	0.568	1.27	0.720	/
Right/Cheek	4233/846.6	RMC 12.2K	1:1	24.50	23.42	0.110	0.874	1.28	1.121	/
	4183/836.6	RMC 12.2K	1:1	24.50	23.47	-0.180	0.987	1.27	1.251	/
	4132/826.4	RMC 12.2K	1:1	24.50	23.52	0.030	0.888	1.25	1.113	/
Right/Tilt	4233/846.6	RMC 12.2K	1:1	24.50	23.42	-0.050	0.980	1.28	1.257	/
	4183/836.6	RMC 12.2K	1:1	24.50	23.47	0.000	0.850	1.27	1.078	/
	4132/826.4	RMC 12.2K	1:1	24.50	23.52	0.000	0.926	1.25	1.160	/
Worst position of Head with Battery 2										
Right/Tilt	4233/846.6	RMC 12.2K	1:1	24.50	23.42	0.030	0.996	1.28	1.277	Figure.40
Worst Case Position of Head (1st Repeated SAR)										
Right/Tilt	4233/846.6	RMC 12.2K	1:1	24.50	23.42	0.049	0.992	1.28	1.272	/
Test position of Body-worn (Distance 15mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	24.50	23.47	-0.050	0.122	1.27	0.155	Figure.41
Front Side	4183/836.6	RMC 12.2K	1:1	24.50	23.47	0.140	0.090	1.27	0.114	/
Test position of Hotspot (Distance 10mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	24.50	23.47	0.023	0.269	1.27	0.341	Figure.42
Front Side	4183/836.6	RMC 12.2K	1:1	24.50	23.47	0.070	0.216	1.27	0.274	/
Left Edge	4183/836.6	RMC 12.2K	1:1	24.50	23.47	-0.041	0.214	1.27	0.271	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	4183/836.6	RMC 12.2K	1:1	24.50	23.47	0.061	0.132	1.27	0.167	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (Distance 10mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	24.50	23.47	-0.170	0.247	1.27	0.313	/

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

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 22: SAR Measurement Variability Results [UMTS Band V (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Tilt	4233/846.6	0.996	0.992	1.00	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.6. LTE Band 2 (Antenna 1, WiFi Off)

Table 23: SAR Values (LTE Band 2/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	19100/1900	1RB, 50%	1:1	23.5	22.80	0.146	0.316	1.17	0.371	/
Left/Tilt	19100/1900	1RB, 50%	1:1	23.5	22.80	0.150	0.259	1.17	0.304	/
Right/Cheek	19100/1900	1RB, 50%	1:1	23.5	22.80	0.027	0.837	1.17	0.983	/
	18900/1880	1RB, 99%	1:1	23.5	22.73	0.020	0.875	1.19	1.044	/
	18700/1860	1RB, 0%	1:1	23.5	22.62	0.070	1.030	1.23	1.263	Figure.43
Right/Tilt	19100/1900	1RB, 50%	1:1	23.5	22.80	0.167	0.722	1.17	0.848	/
	18900/1880	1RB, 99%	1:1	23.5	22.73	0.055	0.698	1.19	0.833	/
	18700/1860	1RB, 0%	1:1	23.5	22.62	0.091	0.679	1.23	0.832	/
Left/Cheek	19100/1900	50%RB, 99%	1:1	22.5	21.83	-0.030	0.198	1.17	0.231	/
Left/Tilt	19100/1900	50%RB, 99%	1:1	22.5	21.83	-0.023	0.189	1.17	0.220	/
Right/Cheek	19100/1900	50%RB, 99%	1:1	22.5	21.83	-0.030	0.618	1.17	0.721	/
Right/Tilt	19100/1900	50%RB, 99%	1:1	22.5	21.83	-0.053	0.598	1.17	0.697	/
Right/Cheek	18700/1860	100%RB, 0%	1:1	22.5	21.77	0.023	0.750	1.18	0.887	/
Right/Tilt	18700/1860	100%RB, 0%	1:1	22.5	21.77	0.057	0.664	1.18	0.785	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	18700/1860	1RB, 0%	1:1	23.5	22.62	0.144	0.746	1.23	0.915	/
Worst Case Position of Head for 1st Repeated SAR(QPSK)										
Right/Cheek	18700/1860	1RB, 0%	1:1	23.5	22.62	0.070	0.902	1.23	1.106	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	19100/1900	1RB, 50%	1:1	23.5	22.80	-0.194	0.067	1.17	0.078	Figure.44
Front Side	19100/1900	1RB, 50%	1:1	23.5	22.80	-0.044	0.041	1.17	0.048	/
Back Side	19100/1900	50%RB, 99%	1:1	22.5	21.83	-0.105	0.045	1.17	0.052	/
Front Side	19100/1900	50%RB, 99%	1:1	22.5	21.83	-0.036	0.034	1.17	0.039	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	19100/1900	1RB, 50%	1:1	23.5	22.80	-0.039	0.343	1.17	0.403	Figure.45
Front Side	19100/1900	1RB, 50%	1:1	23.5	22.80	0.027	0.121	1.17	0.142	/
Left Edge	19100/1900	1RB, 50%	1:1	23.5	22.80	0.045	0.150	1.17	0.176	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	19100/1900	1RB, 50%	1:1	23.5	22.80	0.066	0.149	1.17	0.174	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	19100/1900	50%RB, 99%	1:1	22.5	21.83	0.190	0.224	1.17	0.261	/
Front Side	19100/1900	50%RB, 99%	1:1	22.5	21.83	0.043	0.116	1.17	0.135	/
Left Edge	19100/1900	50%RB, 99%	1:1	22.5	21.83	0.047	0.143	1.17	0.166	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	19100/1900	50%RB, 99%	1:1	22.5	21.83	0.069	0.141	1.17	0.165	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	19100/1900	1RB, 50%	1:1	23.5	22.80	0.059	0.247	1.17	0.290	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 24: SAR Measurement Variability Results [LTE Band 2]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	18700/1860	1.030	0.902	1.14	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.7. LTE Band 4 (Antenna 1, WiFi Off)

Table 25: SAR Values (LTE Band 4/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK, 1RB)										
Left/Cheek	20175/1732.5	1RB, 0%	1:1	23.50	22.88	0.128	0.224	1.15	0.258	/
Left/Tilt	20175/1732.5	1RB, 0%	1:1	23.50	22.88	-0.011	0.213	1.15	0.246	/
Right/Cheek	20300/1745	1RB, 50%	1:1	23.50	22.45	0.146	0.954	1.27	1.215	Figure.46
	20175/1732.5	1RB, 0%	1:1	23.50	22.88	0.044	0.829	1.15	0.956	/
	20050/1720	1RB, 0%	1:1	23.50	22.33	0.080	0.853	1.31	1.116	/
Right/Tilt	20175/1732.5	1RB, 0%	1:1	23.50	22.88	0.091	0.674	1.15	0.777	/
Left/Cheek	20300/1745	50%RB, 99%	1:1	22.50	22.42	0.436	0.374	1.02	0.381	/
Left/Tilt	20300/1745	50%RB, 99%	1:1	22.50	22.42	0.047	0.342	1.02	0.348	/
Right/Cheek	20300/1745	50%RB, 99%	1:1	22.50	22.42	-0.074	0.848	1.02	0.863	/
	20175/1732.5	50%RB, 99%	1:1	22.50	22.41	-0.152	0.628	1.02	0.641	/
	20050/1720	50%RB, 0%	1:1	22.50	22.06	-0.150	0.448	1.11	0.496	/
Right/Tilt	20300/1745	50%RB, 99%	1:1	22.50	22.42	-0.127	0.728	1.02	0.741	/
Right/Cheek	20175/1732.5	100%RB, 0%	1:1	22.50	22.31	0.130	0.605	1.05	0.632	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	20300/1745	1RB, 50%	1:1	23.50	22.45	-0.027	0.725	1.27	0.923	/
Worst Case Position of Head for 1st Repeated SAR										
Right/Cheek	20300/1745	1RB, 50%	1:1	23.50	22.45	-0.092	0.885	1.27	1.127	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	20175/1732.5	1RB, 0%	1:1	23.50	22.88	-0.040	0.051	1.15	0.059	/
Front Side	20175/1732.5	1RB, 0%	1:1	23.50	22.88	-0.035	0.041	1.15	0.047	/
Back Side	20300/1745	50%RB, 99%	1:1	22.50	22.42	-0.059	0.081	1.02	0.083	Figure.47
Front Side	20300/1745	50%RB, 99%	1:1	22.50	22.42	0.134	0.076	1.02	0.077	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	20175/1732.5	1RB, 0%	1:1	23.50	22.88	-0.020	0.336	1.15	0.387	Figure.48
Front Side	20175/1732.5	1RB, 0%	1:1	23.50	22.88	0.027	0.119	1.15	0.137	/
Left Edge	20175/1732.5	1RB, 0%	1:1	23.50	22.88	0.062	0.132	1.15	0.152	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	20175/1732.5	1RB, 0%	1:1	23.50	22.88	-0.010	0.145	1.15	0.168	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	20300/1745	50%RB, 99%	1:1	22.50	22.42	0.022	0.213	1.02	0.216	/
Front Side	20300/1745	50%RB, 99%	1:1	22.50	22.42	0.055	0.108	1.02	0.110	/
Left Edge	20300/1745	50%RB, 99%	1:1	22.50	22.42	0.037	0.127	1.02	0.129	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	20300/1745	50%RB, 99%	1:1	22.50	22.42	-0.080	0.138	1.02	0.141	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	20175/1732.5	1RB, 0%	1:1	23.50	22.88	0.086	0.254	1.15	0.293	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 26: SAR Measurement Variability Results [LTE Band 4]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	20300/1745	0.954	0.885	1.08	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.8. LTE Band 5 (Antenna 1, WiFi Off)

Table 27: SAR Values (LTE Band 5/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	20525/836.5	1RB, 50%	1:1	23.50	23.40	0.051	0.730	1.02	0.747	/
Left/Tilt	20525/836.5	1RB, 50%	1:1	23.50	23.40	0.160	0.625	1.02	0.640	/
Right/Cheek	20600/844	1RB, 0%	1:1	23.50	23.05	0.030	1.120	1.11	1.242	/
	20525/836.5	1RB, 50%	1:1	23.50	23.40	0.060	1.130	1.02	1.156	Figure.49
	20450/829	1RB, 99%	1:1	23.50	23.27	0.010	1.040	1.06	1.098	/
Right/Tilt	20600/844	1RB, 0%	1:1	23.50	23.05	-0.180	0.934	1.11	1.036	/
	20525/836.5	1RB, 50%	1:1	23.50	23.40	-0.020	1.020	1.02	1.044	/
	20450/829	1RB, 99%	1:1	23.50	23.27	0.023	0.859	1.06	0.907	/
Left/Cheek	20525/836.5	50%RB, 99%	1:1	22.50	22.33	-0.180	0.604	1.04	0.628	/
Left/Tilt	20525/836.5	50%RB, 99%	1:1	22.50	22.33	0.040	0.543	1.04	0.565	/
Right/Cheek	20600/844	50%RB, 0%	1:1	22.50	22.30	0.120	0.962	1.05	1.008	/
	20525/836.5	50%RB, 99%	1:1	22.50	22.33	0.090	1.050	1.04	1.092	/
	20450/829	50%RB, 99%	1:1	22.50	21.99	0.050	0.858	1.12	0.965	/
Right/Tilt	20600/844	50%RB, 0%	1:1	22.50	22.30	-0.010	0.995	1.05	1.043	/
	20525/836.5	50%RB, 99%	1:1	22.50	22.33	0.080	0.898	1.04	0.934	/
	20450/829	50%RB, 99%	1:1	22.50	21.99	0.022	0.722	1.12	0.812	/
Right/Cheek	20600/844	100%RB, 0%	1:1	22.50	22.23	0.190	0.935	1.06	0.995	/
Right/Tilt	20600/844	100%RB, 0%	1:1	22.50	22.23	0.109	0.785	1.06	0.835	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	20600/844	1RB, 0%	1:1	23.50	23.05	0.010	1.040	1.11	1.153	/
Worst Case Position of Head for 1st Repeated SAR										
Right/Cheek	20525/836.5	1RB, 50%	1:1	23.50	23.40	0.019	0.988	1.02	1.011	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	20525/836.5	1RB, 50%	1:1	23.50	23.40	-0.080	0.181	1.02	0.185	/
Front Side	20525/836.5	1RB, 50%	1:1	23.50	23.40	0.130	0.146	1.02	0.149	/
Back Side	20525/836.5	50%RB, 99%	1:1	22.50	22.33	0.030	0.187	1.04	0.194	Figure.50
Front Side	20525/836.5	50%RB, 99%	1:1	22.50	22.33	0.120	0.154	1.04	0.160	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	20525/836.5	1RB, 50%	1:1	23.50	23.40	0.190	0.284	1.02	0.291	/
Front Side	20525/836.6	1RB, 50%	1:1	23.50	23.40	0.169	0.107	1.02	0.110	/
Left Edge	20525/836.7	1RB, 50%	1:1	23.50	23.40	0.010	0.159	1.02	0.163	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	20525/836.7	1RB, 50%	1:1	23.50	23.40	0.112	0.291	1.02	0.298	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	20525/836.7	50%RB, 99%	1:1	22.50	22.33	0.130	0.419	1.04	0.436	/
Front Side	20525/836.7	50%RB, 99%	1:1	22.50	22.33	0.145	0.116	1.04	0.120	/
Left Edge	20525/836.7	50%RB, 99%	1:1	22.50	22.33	0.030	0.103	1.04	0.107	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	20525/836.7	50%RB, 99%	1:1	22.50	22.33	0.070	0.180	1.04	0.187	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	20525/836.5	50%RB, 99%	1:1	22.50	22.33	-0.100	0.423	1.04	0.440	Figure.51

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 28: SAR Measurement Variability Results [LTE Band 5]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	20525/836.5	1.130	0.988	1.16	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.9. LTE Band 7 (Antenna 1, WiFi Off)

Table 29: SAR Values (LTE Band 7/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	21350/2560	1RB, 50%	1:1	23	22.90	0.027	0.210	1.02	0.215	/
Left/Tilt	21350/2560	1RB, 50%	1:1	23	22.90	0.020	0.207	1.02	0.212	/
Right/Cheek	21350/2560	1RB, 50%	1:1	23	22.90	0.081	0.783	1.02	0.801	/
	21100/2535	1RB, 99%	1:1	23	22.89	0.053	0.986	1.03	1.011	Figure.52
	20850/2510	1RB, 99%	1:1	23	22.87	0.052	0.935	1.03	0.963	/
Right/Tilt	21350/2560	1RB, 50%	1:1	23	22.90	0.022	0.645	1.02	0.660	/
Left/Cheek	21350/2560	50%RB, 0%	1:1	22	21.95	0.080	0.157	1.01	0.159	/
Left/Tilt	21350/2560	50%RB, 0%	1:1	22	21.95	0.194	0.194	1.01	0.196	/
Right/Cheek	21350/2560	50%RB, 0%	1:1	22	21.95	0.035	0.732	1.01	0.740	/
Right/Tilt	21350/2560	50%RB, 0%	1:1	22	21.95	0.029	0.601	1.01	0.608	/
Right/Cheek	21350/2560	100%RB, 0%	1:1	22	21.92	0.090	0.923	1.02	0.940	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	21100/2535	1RB, 99%	1:1	23	22.89	0.048	0.798	1.03	0.818	/
Worst Case Position of Head for 1st Repeated SAR										
Right/Cheek	21100/2535	1RB, 99%	1:1	23	22.89	-0.099	0.952	1.03	0.976	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	21350/2560	1RB, 50%	1:1	23	22.90	0.050	0.177	1.02	0.181	Figure.53
Front Side	21350/2560	1RB, 50%	1:1	23	22.90	-0.030	0.146	1.02	0.149	/
Back Side	21350/2560	50%RB, 0%	1:1	22	21.95	0.142	0.119	1.01	0.120	/
Front Side	21350/2560	50%RB, 0%	1:1	22	21.95	-0.036	0.099	1.01	0.100	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	21350/2560	1RB, 50%	1:1	23	22.90	0.026	0.145	1.02	0.148	/
Front Side	21350/2560	1RB, 50%	1:1	23	22.90	0.030	0.104	1.02	0.106	/
Left Edge	21350/2560	1RB, 50%	1:1	23	22.90	0.190	0.154	1.02	0.158	Figure.54
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	21350/2560	1RB, 50%	1:1	23	22.90	0.033	0.118	1.02	0.121	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	20850/2510	50%RB, 0%	1:1	22	21.95	0.063	0.123	1.01	0.124	/
Front Side	20850/2510	50%RB, 0%	1:1	22	21.95	0.041	0.119	1.01	0.120	/
Left Edge	20850/2510	50%RB, 0%	1:1	22	21.95	0.130	0.132	1.01	0.134	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	20850/2510	50%RB, 0%	1:1	22	21.95	0.180	0.119	1.01	0.120	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Left Edge	21100/2535	1RB, 99%	1:1	23	22.90	-0.080	0.141	1.02	0.144	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 30: SAR Measurement Variability Results [LTE Band 7]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	21100/2535	0.986	0.952	1.04	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.10. LTE Band 12 (Antenna 1, WiFi Off)

Table 31: SAR Values (LTE Band 12/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	23060/704	1RB,50%	1:1	23.50	23.48	-0.040	0.331	1.00	0.332	/
Left/Tilt	23060/704	1RB,50%	1:1	23.50	23.48	0.028	0.280	1.00	0.281	/
Right/Cheek	23060/704	1RB,50%	1:1	23.50	23.48	0.040	0.424	1.00	0.426	/
Right/Tilt	23060/704	1RB,50%	1:1	23.50	23.48	-0.060	0.439	1.00	0.441	/
Left/Cheek	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.110	0.301	1.02	0.306	/
Left/Tilt	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.026	0.246	1.02	0.250	/
Right/Cheek	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.080	0.480	1.02	0.488	/
Right/Tilt	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.110	0.485	1.02	0.493	/
Worst position of Head with Battery 2 (QPSK)										
Right/Tilt	23095/707.5	50%RB,0%	1:1	22.50	22.43	-0.057	0.525	1.02	0.534	Figure.55

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	23060/704	1RB,50%	1:1	23.50	23.48	0.110	0.121	1.00	0.122	Figure.56
Front Side	23060/704	1RB,50%	1:1	23.50	23.48	0.029	0.093	1.00	0.093	/
Back Side	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.140	0.084	1.02	0.085	/
Front Side	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.020	0.066	1.02	0.067	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	23060/704	1RB,50%	1:1	23.50	23.48	0.080	0.155	1.00	0.156	/
Front Side	23060/704	1RB,50%	1:1	23.50	23.48	0.160	0.153	1.00	0.154	/
Left Edge	23060/704	1RB,50%	1:1	23.50	23.48	-0.021	0.195	1.00	0.196	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	23060/704	1RB,50%	1:1	23.50	23.48	0.180	0.149	1.00	0.150	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.036	0.286	1.02	0.291	Figure.57
Front Side	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.070	0.117	1.02	0.119	/
Left Edge	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.190	0.163	1.02	0.165	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.120	0.118	1.02	0.120	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	23095/707.5	50%RB,0%	1:1	22.50	22.43	0.180	0.238	1.02	0.242	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.11. LTE Band 17 (Antenna 1, WiFi Off)

Table 32: SAR Values (LTE Band 17/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	23800/711	1RB,50%	1:1	23.50	23.48	0.021	0.331	1.00	0.333	/
Left/Tilt	23800/711	1RB,50%	1:1	23.50	23.48	0.036	0.230	1.00	0.231	/
Right/Cheek	23800/711	1RB,50%	1:1	23.50	23.48	0.080	0.506	1.00	0.508	/
Right/Tilt	23800/711	1RB,50%	1:1	23.50	23.48	-0.040	0.528	1.00	0.531	Figure.58
Left/Cheek	23780/709	50%RB,0%	1:1	22.50	22.46	-0.050	0.340	1.01	0.343	/
Left/Tilt	23780/709	50%RB,0%	1:1	22.50	22.46	-0.020	0.225	1.01	0.227	/
Right/Cheek	23780/709	50%RB,0%	1:1	22.50	22.46	-0.052	0.457	1.01	0.461	/
Right/Tilt	23780/709	50%RB,0%	1:1	22.50	22.46	-0.010	0.485	1.01	0.489	/
Worst position of Head with Battery 2 (QPSK)										
Right/Cheek	23800/711	1RB,50%	1:1	23.50	23.48	-0.020	0.484	1.00	0.486	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	23800/711	1RB, 50%	1:1	23.50	23.48	0.178	0.098	1.00	0.098	Figure.59
Front Side	23800/711	1RB, 50%	1:1	23.50	23.48	-0.080	0.069	1.00	0.069	/
Back Side	23780/709	50%RB,0%	1:1	22.50	22.46	0.025	0.059	1.01	0.059	/
Front Side	23780/709	50%RB,0%	1:1	22.50	22.46	0.167	0.034	1.01	0.035	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	23800/711	1RB, 50%	1:1	23.50	23.48	0.060	0.258	1.00	0.259	/
Front Side	23800/711	1RB, 50%	1:1	23.50	23.48	-0.039	0.164	1.00	0.165	/
Left Edge	23800/711	1RB, 50%	1:1	23.50	23.48	-0.080	0.192	1.00	0.193	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	23800/711	1RB, 50%	1:1	23.50	23.48	0.170	0.109	1.00	0.110	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	23780/709	50%RB,0%	1:1	22.50	22.46	0.061	0.271	1.01	0.273	Figure.60
Front Side	23780/709	50%RB,0%	1:1	22.50	22.46	-0.020	0.177	1.01	0.179	/
Left Edge	23780/709	50%RB,0%	1:1	22.50	22.46	0.050	0.176	1.01	0.177	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	23780/709	50%RB,0%	1:1	22.50	22.46	0.033	0.118	1.01	0.119	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	23780/709	50%RB,0%	1:1	22.50	22.46	0.020	0.225	1.01	0.227	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.12. LTE Band 25 (Antenna 1, WiFi Off)

Table 33: SAR Values (LTE Band 25/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	26365/1882.5	1RB, 0%	1:1	23.50	23.02	-0.150	0.421	1.12	0.470	/
Left/Tilt	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.090	0.458	1.12	0.512	/
Right/Cheek	26590/1905	1RB, 0%	1:1	23.50	22.91	0.040	1.020	1.14	1.168	Figure.61
	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.020	0.987	1.12	1.103	/
	26140/1860	1RB, 99%	1:1	23.50	22.93	-0.040	0.944	1.14	1.077	/
Right/Tilt	26590/1905	1RB, 0%	1:1	23.50	22.91	0.011	0.872	1.14	0.998	/
	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.020	0.989	1.12	1.105	/
	26140/1860	1RB, 99%	1:1	23.50	22.93	0.109	0.701	1.14	0.800	/
Left/Cheek	26365/1882.5	50%RB,0%	1:1	22.50	21.97	0.130	0.305	1.13	0.345	/
Left/Tilt	26365/1882.5	50%RB,0%	1:1	22.50	21.97	0.060	0.332	1.13	0.375	/
Right/Cheek	26590/1905	50%RB,99%	1:1	22.50	21.80	0.021	0.863	1.17	1.014	/
	26365/1882.5	50%RB,0%	1:1	22.50	21.97	0.080	0.846	1.13	0.956	/
	26140/1860	50%RB,0%	1:1	22.50	21.74	0.051	0.752	1.19	0.896	/
Right/Tilt	26590/1905	50%RB,99%	1:1	22.50	21.80	0.071	0.694	1.17	0.815	/
	26365/1882.5	50%RB,0%	1:1	22.50	21.97	0.110	0.723	1.13	0.817	
	26140/1860	50%RB,0%	1:1	22.50	21.74	0.038	0.685	1.19	0.816	
Right/Cheek	26590/1905	100%RB,0%	1:1	22.50	21.91	-0.010	0.688	1.14	0.788	/
Right/Tilt	26590/1905	100%RB,0%	1:1	22.50	21.91	0.080	0.605	1.14	0.693	/
Worst position of Head with Battery 2 (QPSK)										
Right/Cheek	26590/1905	1RB, 0%	1:1	23.50	22.91	0.023	0.963	1.14	1.103	/
Worst Case Position of Head for 1st Repeated SAR										
Right/Cheek	26590/1905	1RB, 0%	1:1	23.50	22.91	0.031	0.895	1.14	1.025	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.071	0.052	1.12	0.058	/
Front Side	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.061	0.048	1.12	0.054	/
Back Side	26365/1882.5	50%RB, 0%	1:1	22.50	21.97	-0.026	0.078	1.13	0.088	Figure.62
Front Side	26365/1882.5	50%RB, 0%	1:1	22.50	21.97	0.069	0.050	1.13	0.056	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.160	0.314	1.12	0.351	Figure.63
Front Side	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.022	0.119	1.12	0.133	/
Left Edge	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.034	0.147	1.12	0.164	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.051	0.152	1.12	0.169	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	26365/1882.5	50%RB, 0%	1:1	22.50	21.97	0.021	0.223	1.13	0.252	/
Front Side	26365/1882.5	50%RB, 0%	1:1	22.50	21.97	0.050	0.112	1.13	0.127	/
Left Edge	26365/1882.5	50%RB, 0%	1:1	22.50	21.97	0.121	0.139	1.13	0.157	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	26365/1882.5	50%RB, 0%	1:1	22.50	21.97	0.041	0.143	1.13	0.161	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	26365/1882.5	1RB, 0%	1:1	23.50	23.02	0.030	0.251	1.12	0.280	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 34: SAR Measurement Variability Results [LTE Band 25]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	26590/1905	0.990	0.895	1.11	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.13. LTE Band 26 (Antenna 1, WiFi Off)

Table 35: SAR Values (LTE Band 26/15MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK, 1RB)										
Left/Cheek	26965/841.5	1RB, 50%	1:1	23.50	23.25	-0.140	0.408	1.06	0.432	/
Left/Tilt	26965/841.5	1RB, 50%	1:1	23.50	23.25	-0.060	0.391	1.06	0.414	/
Right/Cheek	26965/841.5	1RB, 50%	1:1	23.50	23.25	0.240	0.770	1.06	0.816	/
	26865/831.5	1RB, 50%	1:1	23.50	23.21	0.010	0.723	1.07	0.772	/
	26775/822.5	1RB, 50%	1:1	23.50	23.16	0.030	0.884	1.08	0.957	/
Right/Tilt	26965/841.5	1RB, 50%	1:1	23.50	23.25	0.044	0.639	1.06	0.677	/
Left/Cheek	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.120	0.305	1.07	0.326	/
Left/Tilt	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.060	0.364	1.07	0.389	/
Right/Cheek	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.040	0.625	1.07	0.667	/
Right/Tilt	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.060	0.571	1.07	0.610	/
Right/Cheek	26865/831.5	100%RB, 50%	1:1	22.50	22.14	0.020	0.768	1.09	0.835	/
Worst position of Head with Battery 2 (QPSK)										
Right/Cheek	26775/822.5	1RB, 50%	1:1	23.50	23.16	0.030	0.886	1.08	0.959	Figure.64
Worst Case Position of Head (1st Repeated SAR)										
Right/Cheek	26775/822.5	1RB, 50%	1:1	23.50	23.16	0.012	0.795	1.08	0.861	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	26965/841.5	1RB, 50%	1:1	23.50	23.25	-0.020	0.167	1.06	0.177	Figure.65
Front Side	26965/841.5	1RB, 50%	1:1	23.50	23.25	-0.040	0.118	1.06	0.125	/
Back Side	26965/841.5	50%RB, 0%	1:1	22.50	22.22	-0.010	0.161	1.07	0.172	/
Front Side	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.024	0.122	1.07	0.130	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	26965/841.5	1RB, 50%	1:1	23.50	23.25	0.021	0.401	1.06	0.425	/
Front Side	26965/841.5	1RB, 50%	1:1	23.50	23.25	0.080	0.277	1.06	0.294	/
Left Edge	26965/841.5	1RB, 50%	1:1	23.50	23.25	-0.020	0.137	1.06	0.145	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	26965/841.5	1RB, 50%	1:1	23.50	23.25	-0.090	0.251	1.06	0.266	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Back Side	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.100	0.310	1.07	0.331	/
Front Side	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.080	0.201	1.07	0.215	/
Left Edge	26965/841.5	50%RB, 0%	1:1	22.50	22.22	-0.070	0.107	1.07	0.114	/
Right Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Top Edge	26965/841.5	50%RB, 0%	1:1	22.50	22.22	0.150	0.211	1.07	0.225	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	26965/841.5	1RB, 0%	1:1	23.50	23.25	-0.025	0.495	1.06	0.525	Figure.66

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 36: SAR Measurement Variability Results [LTE Band 26]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	26775/822.5	0.886	0.795	1.11	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.14. GSM 850 (Antenna 1, WiFi On)

Table 37: SAR Values [GSM 850 (GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Time slot	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	190/836.6	GSM	1:8.3	29.30	29.22	-0.140	0.372	1.02	0.379	/
Left/Tilt	190/836.6	GSM	1:8.3	29.30	29.22	0.060	0.341	1.02	0.347	/
Right/Cheek	190/836.6	GSM	1:8.3	29.30	29.22	-0.040	0.638	1.02	0.650	/
Right/Tilt	190/836.6	GSM	1:8.3	29.30	29.22	0.054	0.474	1.02	0.483	/
Worst position of Head With Battery 2										
Right/Cheek	190/836.6	GSM	1:8.3	29.30	29.22	0.007	0.640	1.02	0.652	/
Test Position of Body (Distance 15mm)										
Back Side	190/836.6	GSM	1:8.3	29.30	29.22	-0.097	0.074	1.02	0.075	/
Front Side	190/836.6	GSM	1:8.3	29.30	29.22	-0.031	0.060	1.02	0.061	/
Worst position of Body With Battery 2 (Distance 15mm)										
Back Side	190/836.6	GSM	1:8.3	29.30	29.22	0.051	0.071	1.02	0.072	/

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.

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.15. GSM 1900 (Antenna 1, WiFi On)

Table 38: SAR Values [GSM 1900(GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Time slot	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	661/1880	GSM	1:8.3	28.30	28.04	0.080	0.261	1.06	0.277	/
Left/Tilt	661/1880	GSM	1:8.3	28.30	28.04	-0.101	0.264	1.06	0.280	/
Right/Cheek	661/1880	GSM	1:8.3	28.30	28.04	-0.066	0.741	1.06	0.787	/
Right/Tilt	661/1880	GSM	1:8.3	28.30	28.04	0.158	0.651	1.06	0.691	/
Worst position of Head With Battery 2										
Right/Cheek	661/1880	GSM	1:8.3	28.30	28.04	0.020	0.746	1.06	0.792	/
Test position of Body-worn (Distance 15mm)										
Back Side	661/1880	GSM	1:8.3	28.30	28.04	0.011	0.041	1.06	0.044	/
Front Side	661/1880	GSM	1:8.3	28.30	28.04	-0.019	0.024	1.06	0.025	/
Worst position of Body With Battery 2 (Distance 15mm)										
Back Side	661/1880	GSM	1:8.3	28.30	28.04	0.064	0.039	1.06	0.041	/

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.

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.16. UMTS Band II (Antenna 1, WiFi On)

Table 39: SAR Values [UMTS Band II (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	9400/1880	RMC 12.2K	1:1	22.00	21.76	-0.032	0.192	1.06	0.203	/
Left/Tilt	9400/1880	RMC 12.2K	1:1	22.00	21.76	0.024	0.282	1.06	0.298	/
Right/Cheek	9400/1880	RMC 12.4K	1:1	22.00	21.76	-0.096	0.657	1.06	0.694	/
Right/Tilt	9400/1880	RMC 12.7K	1:1	22.00	21.76	-0.046	0.638	1.06	0.674	/
Worst position of Head with Battery 2										
Right/Cheek	9400/1880	RMC 12.5K	1:1	22.00	21.76	0.192	0.754	1.06	0.797	/
Test position of Body-worn (Distance 15mm)										
Back Side	9400/1880	RMC 12.2K	1:1	22.00	21.76	-0.192	0.022	1.06	0.024	/
Front Side	9400/1880	RMC 12.2K	1:1	22.00	21.76	-0.045	0.019	1.06	0.020	/
Worst position of Body With Battery 2 (Distance 15mm)										
Back Side	9400/1880	RMC 12.2K	1:1	22.00	21.76	0.122	0.021	1.06	0.022	/

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

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.17. UMTS Band IV (Antenna 1, WiFi On)

Table 40: SAR Values [UMTS Band IV (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	0.026	0.110	1.15	0.126	/
Left/Tilt	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	0.023	0.172	1.15	0.197	/
Right/Cheek	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	0.191	0.512	1.15	0.588	/
Right/Tilt	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	0.030	0.628	1.15	0.721	/
Worst position of Head with Battery 2										
Right/Tilt	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	0.111	0.574	1.15	0.659	/
Test position of Body-worn (Distance 15mm)										
Back Side	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	0.082	0.033	1.15	0.038	/
Front Side	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	-0.030	0.029	1.15	0.033	/
Worst position of Body With Battery 2 (Distance 15mm)										
Back Side	1413/1732.6	RMC 12.2K	1:1	21.00	20.40	0.110	0.031	1.15	0.036	/

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

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.18. UMTS Band V (Antenna 1, WiFi On)

Table 41: SAR Values [UMTS Band V (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	4183/836.6	RMC 12.2K	1:1	22.00	21.45	0.190	0.345	1.14	0.392	/
Left/Tilt	4183/836.6	RMC 12.2K	1:1	22.00	21.45	0.140	0.352	1.14	0.400	/
Right/Cheek	4233/846.6	RMC 12.2K	1:1	22.00	21.39	0.006	0.776	1.15	0.893	/
	4183/836.6	RMC 12.2K	1:1	22.00	21.45	-0.020	0.810	1.14	0.919	/
	4132/826.4	RMC 12.2K	1:1	22.00	21.50	0.006	0.711	1.12	0.798	/
Right/Tilt	4183/836.6	RMC 12.2K	1:1	22.00	21.45	0.054	0.554	1.14	0.629	/
Worst position of Head with Battery 2										
Right/Cheek	4183/836.6	RMC 12.2K	1:1	22.00	21.45	-0.055	0.746	1.14	0.847	/
Worst Case Position of Head (1st Repeated SAR)										
Right/Cheek	4183/836.6	RMC 12.2K	1:1	22.00	21.45	-0.030	0.745	1.14	0.846	/
Test position of Body-worn (Distance 15mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	22.00	21.45	-0.043	0.094	1.14	0.107	/
Front Side	4183/836.6	RMC 12.2K	1:1	22.00	21.45	-0.020	0.070	1.14	0.079	/
Worst position of Body With Battery 2 (Distance 15mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	22.00	21.45	0.019	0.091	1.14	0.103	/

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
3. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.
4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).
5. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 42: SAR Measurement Variability Results [UMTS Band V (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	4183/836.6	0.810	0.745	1.08	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.19. LTE Band 2 (Antenna 1, WiFi On)

Table 43: SAR Values (LTE Band 2/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	18900/1880	1RB, 0%	1:1	20.00	19.98	0.080	0.264	1.01	0.265	/
Left/Tilt	18900/1880	1RB, 0%	1:1	20.00	19.98	-0.070	0.242	1.01	0.243	/
Right/Cheek	19100/1900	1RB, 0%	1:1	20.00	19.92	0.110	0.793	1.02	0.808	/
	18900/1880	1RB, 0%	1:1	20.00	19.98	-0.026	0.761	1.01	0.765	/
	18700/1860	1RB, 99%	1:1	20.00	19.90	0.025	0.856	1.02	0.876	/
Right/Tilt	18900/1880	1RB, 0%	1:1	20.00	19.98	0.020	0.656	1.01	0.660	/
Left/Cheek	19100/1900	50%RB, 99%	1:1	19.00	18.97	0.110	0.142	1.01	0.143	/
Left/Tilt	19100/1900	50%RB, 99%	1:1	19.00	18.97	0.032	0.171	1.01	0.172	/
Right/Cheek	19100/1900	50%RB, 99%	1:1	19.00	18.97	0.058	0.592	1.01	0.596	/
Right/Tilt	19100/1900	50%RB, 99%	1:1	19.00	18.97	0.130	0.469	1.01	0.472	/
Right/Cheek	18700/1860	100%RB, 0%	1:1	19.00	18.87	0.020	0.642	1.03	0.662	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	18700/1860	1RB, 50%	1:1	20.00	19.90	0.144	0.746	1.02	0.763	/
Worst Case Position of Head (1st Repeated SAR)										
Right/Cheek	18700/1860	1RB, 99%	1:1	20.00	19.90	-0.163	0.744	1.02	0.761	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	18900/1880	1RB, 0%	1:1	20.00	19.98	-0.052	0.046	1.01	0.046	/
Front Side	18900/1880	1RB, 0%	1:1	20.00	19.98	-0.063	0.014	1.01	0.014	/
Back Side	19100/1900	50%RB, 99%	1:1	19.00	18.97	0.142	0.043	1.01	0.043	/
Front Side	19100/1900	50%RB, 99%	1:1	19.00	18.97	-0.011	0.011	1.01	0.011	/
Worst position of Body With Battery 2(QPSK) (Distance 15mm)										
Back Side	18900/1880	1RB, 0%	1:1	20.00	19.98	0.109	0.042	1.01	0.042	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 44: SAR Measurement Variability Results [LTE Band 2]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	18700/1860	0.856	0.744	1.15	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.20. LTE Band 4 (Antenna 1, WiFi On)

Table 45: SAR Values (LTE Band 4/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK, 1RB)										
Left/Cheek	20175/1732.5	1RB, 0%	1:1	20.00	19.99	0.018	0.256	1.00	0.257	/
Left/Tilt	20175/1732.5	1RB, 0%	1:1	20.00	19.99	0.027	0.319	1.00	0.320	/
Right/Cheek	20175/1732.5	1RB, 0%	1:1	20.00	19.99	0.150	0.709	1.00	0.710	/
Right/Tilt	20175/1732.5	1RB, 0%	1:1	20.00	19.99	0.070	0.608	1.00	0.609	/
Left/Cheek	20300/1745	50%RB, 99%	1:1	19.00	18.98	0.020	0.268	1.00	0.269	/
Left/Tilt	20300/1745	50%RB, 99%	1:1	19.00	18.98	0.028	0.261	1.00	0.262	/
Right/Cheek	20300/1745	50%RB, 99%	1:1	19.00	18.98	0.037	0.662	1.00	0.665	/
Right/Tilt	20300/1745	50%RB, 99%	1:1	19.00	18.98	0.090	0.525	1.00	0.527	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	20175/1732.5	1RB, 0%	1:1	20.00	19.99	0.090	0.599	1.00	0.600	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	20175/1732.5	1RB, 0%	1:1	20.00	19.99	-0.048	0.046	1.00	0.046	/
Front Side	20175/1732.5	1RB, 0%	1:1	20.00	19.99	0.103	0.011	1.00	0.011	/
Back Side	20300/1745	50%RB, 99%	1:1	19.00	18.98	0.034	0.049	1.00	0.049	/
Front Side	20300/1745	50%RB, 99%	1:1	19.00	18.98	0.086	0.015	1.00	0.015	/
Worst position of Body With Battery 2(QPSK) (Distance 15mm)										
Back Side	20300/1745	50%RB, 99%	1:1	19.00	18.98	0.102	0.047	1.00	0.047	/

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

7.3.21. LTE Band 5 (Antenna 1, WiFi On)

Table 46: SAR Values (LTE Band 5/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	20525/836.5	1RB, 50%	1:1	21.00	20.99	-0.160	0.399	1.00	0.400	/
Left/Tilt	20525/836.5	1RB, 50%	1:1	21.00	20.99	-0.070	0.330	1.00	0.331	/
Right/Cheek	20525/836.5	1RB, 50%	1:1	21.00	20.99	-0.021	0.605	1.00	0.606	/
Right/Tilt	20525/836.5	1RB, 50%	1:1	21.00	20.99	0.080	0.477	1.00	0.478	/
Left/Cheek	20525/836.5	50%RB, 0%	1:1	20.00	19.91	0.048	0.314	1.02	0.321	/
Left/Tilt	20525/836.5	50%RB, 0%	1:1	20.00	19.91	0.070	0.259	1.02	0.264	/
Right/Cheek	20525/836.5	50%RB, 0%	1:1	20.00	19.91	0.026	0.605	1.02	0.618	/
Right/Tilt	20525/836.5	50%RB, 0%	1:1	20.00	19.91	0.130	0.436	1.02	0.445	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	20525/836.5	50%RB, 0%	1:1	20.00	19.91	0.020	0.621	1.02	0.634	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	20525/836.5	1RB, 50%	1:1	21.00	20.99	-0.021	0.024	1.00	0.024	/
Front Side	20525/836.5	1RB, 50%	1:1	21.00	20.99	0.028	0.012	1.00	0.012	/
Back Side	20525/836.5	50%RB, 0%	1:1	20.00	19.91	-0.075	0.020	1.02	0.021	/
Front Side	20525/836.5	50%RB, 0%	1:1	20.00	19.91	-0.026	0.010	1.02	0.010	/
Worst position of Body With Battery 2(QPSK) (Distance 15mm)										
Back Side	20525/836.5	1RB, 50%	1:1	21.00	20.99	0.084	0.021	1.00	0.021	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.22. LTE Band 7 (Antenna 1, WiFi On)

Table 47: SAR Values (LTE Band 7/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	21100/2535	1RB, 99%	1:1	20.00	19.81	0.190	0.203	1.04	0.212	/
Left/Tilt	21100/2535	1RB, 99%	1:1	20.00	19.81	-0.024	0.201	1.04	0.210	/
Right/Cheek	21350/2560	1RB, 0%	1:1	20.00	19.73	0.044	0.819	1.06	0.872	/
	21100/2535	1RB, 99%	1:1	20.00	19.81	0.096	0.770	1.04	0.805	/
	20850/2510	1RB, 50%	1:1	20.00	19.64	0.051	0.827	1.09	0.898	/
Right/Tilt	21100/2535	1RB, 99%	1:1	20.00	19.81	0.037	0.738	1.04	0.771	/
Left/Cheek	21100/2535	50%RB, 99%	1:1	19.00	18.97	0.035	0.228	1.01	0.229	/
Left/Tilt	21100/2535	50%RB, 99%	1:1	19.00	18.97	0.180	0.197	1.01	0.198	/
Right/Cheek	21350/2560	50%RB, 99%	1:1	19.00	18.96	0.047	0.842	1.01	0.850	/
	21100/2535	50%RB, 99%	1:1	19.00	18.97	0.101	0.841	1.01	0.846	/
	20850/2510	50%RB, 0%	1:1	19.00	18.97	0.048	0.865	1.01	0.871	/
Right/Tilt	21100/2535	50%RB, 99%	1:1	19.00	18.97	0.045	0.741	1.01	0.746	/
Right/Cheek	21350/2560	100%RB, 0%	1:1	19.00	18.92	0.026	0.837	1.02	0.853	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	20850/2510	1RB, 50%	1:1	20.00	19.64	0.036	0.870	1.09	0.945	/
Worst Case Position of Head (1st Repeated SAR)										
Right/Cheek	20850/2510	1RB, 50%	1:1	20.00	19.64	0.100	0.879	1.09	0.955	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	21100/2535	1RB, 99%	1:1	20.00	19.81	-0.140	0.059	1.04	0.062	/
Front Side	21100/2535	1RB, 99%	1:1	20.00	19.81	0.028	0.075	1.04	0.078	/
Back Side	21350/2560	50%RB, 99%	1:1	19.00	18.97	0.060	0.050	1.01	0.050	/
Front Side	21350/2560	50%RB, 99%	1:1	19.00	18.97	0.120	0.058	1.01	0.058	/
Worst position of Body With Battery 2(QPSK) (Distance 15mm)										
Front Side	21100/2535	1RB, 99%	1:1	20.00	19.81	0.045	0.072	1.04	0.075	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

Table 48: SAR Measurement Variability Results [LTE Band 7]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Right/Cheek	20850/2510	0.870	0.879	1.01	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.23. LTE Band 12 (Antenna 1, WiFi On)

Table 49: SAR Values (LTE Band 12/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	23060/704	1RB,50%	1:1	23.00	22.97	0.020	0.129	1.01	0.130	/
Left/Tilt	23060/704	1RB,50%	1:1	23.00	22.97	0.031	0.128	1.01	0.129	/
Right/Cheek	23060/704	1RB,50%	1:1	23.00	22.97	0.066	0.381	1.01	0.384	/
Right/Tilt	23060/704	1RB,50%	1:1	23.00	22.97	0.020	0.387	1.01	0.390	/
Left/Cheek	23095/707.5	50%RB,0%	1:1	22.00	21.77	0.035	0.223	1.06	0.235	/
Left/Tilt	23095/707.5	50%RB,0%	1:1	22.00	21.77	0.060	0.213	1.06	0.225	/
Right/Cheek	23095/707.5	50%RB,0%	1:1	22.00	21.77	-0.140	0.379	1.06	0.400	/
Right/Tilt	23095/707.5	50%RB,0%	1:1	22.00	21.77	0.110	0.485	1.06	0.512	/
Worst position of Head with Battery 2 (QPSK)										
Right/Tilt	23095/707.5	50%RB,0%	1:1	22.00	21.77	0.050	0.369	1.06	0.389	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	23060/704	1RB,50%	1:1	23.00	22.97	0.141	0.018	1.01	0.018	/
Front Side	23060/704	1RB,50%	1:1	23.00	22.97	-0.046	0.017	1.01	0.017	/
Back Side	23095/707.5	50%RB,0%	1:1	22.00	21.77	0.030	0.017	1.06	0.018	/
Front Side	23095/707.5	50%RB,0%	1:1	22.00	21.77	0.071	0.015	1.06	0.016	/
Worst position of Body With Battery 2(QPSK) (Distance 15mm)										
Back Side	23060/704	1RB,50%	1:1	23.00	22.97	0.108	0.017	1.01	0.017	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.24. LTE Band 17 (Antenna 1, WiFi On)

Table 50: SAR Values (LTE Band 17/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	23800/711	1RB,50%	1:1	23.00	22.99	-0.020	0.336	1.00	0.337	/
Left/Tilt	23800/711	1RB,50%	1:1	23.00	22.99	0.010	0.224	1.00	0.225	/
Right/Cheek	23800/711	1RB,50%	1:1	23.00	22.99	0.020	0.488	1.00	0.489	/
Right/Tilt	23800/711	1RB,50%	1:1	23.00	22.99	0.050	0.432	1.00	0.433	/
Left/Cheek	23780/709	50%RB,0%	1:1	22.00	21.97	0.090	0.183	1.01	0.184	/
Left/Tilt	23780/709	50%RB,0%	1:1	22.00	21.97	0.028	0.270	1.01	0.272	/
Right/Cheek	23780/709	50%RB,0%	1:1	22.00	21.97	0.090	0.468	1.01	0.471	/
Right/Tilt	23780/709	50%RB,0%	1:1	22.00	21.97	0.120	0.432	1.01	0.435	/
Worst position of Head with Battery 2 (QPSK)										
Right/Cheek	23800/711	1RB,50%	1:1	23.00	22.99	-0.140	0.481	1.00	0.482	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	23800/711	1RB,50%	1:1	23.00	22.99	0.028	0.017	1.00	0.017	/
Front Side	23800/711	1RB,50%	1:1	23.00	22.99	-0.046	0.014	1.00	0.014	/
Back Side	23780/709	50%RB,0%	1:1	22.00	21.97	0.047	0.015	1.01	0.016	/
Front Side	23780/709	50%RB,0%	1:1	22.00	21.97	-0.166	0.013	1.01	0.014	/
Worst position of Body With Battery 2(QPSK) (Distance 15mm)										
Back Side	23800/711	1RB,50%	1:1	23.00	22.99	0.164	0.016	1.00	0.016	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.25. LTE Band 25 (Antenna 1, WiFi On)

Table 51: SAR Values (LTE Band 25/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	26365/1882.5	1RB, 0%	1:1	21.50	21.39	0.033	0.174	1.03	0.178	/
Left/Tilt	26365/1882.5	1RB, 0%	1:1	21.50	21.39	0.134	0.130	1.03	0.133	/
Right/Cheek	26365/1882.5	1RB, 0%	1:1	21.50	21.39	0.090	0.505	1.03	0.518	/
Right/Tilt	26365/1882.5	1RB, 0%	1:1	21.50	21.39	0.120	0.622	1.03	0.638	/
Left/Cheek	26365/1882.5	50%RB,0%	1:1	20.50	20.48	0.100	0.154	1.01	0.155	/
Left/Tilt	26365/1882.5	50%RB,0%	1:1	20.50	20.48	-0.020	0.189	1.01	0.190	/
Right/Cheek	26365/1882.5	50%RB,0%	1:1	20.50	20.48	0.054	0.408	1.01	0.410	/
Right/Tilt	26365/1882.5	50%RB,0%	1:1	20.50	20.48	0.130	0.523	1.01	0.526	/
Worst position of Head with Battery 2 (QPSK)										
Right/Tilt	26365/1882.5	1RB, 0%	1:1	21.50	21.39	0.140	0.621	1.03	0.637	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	26365/1882.5	1RB, 0%	1:1	21.50	21.39	-0.057	0.040	1.03	0.041	/
Front Side	26365/1882.5	1RB, 0%	1:1	21.50	21.39	0.034	0.012	1.03	0.012	/
Back Side	26365/1882.5	50%RB,0%	1:1	20.50	20.48	0.016	0.040	1.01	0.040	/
Front Side	26365/1882.5	50%RB,0%	1:1	20.50	20.48	0.010	0.011	1.01	0.011	/
Worst position of Body With Battery 2(QPSK) (Distance 15mm)										
Back Side	26365/1882.5	1RB,0%	1:1	21.50	21.39	0.117	0.038	1.03	0.039	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.26. LTE Band 26 (Antenna 1, WiFi On)

Table 52: SAR Values (LTE Band 26/15MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK, 1RB)										
Left/Cheek	26965/841.5	1RB, 50%	1:1	22.00	21.99	0.080	0.246	1.00	0.247	/
Left/Tilt	26965/841.5	1RB, 50%	1:1	22.00	21.99	0.150	0.229	1.00	0.229	/
Right/Cheek	26965/841.5	1RB, 50%	1:1	22.00	21.99	-0.170	0.371	1.00	0.372	/
Right/Tilt	26965/841.5	1RB, 50%	1:1	22.00	21.99	-0.090	0.343	1.00	0.344	/
Left/Cheek	26965/841.5	50%RB, 0%	1:1	21.00	20.85	0.140	0.220	1.03	0.228	/
Left/Tilt	26965/841.5	50%RB, 0%	1:1	21.00	20.85	0.032	0.166	1.03	0.172	/
Right/Cheek	26965/841.5	50%RB, 0%	1:1	21.00	20.85	0.020	0.342	1.03	0.354	/
Right/Tilt	26965/841.5	50%RB, 0%	1:1	21.00	20.85	0.010	0.305	1.03	0.316	/
Worst position of Head with Battery 2 (QPSK)										
Right/Cheek	26965/841.5	1RB, 50%	1:1	22.00	21.99	-0.080	0.379	1.00	0.380	/
Test case position of Body with(QPSK) (Distance 15mm)										
Back Side	26965/841.5	1RB, 50%	1:1	22.00	21.99	-0.061	0.022	1.00	0.022	/
Front Side	26965/841.5	1RB, 50%	1:1	22.00	21.99	0.032	0.018	1.00	0.018	/
Back Side	26965/841.5	50%RB, 0%	1:1	21.00	20.85	0.041	0.020	1.03	0.021	/
Front Side	26965/841.5	50%RB, 0%	1:1	21.00	20.85	0.025	0.019	1.03	0.019	/
Worst position of Body With Battery 2 (Distance 15mm)										
Back Side	26965/841.5	1RB, 50%	1:1	22.00	21.99	0.105	0.021	1.00	0.021	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.27. GSM 850 (Antenna 2)

Table 53: SAR Values [GSM 850 (GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Time slot	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	190/836.6	GSM	1:8.3	33.50	32.89	0.028	0.132	1.15	0.152	/
Left/Tilt	190/836.6	GSM	1:8.3	33.50	32.89	0.040	0.062	1.15	0.072	/
Right/Cheek	190/836.6	GSM	1:8.3	33.50	32.89	0.030	0.158	1.15	0.182	Figure.67
Right/Tilt	190/836.6	GSM	1:8.3	33.50	32.89	0.160	0.065	1.15	0.075	/
Worst position of Head With Battery 2										
Right/Cheek	190/836.6	GSM	1:8.3	33.50	32.89	0.149	0.151	1.15	0.174	/
Test position of Body-worn (Distance 15mm)										
Back Side	190/836.6	GSM	1:8.3	33.50	32.89	-0.052	0.239	1.15	0.275	Figure.68
Front Side	190/836.6	GSM	1:8.3	33.50	32.89	-0.010	0.199	1.15	0.229	/
Test position of Hotspot (Distance 10mm)										
Back Side	190/836.6	2Txslots	1:4.15	31.50	30.83	0.076	0.206	1.17	0.240	/
Front Side	190/836.6	2Txslots	1:4.15	31.50	30.83	0.020	0.272	1.17	0.317	Figure.69
Left Edge	190/836.6	2Txslots	1:4.15	31.50	30.83	-0.020	0.194	1.17	0.226	/
Right Edge	190/836.6	2Txslots	1:4.15	31.50	30.83	-0.044	0.089	1.17	0.104	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	190/836.6	2Txslots	1:4.15	31.50	30.83	0.014	0.066	1.17	0.077	/
Worst case test Position With Battery 2 (Distance 10mm)										
Front Side	190/836.6	2Txslots	1:4.15	31.50	30.83	-0.026	0.224	1.17	0.261	/

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.

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.28. GSM 1900 (Antenna 2)

Table 54: SAR Values [GSM 1900(GSM/GPRS)]

Test Position	Channel/ Frequency (MHz)	Time slot	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	661/1880	GSM	1:8.3	30.50	30.22	0.023	0.147	1.07	0.157	/
Left/Tilt	661/1880	GSM	1:8.3	30.50	30.22	0.042	0.040	1.07	0.042	/
Right/Cheek	661/1880	GSM	1:8.3	30.50	30.22	0.172	0.071	1.07	0.075	/
Right/Tilt	661/1880	GSM	1:8.3	30.50	30.22	0.047	0.058	1.07	0.062	/
Worst position of Head With Battery 2										
Left/Cheek	661/1880	GSM	1:8.3	30.50	30.22	0.031	0.169	1.07	0.180	Figure.70
Test position of Body-worn (Distance 15mm)										
Back Side	661/1880	GSM	1:8.3	30.50	30.22	0.138	0.098	1.07	0.104	Figure.71
Front Side	661/1880	GSM	1:8.3	30.50	30.22	0.179	0.084	1.07	0.089	/
Test position of Hotspot (Distance 10mm)										
Back Side	661/1880	2Txslots	1:4.15	28.50	28.17	0.110	0.445	1.08	0.480	/
Front Side	661/1880	2Txslots	1:4.15	28.50	28.17	0.025	0.244	1.08	0.263	/
Left Edge	661/1880	2Txslots	1:4.15	28.50	28.17	-0.040	0.447	1.08	0.482	Figure.72
Right Edge	661/1880	2Txslots	1:4.15	28.50	28.17	0.023	0.203	1.08	0.219	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	661/1880	2Txslots	1:4.15	28.50	28.17	-0.030	0.236	1.08	0.255	/
Worst case test Position With Battery 2 (Distance 10mm)										
Left Edge	661/1880	2Txslots	1:4.15	28.50	28.17	0.030	0.420	1.08	0.453	/

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.

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.29. UMTS Band II (Antenna 2)

Table 55: SAR Values [UMTS Band II (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	9400/1880	RMC 12.2K	1:1	24.50	23.96	0.070	0.408	1.13	0.462	/
Left/Tilt	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.010	0.113	1.13	0.128	/
Right/Cheek	9400/1880	RMC 12.5K	1:1	24.50	23.96	0.137	0.212	1.13	0.240	/
Right/Tilt	9400/1880	RMC 12.8K	1:1	24.50	23.96	0.068	0.155	1.13	0.176	/
Worst position of Head with Battery 2										
Left/Cheek	9400/1880	RMC 12.5K	1:1	24.50	23.96	0.062	0.420	1.13	0.476	Figure.73
Test position of Body-worn (Distance 15mm)										
Back Side	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.038	0.168	1.13	0.190	/
Front Side	9400/1880	RMC 12.2K	1:1	24.50	23.96	0.077	0.169	1.13	0.191	Figure.74
Test position of Hotspot (Distance 10mm)										
Back Side	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.061	0.537	1.13	0.608	Figure.75
Front Side	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.054	0.403	1.13	0.456	/
Left Edge	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.034	0.535	1.13	0.606	/
Right Edge	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.027	0.012	1.13	0.013	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.076	0.357	1.13	0.404	/
Worst position of Body with Battery 2 (Distance 10mm)										
Back Side	9400/1880	RMC 12.2K	1:1	24.50	23.96	-0.110	0.503	1.13	0.570	/

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

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.30. UMTS Band IV (Antenna 2)

Table 56: SAR Values [UMTS Band IV (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.060	0.351	1.04	0.364	/
Left/Tilt	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.070	0.113	1.04	0.117	/
Right/Cheek	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.079	0.177	1.04	0.184	/
Right/Tilt	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.037	0.173	1.04	0.179	/
Worst position of Head with Battery 2										
Left/Cheek	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.067	0.358	1.04	0.371	Figure.76
Test position of Body-worn (Distance 15mm)										
Back Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	-0.095	0.366	1.04	0.380	Figure.77
Front Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.023	0.245	1.04	0.254	/
Test position of Hotspot (Distance 10mm)										
Back Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	-0.024	0.567	1.04	0.588	/
Front Side	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.120	0.325	1.04	0.337	/
Left Edge	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	-0.050	0.565	1.04	0.586	/
Right Edge	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	-0.055	0.029	1.04	0.030	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.090	0.628	1.04	0.652	Figure.78
Worst position of Body with Battery 2 (Distance 10mm)										
Bottom Edge	1413/1732.6	RMC 12.2K	1:1	24.00	23.84	0.121	0.611	1.04	0.634	/

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
3. Per FCC KDB Publication 648474 D04, SAR was evaluated without a headset connected to the device. Since the reported SAR was ≤ 1.2 W/kg, no additional SAR evaluations using a headset cable were required.
4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

7.3.31. UMTS Band V (Antenna 2)

Table 57: SAR Values [UMTS Band V (WCDMA/HSDPA/HSUPA)]

Test Position	Channel/ Frequency (MHz)	Channel Type	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head										
Left/Cheek	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.190	0.140	1.22	0.171	/
Left/Tilt	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.020	0.083	1.22	0.101	/
Right/Cheek	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.130	0.166	1.22	0.203	Figure.79
Right/Tilt	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.130	0.085	1.22	0.105	/
Worst position of Head with Battery 2										
Right/Cheek	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.170	0.158	1.22	0.193	/
Test position of Body-worn (Distance 15mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.065	0.223	1.22	0.273	Figure.80
Front Side	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.001	0.163	1.22	0.200	/
Test position of Hotspot (Distance 10mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.164	0.233	1.22	0.285	Figure.81
Front Side	4183/836.6	RMC 12.2K	1:1	24.50	23.62	-0.027	0.171	1.22	0.209	/
Left Edge	4183/836.6	RMC 12.2K	1:1	24.50	23.62	-0.031	0.078	1.22	0.095	/
Right Edge	4183/836.6	RMC 12.2K	1:1	24.50	23.62	0.026	0.137	1.22	0.168	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	4183/836.6	RMC 12.2K	1:1	24.50	23.62	-0.012	0.068	1.22	0.083	/
Worst position of Body with Battery 2 (Distance 10mm)										
Back Side	4183/836.6	RMC 12.2K	1:1	24.50	23.62	-0.120	0.206	1.22	0.252	/

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

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

4. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

5.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.32. LTE Band 2 (Antenna 2)

Table 58: SAR Values (LTE Band 2/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	18900/1880	1RB, 99%	1:1	23.5	23.28	0.141	0.330	1.05	0.347	/
Left/Tilt	18900/1880	1RB, 99%	1:1	23.5	23.28	0.021	0.072	1.05	0.076	/
Right/Cheek	18900/1880	1RB, 99%	1:1	23.5	23.28	0.154	0.157	1.05	0.165	/
Right/Tilt	18900/1880	1RB, 99%	1:1	23.5	23.28	0.030	0.092	1.05	0.097	/
Left/Cheek	19100/1900	50%RB, 99%	1:1	22.5	22.47	0.156	0.409	1.01	0.412	Figure.82
Left/Tilt	19100/1900	50%RB, 99%	1:1	22.5	22.47	-0.060	0.087	1.01	0.088	/
Right/Cheek	19100/1900	50%RB, 99%	1:1	22.5	22.47	0.019	0.179	1.01	0.180	/
Right/Tilt	19100/1900	50%RB, 99%	1:1	22.5	22.47	0.029	0.123	1.01	0.124	/
Worst position of Head for Battery 2 (QPSK)										
Left/Cheek	19100/1900	50%RB, 99%	1:1	22.5	22.47	0.196	0.318	1.01	0.320	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	18900/1880	1RB, 99%	1:1	23.5	23.28	0.015	0.216	1.05	0.227	/
Front Side	18900/1880	1RB, 99%	1:1	23.5	23.28	0.142	0.103	1.05	0.108	/
Back Side	19100/1900	50%RB, 99%	1:1	22.5	22.47	-0.050	0.230	1.01	0.232	Figure.83
Front Side	19100/1900	50%RB, 99%	1:1	22.5	22.47	-0.174	0.203	1.01	0.204	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	18900/1880	1RB, 99%	1:1	23.5	23.28	-0.141	0.301	1.05	0.316	/
Front Side	18900/1880	1RB, 99%	1:1	23.5	23.28	-0.049	0.384	1.05	0.404	/
Left Edge	18900/1880	1RB, 99%	1:1	23.5	23.28	-0.100	0.431	1.05	0.453	/
Right Edge	18900/1880	1RB, 99%	1:1	23.5	23.28	0.038	0.050	1.05	0.053	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	18900/1880	1RB, 99%	1:1	23.5	23.28	-0.130	0.280	1.05	0.294	/
Back Side	19100/1900	50%RB, 99%	1:1	22.5	22.47	0.109	0.389	1.01	0.392	/
Front Side	19100/1900	50%RB, 99%	1:1	22.5	22.47	0.043	0.317	1.01	0.319	/
Left Edge	19100/1900	50%RB, 99%	1:1	22.5	22.47	-0.023	0.446	1.01	0.449	Figure.84
Right Edge	19100/1900	50%RB, 99%	1:1	22.5	22.47	0.053	0.050	1.01	0.050	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	19100/1900	50%RB, 99%	1:1	22.5	22.47	-0.010	0.310	1.01	0.312	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Left Edge	18900/1880	1RB, 99%	1:1	23.5	23.28	0.010	0.360	1.05	0.379	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.33. LTE Band 4 (Antenna 2)

Table 59: SAR Values (LTE Band 4/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK, 1RB)										
Left/Cheek	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.031	0.367	1.00	0.369	/
Left/Tilt	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.013	0.168	1.00	0.169	/
Right/Cheek	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.090	0.207	1.00	0.110	/
Right/Tilt	20300/1745	1RB, 0%	1:1	23.50	23.48	0.055	0.180	1.00	0.123	/
Left/Cheek	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	-0.056	0.233	1.02	0.238	/
Left/Tilt	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	-0.148	0.116	1.02	0.119	/
Right/Cheek	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	-0.173	0.110	1.02	0.113	/
Right/Tilt	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	-0.037	0.122	1.02	0.125	/
Worst position of Head for Battery 2 (QPSK)										
Left/Cheek	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.047	0.395	1.00	0.397	Figure.85
Note: 1.The value with blue color is the maximum SAR Value of each test band.										

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.035	0.336	1.00	0.337	Figure.86
Front Side	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.126	0.229	1.00	0.230	/
Back Side	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	-0.058	0.240	1.02	0.246	/
Front Side	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	-0.068	0.159	1.02	0.163	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.042	0.486	1.00	0.488	/
Front Side	20300/1745	1RB, 0%	1:1	23.50	23.48	0.022	0.459	1.00	0.461	/
Left Edge	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.050	0.471	1.00	0.473	/
Right Edge	20300/1745	1RB, 0%	1:1	23.50	23.48	-0.049	0.055	1.00	0.055	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	20300/1745	1RB, 0%	1:1	23.50	23.48	0.140	0.532	1.00	0.534	Figure.87
Back Side	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	-0.033	0.387	1.02	0.396	/
Front Side	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	0.023	0.462	1.02	0.473	/
Left Edge	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	0.010	0.426	1.02	0.436	/
Right Edge	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	0.052	0.051	1.02	0.052	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	20175/1732.5	50%RB, 99%	1:1	22.50	22.40	0.010	0.393	1.02	0.402	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Bottom Edge	20300/1745	1RB, 0%	1:1	23.50	23.48	0.055	0.489	1.00	0.491	/

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

7.3.34. LTE Band 5 (Antenna 2)

Table 60: SAR Values (LTE Band 5/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	20525/836.5	1RB, 50%	1:1	23.50	23.48	0.021	0.189	1.00	0.190	/
Left/Tilt	20525/836.5	1RB, 50%	1:1	23.50	23.48	0.068	0.115	1.00	0.116	/
Right/Cheek	20525/836.5	1RB, 50%	1:1	23.50	23.48	-0.133	0.223	1.00	0.224	/
Right/Tilt	20525/836.5	1RB, 50%	1:1	23.50	23.48	-0.100	0.129	1.00	0.130	/
Left/Cheek	20525/836.5	50%RB, 99%	1:1	22.50	22.48	0.051	0.114	1.00	0.115	/
Left/Tilt	20525/836.5	50%RB, 99%	1:1	22.50	22.48	0.016	0.070	1.00	0.071	/
Right/Cheek	20525/836.5	50%RB, 99%	1:1	22.50	22.48	0.019	0.142	1.00	0.143	/
Right/Tilt	20525/836.5	50%RB, 99%	1:1	22.50	22.48	0.037	0.081	1.00	0.081	/
Worst position of Head for Battery 2 (QPSK)										
Right/Cheek	20525/836.5	1RB, 50%	1:1	23.50	23.48	-0.010	0.229	1.00	0.230	Figure.88

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	20525/836.5	1RB, 50%	1:1	23.50	23.48	-0.17	0.215	1.00	0.216	Figure.89
Front Side	20525/836.5	1RB, 50%	1:1	23.50	23.48	-0.051	0.180	1.00	0.181	/
Back Side	20525/836.5	50%RB, 99%	1:1	22.50	22.48	-0.050	0.136	1.00	0.137	/
Front Side	20525/836.5	50%RB, 99%	1:1	22.50	22.48	0.057	0.109	1.00	0.110	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	20525/836.5	1RB, 50%	1:1	23.50	23.48	-0.040	0.247	1.00	0.248	Figure.90
Front Side	20525/836.6	1RB, 50%	1:1	23.50	23.48	-0.060	0.171	1.00	0.172	/
Left Edge	20525/836.7	1RB, 50%	1:1	23.50	23.48	-0.043	0.040	1.00	0.040	/
Right Edge	20525/836.7	1RB, 50%	1:1	23.50	23.48	0.050	0.107	1.00	0.107	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	20525/836.7	1RB, 50%	1:1	23.50	23.48	-0.110	0.094	1.00	0.095	/
Back Side	20525/836.7	50%RB, 99%	1:1	22.50	22.48	0.130	0.156	1.00	0.157	/
Front Side	20525/836.7	50%RB, 99%	1:1	22.50	22.48	-0.104	0.134	1.00	0.135	/
Left Edge	20525/836.7	50%RB, 99%	1:1	22.50	22.48	-0.031	0.039	1.00	0.039	/
Right Edge	20525/836.7	50%RB, 99%	1:1	22.50	22.48	0.010	0.087	1.00	0.088	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	20525/836.7	50%RB, 99%	1:1	22.50	22.48	0.135	0.074	1.00	0.075	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	20525/836.5	1RB, 50%	1:1	23.50	23.48	-0.010	0.243	1.00	0.244	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.35. LTE Band 7 (Antenna 2)

Table 61: SAR Values (LTE Band 7/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	21350/2560	1RB, 50%	1:1	23	22.97	0.117	0.347	1.01	0.349	/
Left/Tilt	21350/2560	1RB, 50%	1:1	23	22.97	-0.022	0.089	1.01	0.089	/
Right/Cheek	21350/2560	1RB, 50%	1:1	23	22.97	0.049	0.173	1.01	0.174	/
Right/Tilt	21350/2560	1RB, 50%	1:1	23	22.97	0.026	0.079	1.01	0.079	/
Left/Cheek	21350/2560	50%RB, 99%	1:1	22	21.97	0.057	0.340	1.01	0.342	/
Left/Tilt	21350/2560	50%RB, 99%	1:1	22	21.97	0.062	0.073	1.01	0.073	/
Right/Cheek	21350/2560	50%RB, 99%	1:1	22	21.97	0.052	0.160	1.01	0.161	/
Right/Tilt	21350/2560	50%RB, 99%	1:1	22	21.97	0.166	0.065	1.01	0.065	/
Worst position of Head for Battery 2 (QPSK)										
Left/Cheek	21350/2560	1RB, 50%	1:1	23	22.97	0.028	0.373	1.01	0.376	Figure.91

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	21350/2560	1RB, 50%	1:1	23	22.97	0.044	0.198	1.01	0.199	Figure.92
Front Side	21350/2560	1RB, 50%	1:1	23	22.97	0.021	0.166	1.01	0.167	/
Back Side	21350/2560	50%RB, 99%	1:1	22	21.97	0.057	0.144	1.01	0.145	/
Front Side	21350/2560	50%RB, 99%	1:1	22	21.97	0.036	0.126	1.01	0.127	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	21350/2560	1RB, 50%	1:1	23	22.97	0.084	0.277	1.01	0.279	/
Front Side	21350/2560	1RB, 50%	1:1	23	22.97	0.032	0.206	1.01	0.207	/
Left Edge	21350/2560	1RB, 50%	1:1	23	22.97	-0.030	0.287	1.01	0.289	/
Right Edge	21350/2560	1RB, 50%	1:1	23	22.97	0.076	0.043	1.01	0.043	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	21350/2560	1RB, 50%	1:1	23	22.97	0.090	0.177	1.01	0.178	/
Back Side	21350/2560	50%RB, 99%	1:1	22	21.97	0.047	0.300	1.01	0.302	/
Front Side	21350/2560	50%RB, 99%	1:1	22	21.97	0.014	0.232	1.01	0.234	/
Left Edge	21350/2560	50%RB, 99%	1:1	22	21.97	-0.160	0.268	1.01	0.270	/
Right Edge	21350/2560	50%RB, 99%	1:1	22	21.97	0.064	0.044	1.01	0.045	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	21350/2560	50%RB, 99%	1:1	22	21.97	0.170	0.167	1.01	0.168	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	21350/2560	50%RB, 99%	1:1	22	21.97	0.074	0.328	1.01	0.330	Figure.93

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.36. LTE Band 12 (Antenna 2)

Table 62: SAR Values (LTE Band 12/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	23130/711	1RB,50%	1:1	23.50	23.48	-0.072	0.200	1.00	0.201	Figure.94
Left/Tilt	23130/711	1RB,50%	1:1	23.50	23.48	-0.059	0.113	1.00	0.114	/
Right/Cheek	23130/711	1RB,50%	1:1	23.50	23.48	0.012	0.189	1.00	0.190	/
Right/Tilt	23130/711	1RB,50%	1:1	23.50	23.48	-0.023	0.094	1.00	0.094	/
Left/Cheek	23095/707.5	50%RB,99%	1:1	22.50	22.39	-0.015	0.147	1.03	0.151	/
Left/Tilt	23095/707.5	50%RB,99%	1:1	22.50	22.39	0.199	0.110	1.03	0.113	/
Right/Cheek	23095/707.5	50%RB,99%	1:1	22.50	22.39	0.106	0.129	1.03	0.132	/
Right/Tilt	23095/707.5	50%RB,99%	1:1	22.50	22.39	-0.090	0.085	1.03	0.087	/
Worst position of Head with Battery 2 (QPSK)										
Left/Cheek	23130/711	1RB,50%	1:1	23.50	23.48	0.002	0.112	1.00	0.113	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	23130/711	1RB,50%	1:1	23.50	23.48	0.024	0.179	1.00	0.180	Figure.95
Front Side	23130/711	1RB,50%	1:1	23.50	23.48	0.177	0.166	1.00	0.167	/
Back Side	23095/707.5	50%RB,99%	1:1	22.50	22.39	0.030	0.017	1.03	0.017	/
Front Side	23095/707.5	50%RB,99%	1:1	22.50	22.39	-0.161	0.126	1.03	0.129	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	23130/711	1RB,50%	1:1	23.50	23.48	-0.117	0.145	1.00	0.146	/
Front Side	23130/711	1RB,50%	1:1	23.50	23.48	-0.040	0.176	1.00	0.177	Figure.96
Left Edge	23130/711	1RB,50%	1:1	23.50	23.48	0.010	0.123	1.00	0.124	/
Right Edge	23130/711	1RB,50%	1:1	23.50	23.48	0.040	0.166	1.00	0.167	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	23130/711	1RB,50%	1:1	23.50	23.48	0.034	0.039	1.00	0.039	/
Back Side	23095/707.5	50%RB,99%	1:1	22.50	22.39	0.140	0.133	1.03	0.137	/
Front Side	23095/707.5	50%RB,99%	1:1	22.50	22.39	0.020	0.162	1.03	0.166	/
Left Edge	23095/707.5	50%RB,99%	1:1	22.50	22.39	-0.055	0.129	1.03	0.132	/
Right Edge	23095/707.5	50%RB,99%	1:1	22.50	22.39	0.181	0.168	1.03	0.173	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	23095/707.5	50%RB,99%	1:1	22.50	22.39	0.113	0.101	1.03	0.104	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Front Side	23130/711	1RB,50%	1:1	23.50	23.48	0.044	0.174	1.00	0.175	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.37. LTE Band 17 (Antenna 2)

Table 63: SAR Values (LTE Band 17/10MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	23780/709	1RB,50%	1:1	23.50	23.48	0.022	0.194	1.01	0.195	/
Left/Tilt	23780/709	1RB,50%	1:1	23.50	23.48	0.064	0.136	1.01	0.137	/
Right/Cheek	23780/709	1RB,50%	1:1	23.50	23.48	-0.045	0.175	1.01	0.176	/
Right/Tilt	23780/709	1RB,50%	1:1	23.50	23.48	-0.016	0.121	1.01	0.122	/
Left/Cheek	23790/710	50%RB,0%	1:1	22.50	22.45	0.069	0.200	1.01	0.202	Figure.97
Left/Tilt	23790/710	50%RB,0%	1:1	22.50	22.45	0.003	0.126	1.01	0.128	/
Right/Cheek	23790/710	50%RB,0%	1:1	22.50	22.45	0.158	0.173	1.01	0.175	/
Right/Tilt	23790/710	50%RB,0%	1:1	22.50	22.45	-0.030	0.107	1.01	0.108	/
Worst position of Head with Battery 2 (QPSK)										
Left/Cheek	23790/710	50%RB,0%	1:1	22.50	22.45	0.077	0.141	1.01	0.143	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	23780/709	1RB,50%	1:1	23.50	23.48	0.140	0.232	1.01	0.233	/
Front Side	23780/709	1RB,50%	1:1	23.50	23.48	0.018	0.184	1.01	0.185	/
Back Side	23790/710	50%RB,0%	1:1	22.50	22.45	0.150	0.234	1.01	0.237	Figure.98
Front Side	23790/710	50%RB,0%	1:1	22.50	22.45	0.030	0.171	1.01	0.173	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	23780/709	1RB,50%	1:1	23.50	23.48	0.030	0.309	1.01	0.311	Figure.99
Front Side	23780/709	1RB,50%	1:1	23.50	23.48	-0.021	0.196	1.01	0.197	/
Left Edge	23780/709	1RB,50%	1:1	23.50	23.48	-0.240	0.102	1.01	0.103	/
Right Edge	23780/709	1RB,50%	1:1	23.50	23.48	-0.023	0.195	1.01	0.196	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	23780/709	1RB,50%	1:1	23.50	23.48	-0.010	0.042	1.01	0.042	/
Back Side	23790/710	50%RB,0%	1:1	22.50	22.45	0.040	0.286	1.01	0.290	/
Front Side	23790/710	50%RB,0%	1:1	22.50	22.45	-0.013	0.183	1.01	0.185	/
Left Edge	23790/710	50%RB,0%	1:1	22.50	22.45	0.007	0.099	1.01	0.100	/
Right Edge	23790/710	50%RB,0%	1:1	22.50	22.45	-0.014	0.167	1.01	0.169	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	23790/710	50%RB,0%	1:1	22.50	22.45	0.030	0.038	1.01	0.038	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	23780/709	1RB,50%	1:1	23.50	23.48	0.002	0.307	1.01	0.309	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.38. LTE Band 25 (Antenna 2)

Table 64: SAR Values (LTE Band 25/20MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK)										
Left/Cheek	26365/1882.5	1RB, 0%	1:1	23.50	22.48	-0.032	0.375	1.26	0.474	/
Left/Tilt	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.045	0.190	1.26	0.240	/
Right/Cheek	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.103	0.276	1.26	0.349	/
Right/Tilt	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.027	0.161	1.26	0.204	/
Left/Cheek	26365/1882.5	50%RB,0%	1:1	22.50	22.22	-0.047	0.387	1.07	0.413	/
Left/Tilt	26365/1882.5	50%RB,0%	1:1	22.50	22.22	0.037	0.150	1.07	0.160	/
Right/Cheek	26365/1882.5	50%RB,0%	1:1	22.50	22.22	-0.037	0.222	1.07	0.237	/
Right/Tilt	26365/1882.5	50%RB,0%	1:1	22.50	22.22	0.120	0.153	1.07	0.163	/
Worst position of Head with Battery 2 (QPSK)										
Left/Cheek	26365/1882.5	1RB, 0%	1:1	23.50	22.48	-0.024	0.424	1.26	0.536	Figure.100
Note: 1.The value with blue color is the maximum SAR Value of each test band.										

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21Db	Limit SAR_{1g} 1.6 W/kg			
						Drift (Db)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	26365/1882.5	1RB, 0%	1:1	23.50	22.48	-0.055	0.335	1.26	0.424	/
Front Side	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.026	0.251	1.26	0.317	/
Back Side	26365/1882.5	50%RB, 0%	1:1	22.50	22.22	0.033	0.337	1.07	0.359	Figure.101
Front Side	26365/1882.5	50%RB, 0%	1:1	22.50	22.22	0.028	0.253	1.07	0.270	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	26590/1905	1RB, 0%	1:1	23.50	22.34	-0.110	0.376	1.31	0.491	/
	26365/1882.5	1RB, 0%	1:1	23.50	22.48	-0.100	0.722	1.26	0.913	/
	26140/1857.5	1RB, 0%	1:1	23.50	22.42	-0.010	0.398	1.28	0.510	/
Front Side	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.030	0.524	1.26	0.663	/
Left Edge	26365/1882.5	1RB, 0%	1:1	23.50	22.48	-0.077	0.537	1.26	0.679	/
Right Edge	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.034	0.037	1.26	0.047	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.180	0.403	1.26	0.510	/
Back Side	26365/1882.5	50%RB, 0%	1:1	22.50	22.48	-0.024	0.762	1.00	0.766	Figure.102
Front Side	26365/1882.5	50%RB, 0%	1:1	22.50	22.22	0.075	0.492	1.07	0.525	/
Left Edge	26365/1882.5	50%RB, 0%	1:1	22.50	22.22	0.060	0.482	1.07	0.515	/
Right Edge	26365/1882.5	50%RB, 0%	1:1	22.50	22.48	-0.132	0.044	1.00	0.044	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	26365/1882.5	50%RB, 0%	1:1	22.50	22.22	0.102	0.038	1.07	0.040	/
Back Side	26590/1905	100%RB, 0%	1:1	22.50	22.41	0.066	0.441	1.02	0.450	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	26365/1882.5	1RB, 0%	1:1	23.50	22.48	0.016	0.713	1.26	0.902	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.39. LTE Band 26 (Antenna 2)

Table 65: SAR Values (LTE Band 26/15MHz)

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head (QPSK, 1RB)										
Left/Cheek	26775/822.5	1RB, 50%	1:1	23.50	23.48	0.030	0.138	1.00	0.139	/
Left/Tilt	26775/822.5	1RB, 50%	1:1	23.50	23.48	0.025	0.090	1.00	0.091	/
Right/Cheek	26775/822.5	1RB, 50%	1:1	23.50	23.48	0.178	0.144	1.00	0.145	/
Right/Tilt	26775/822.5	1RB, 50%	1:1	23.50	23.48	-0.038	0.098	1.00	0.098	/
Left/Cheek	26775/822.5	50%RB, 99%	1:1	22.50	22.44	-0.142	0.131	1.01	0.133	/
Left/Tilt	26775/822.5	50%RB, 99%	1:1	22.50	22.44	-0.157	0.101	1.01	0.102	/
Right/Cheek	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.169	0.164	1.01	0.166	Figure.103
Right/Tilt	26775/822.5	50%RB, 99%	1:1	22.50	22.44	-0.133	0.094	1.01	0.095	/
Worst position of Head with Battery 2 (QPSK)										
Right/Cheek	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.011	0.139	1.01	0.141	/

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

Test Position	Channel/ Frequency (MHz)	RB Offset	Duty Cycle	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit SAR_{1g} 1.6 W/kg			
						Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test position of Body-worn (QPSK, Distance 15mm)										
Back Side	26775/822.5	1RB, 50%	1:1	23.50	23.48	-0.049	0.215	1.00	0.216	/
Front Side	26775/822.5	1RB, 50%	1:1	23.50	23.48	-0.040	0.152	1.00	0.153	/
Back Side	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.021	0.217	1.01	0.220	Figure.104
Front Side	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.047	0.147	1.01	0.149	/
Test position of Hotspot (QPSK, Distance 10mm)										
Back Side	26775/822.5	1RB, 50%	1:1	23.50	23.48	0.060	0.200	1.00	0.201	/
Front Side	26775/822.5	1RB, 50%	1:1	23.50	23.48	0.100	0.154	1.00	0.155	/
Left Edge	26775/822.5	1RB, 50%	1:1	23.50	23.48	0.062	0.031	1.00	0.031	/
Right Edge	26775/822.5	1RB, 50%	1:1	23.50	23.48	0.120	0.120	1.00	0.121	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	26775/822.5	1RB, 50%	1:1	23.50	23.48	-0.190	0.075	1.00	0.076	/
Back Side	26775/822.5	50%RB, 99%	1:1	22.50	22.44	-0.180	0.209	1.01	0.212	Figure.105
Front Side	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.051	0.152	1.01	0.154	/
Left Edge	26775/822.5	50%RB, 99%	1:1	22.50	22.44	-0.068	0.097	1.01	0.098	/
Right Edge	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.114	0.118	1.01	0.120	/
Top Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bottom Edge	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.109	0.105	1.01	0.106	/
Worst position of Body with Battery 2 (QPSK, Distance 10mm)										
Back Side	26775/822.5	50%RB, 99%	1:1	22.50	22.44	0.087	0.188	1.01	0.191	/

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

2.When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg;

7.3.40. WiFi (WiFi Only)

Table 66: SAR Values(802.11b/g)

Test Position	Channel/ Frequency (MHz)	Service	Duty Cycle	Area Scan Max. SAR (W/kg)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit of SAR 1.6 W/kg			
							Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head with 802.11b											
Left/Cheek	11/2462	DSSS	1:1	1.040	15.5	14.96	0.024	1.130	1.13	1.280	/
	6/2437	DSSS	1:1	0.956	15.5	14.84	0.029	1.030	1.16	1.199	/
	1/2412	DSSS	1:1	0.568	15.5	14.82	0.064	0.625	1.17	0.731	/
Left/Tilt	11/2462	DSSS	1:1	0.759	15.5	14.96	0.180	0.995	1.13	1.127	/
	6/2437	DSSS	1:1	0.741	15.5	14.84	0.022	0.891	1.16	1.037	/
Right/Cheek	11/2462	DSSS	1:1	0.308	15.5	14.84	-0.024	0.331	1.16	0.385	/
Right/Tilt	11/2462	DSSS	1:1	0.265	15.5	14.84	0.080	0.315	1.16	0.367	/
Worst case test Position With Battery 2											
Left/Cheek	11/2462	DSSS	1:1	1.100	15.5	14.96	-0.010	1.190	1.13	1.348	Figure.106
Worst Case Position of Head ,1st Repeated SAR											
Left/Cheek	11/2462	DSSS	1:1	1.170	15.5	14.96	0.033	1.080	1.13	1.223	/
Test Position of Head with 802.11g											
Left/Cheek	11/2462	OFDM	1:1	1.020	15.5	14.87	0.029	1.120	1.16	1.295	/
	6/2437	OFDM	1:1	1.020	15.5	14.81	0.090	1.090	1.17	1.278	/
	1/2412	OFDM	1:1	0.686	15.5	14.73	0.032	0.746	1.19	0.891	/
Test position of Body-worn (Distance 15mm)											
Back Side	11/2462	DSSS	1:1	0.074	15.5	14.84	0.025	0.075	1.16	0.088	/
Front Side	11/2462	DSSS	1:1	0.088	15.5	14.84	-0.021	0.096	1.16	0.112	Figure.107
Test position of Hotspot (Distance 10mm)											
Back Side	11/2462	DSSS	1:1	0.147	15.5	14.84	0.028	0.147	1.16	0.171	/
Front Side	11/2462	DSSS	1:1	0.157	15.5	14.84	-0.020	0.165	1.16	0.192	/
Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Right Edge	11/2462	DSSS	1:1	0.158	15.5	14.84	-0.110	0.162	1.16	0.189	/
Top Edge	11/2462	DSSS	1:1	0.077	15.5	14.84	0.180	0.086	1.16	0.100	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst case test Position With Battery 2 (Distance 10mm)											
Front Side	11/2462	DSSS	1:1	0.222	15.5	14.84	0.061	0.237	1.16	0.276	Figure.108

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

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

3. Highest reported SAR is ≤ 0.4 W/kg. Therefore, further SAR measurements within this exposure condition are not required. Highest reported SAR is > 0.4 W/kg. Due to the highest reported SAR for this test position, other test positions in Head exposure condition were evaluated until a SAR ≤ 0.8 W/kg was reported.

4. 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, SAR measurement is not required for 2.4 GHz 802.11g/n OFDM configurations.

Table 67: SAR Measurement Variability Results [WiFi]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Left/Cheek	11/2462	1.190	1.080	1.01	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.3.41. WiFi (WiFi on synchronous transmission)

Table 68: SAR Values(802.11b)

Test Position	Channel/ Frequency (MHz)	Service	Duty Cycle	Area Scan Max. SAR (W/kg)	Maximum Allowed Power (dBm)	Conducted Power (dBm)	Drift ± 0.21dB	Limit of SAR 1.6 W/kg			
							Drift (dB)	Measured SAR_{1g} (W/kg)	Scaling Factor	Reported SAR_{1g} (W/kg)	Graph Results
Test Position of Head with 802.11b											
Left/Cheek	11/2462	DSSS	1:1	1.060	14.50	14.37	0.029	1.120	1.03	1.154	Figure.109
	6/2437	DSSS	1:1	1.010	14.50	14.26	0.090	1.090	1.06	1.152	/
Left/Tilt	11/2462	DSSS	1:1	0.761	14.50	14.37	0.030	1.020	1.03	1.051	/
	6/2437	DSSS	1:1	0.677	14.50	14.26	0.044	0.867	1.06	0.916	/
Right/Cheek	11/2462	DSSS	1:1	0.373	14.50	14.37	-0.050	0.373	1.03	0.384	/
Right/Tilt	11/2462	DSSS	1:1	0.282	14.50	14.37	0.120	0.341	1.03	0.351	/
Worst case test Position With Battery 2											
Left/Cheek	11/2462	DSSS	1:1	0.834	14.50	14.37	0.037	1.020	1.03	1.051	/
Worst Case Position of Head ,1st Repeated SAR											
Left/Cheek	11/2462	DSSS	1:1	0.994	14.50	14.37	0.026	1.010	1.03	1.041	/
Test position of Body-worn (Distance 15mm)											
Back Side	11/2462	DSSS	1:1	0.088	14.50	14.37	0.075	0.095	1.03	0.097	/
Front Side	11/2462	DSSS	1:1	0.086	14.50	14.37	0.041	0.091	1.03	0.094	/
Test position of Hotspot (Distance 10mm)											
Back Side	11/2462	DSSS	1:1	0.214	14.50	14.37	0.106	0.215	1.03	0.222	/
Front Side	11/2462	DSSS	1:1	0.157	14.50	14.37	0.110	0.153	1.03	0.158	/
Left Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Right Edge	11/2462	DSSS	1:1	0.158	14.50	14.37	0.048	0.123	1.03	0.127	/
Top Edge	11/2462	DSSS	1:1	0.077	14.50	14.37	0.105	0.060	1.03	0.062	/
Bottom Edge	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Worst case test Position With Battery 2 (Distance 10mm)											
Back Side	11/2462	DSSS	1:1	0.107	14.50	14.37	0.037	0.189	1.03	0.195	/

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

2. Per FCC KDB Publication 447498 D01, if the reported (scaled) SAR measured at the middle channel or highest output power channel for each test configuration is ≤ 0.8 W/kg then testing at the other channels is optional for such test configuration(s).

3. Highest reported SAR is ≤ 0.4 W/kg. Therefore, further SAR measurements within this exposure condition are not required. Highest reported SAR is > 0.4 W/kg. Due to the highest reported SAR for this test position, other test positions in Head exposure condition were evaluated until a SAR ≤ 0.8 W/kg was reported.

4. 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, SAR measurement is not required for 2.4 GHz 802.11g/n OFDM configurations.

Table 69: SAR Measurement Variability Results [WiFi]

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Left/Cheek	11/2462	1.120	1.010	1.11	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

3) A third repeated measurement was performed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

7.4. Simultaneous Transmission Conditions

Air-Interface	Band (MHz)	Type	SimultaneousTransmissions	Voice Over Digital Transport (Data)
GSM	850	Voice	Yes BT or WiFi	NA
	1900	Voice		
	GPRS	Data	Yes BT or WiFi	NA
	EGPRS	Data		
WCDMA	UMTS Band II	Voice	Yes BT or WiFi	NA
	UMTS Band IV	Voice		
	UMTS Band V	Voice		
	RMC	Data	Yes BT or WiFi	NA
	HSDPA	Data		
	HSUPA	Data		
	DC-HSDPA	Data		
LTE	Band 2	Data	Yes BT or WiFi	NA
	Band 4	Data		
	Band 5	Data		
	Band 7	Data		
	Band 12	Data		
	Band17	Data		
	Band 25	Data		
	Band 26	Data		
WiFi	2450	Data	Yes GSM, GPRS, EGPRS, RMC, HSDPA, HSUPA, DC-HSDPA, LTE	Yes
Bluetooth (BT)	2450	Data	Yes GSM, GPRS, EGPRS, RMC, HSDPA, HSUPA, DC-HSDPA, LTE	NA

When standalone SAR is not required to be measured per FCC KDB 447498 D01, the following equation must be used to estimate the standalone 1g SAR for simultaneous transmission assessment involving that transmitter.

$$\text{Estimated SAR} = \frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} * \frac{\sqrt{\text{f (GHz)}}}{7.5}$$

Band	Configuration	Frequency (MHz)	Maximum Power (dBm)	Separation Distance (mm)	Estimated SAR （W/kg)
Bluetooth	Body	2480	8.5	15	0.100

Per FCC KDB 447498 D01, simultaneous transmission SAR test exclusion may be applied when the sum of the 1-g SAR for all the simultaneous transmitting antennas in a specific a physical test configuration is ≤1.6 W/kg. When the sum is greater than the SAR limit, SAR test exclusion is determined by the SAR to peak location separation ratio.

$$\text{Ratio} = \frac{(SAR_1 + SAR_2)^{1.5}}{\text{(peak location separation, mm)}} < 0.04$$

Antenna 1 & Antenna 2 Mode

Antenna 1 and Antenna 2 cannot transmit simultaneously.

WiFi & BT Mode

BT and WiFi antenna cannot transmit simultaneously.

About BT and GSM/UMTS/LTE Antenna 1

SAR_{1g} (W/kg) / Test Position	GSM 850	GSM 1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B25	LTE B26	BT	MAX. ΣSAR_{1g}	Peak location separation ratio
Back Side(15mm)	0.182	0.049	0.084	0.066	0.155	0.078	0.083	**0.194**	0.181	0.122	0.098	0.088	0.177	**0.100**	0.294	NA
Front Side(15mm)	0.133	0.054	0.091	0.048	0.114	0.048	0.077	**0.160**	0.149	0.093	0.069	0.056	0.130	**0.100**	0.260	NA

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

MAX. ΣSAR_{1g} = 0.294 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for BT and GSM/UMTS/LTE antenna 1.

About WiFi and GSM/UMTS/LTE Antenna 1

SAR_{1g} (W/kg) / Test Position	GSM 850	GSM 1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B25	LTE B26	WiFi	MAX. ΣSAR_{1g}	Peak location separation ratio
Left, Touch	0.379	0.277	0.203	0.126	0.392	0.265	0.269	**0.400**	0.229	0.235	0.337	0.178	0.247	**1.154**	1.554	NA
Left, Tilt	0.347	0.280	0.298	0.197	**0.400**	0.243	0.320	0.331	0.210	0.225	0.272	0.190	0.229	**1.051**	1.451	NA
Right, Touch	0.652	0.792	0.797	0.588	0.919	0.876	0.710	0.634	**0.955**	0.400	0.489	0.518	0.380	**0.384**	1.339	NA
Right, Tilt	0.483	0.691	0.674	0.721	0.629	0.660	0.609	0.478	**0.771**	0.437	0.435	0.638	0.344	**0.351**	1.122	NA
Back Side(15mm)	0.075	0.044	0.024	0.038	**0.107**	0.046	0.049	0.024	0.062	0.018	0.017	0.041	0.022	**0.097**	0.204	NA
Front Side(15mm)	0.061	0.025	0.020	0.033	**0.079**	0.014	0.015	0.012	0.078	0.017	0.014	0.012	0.019	**0.094**	0.173	NA
Back Side(10mm)	0.509	0.149	0.181	0.158	0.341	0.403	0.387	0.440	0.148	0.291	0.273	0.351	**0.525**	**0.222**	0.747	NA
Front Side(10mm)	0.136	0.188	0.152	0.286	0.274	0.142	0.137	0.120	0.120	0.154	0.179	0.133	**0.294**	**0.158**	0.452	NA
Left Edge(10mm)	0.185	0.147	0.175	0.177	**0.271**	0.176	0.152	0.163	0.158	0.196	0.193	0.164	0.145	NA	0.271	NA
Right Edge(10mm)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.127**	0.127	NA
Top Edge(10mm)	**0.301**	0.192	0.131	0.127	0.167	0.174	0.168	0.298	0.121	0.150	0.119	0.169	0.266	**0.062**	0.363	NA
Bottom Edge(10mm)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA

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

MAX. ΣSAR_{1g} = 1.554 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for WiFi and GSM/UMTS/LTE Antenna 1.

About BT and GSM/UMTS/LTE Antenna 2

SAR_{1g} (W/kg) / Test Position	GSM 850	GSM 1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B25	LTE B26	BT	MAX. ΣSAR_{1g}	Peak location separation ratio
Back Side(15mm)	0.275	0.104	0.190	0.380	0.273	0.232	0.337	0.216	0.193	0.180	0.237	**0.424**	0.220	**0.100**	0.524	NA
Front Side(15mm)	0.229	0.089	0.191	0.254	0.200	0.204	0.230	0.181	0.167	0.167	0.185	**0.317**	0.153	**0.100**	0.417	NA

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

MAX. ΣSAR_{1g} = 0.524 W/kg <1.6 W/kg, so the Simultaneous transimition SAR with volum scan are not required for BT and GSM/UMTS/LTE antenna.

About WiFi and GSM/UMTS/LTE Antenna 2

SAR_{1g} (W/kg) / Test Position	GSM 850	GSM 1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B25	LTE B26	WiFi	MAX. ΣSAR_{1g}	Peak location separation ratio
Left, Touch	0.152	0.180	0.476	0.371	0.171	0.412	0.397	0.190	0.376	0.201	0.202	**0.536**	0.139	**1.154**	1.690	Yes
Left, Tilt	0.072	0.042	0.128	0.117	0.101	0.088	0.169	0.116	0.089	0.114	0.137	**0.240**	0.102	**1.051**	1.291	NA
Right, Touch	0.182	0.075	0.240	0.184	0.203	0.180	0.113	0.230	0.174	0.190	0.176	**0.349**	0.166	**0.384**	0.733	NA
Right, Tilt	0.075	0.062	0.176	0.179	0.105	0.124	0.125	0.130	0.079	0.094	0.122	**0.204**	0.098	**0.351**	0.555	NA
Back Side(15mm)	0.275	0.104	0.190	0.380	0.273	0.232	0.337	0.216	0.199	0.180	0.237	**0.424**	0.220	**0.097**	0.521	NA
Front Side(15mm)	0.229	0.089	0.191	0.254	0.200	0.204	0.230	0.181	0.167	0.167	0.185	**0.317**	0.153	**0.094**	0.411	NA
Back Side(10mm)	0.240	0.480	0.608	0.588	0.285	0.392	0.488	0.248	0.330	0.146	0.311	**0.913**	0.212	**0.222**	1.135	NA
Front Side(10mm)	0.317	0.263	0.456	0.337	0.209	0.404	0.473	0.172	0.234	0.177	0.197	**0.663**	0.155	**0.158**	0.821	NA
Left Edge(10mm)	0.226	0.482	0.606	0.586	0.095	0.453	0.473	0.040	0.289	0.132	0.103	**0.679**	0.098	NA	0.679	NA
Right Edge(10mm)	0.104	**0.219**	0.013	0.030	0.168	0.053	0.055	0.107	0.045	0.173	0.196	0.047	0.121	**0.127**	0.346	NA
Top Edge(10mm)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.062**	0.062	NA
Bottom Edge(10mm)	0.077	0.255	0.404	**0.652**	0.083	0.312	0.534	0.095	0.178	0.104	0.042	0.510	0.106	NA	0.652	NA

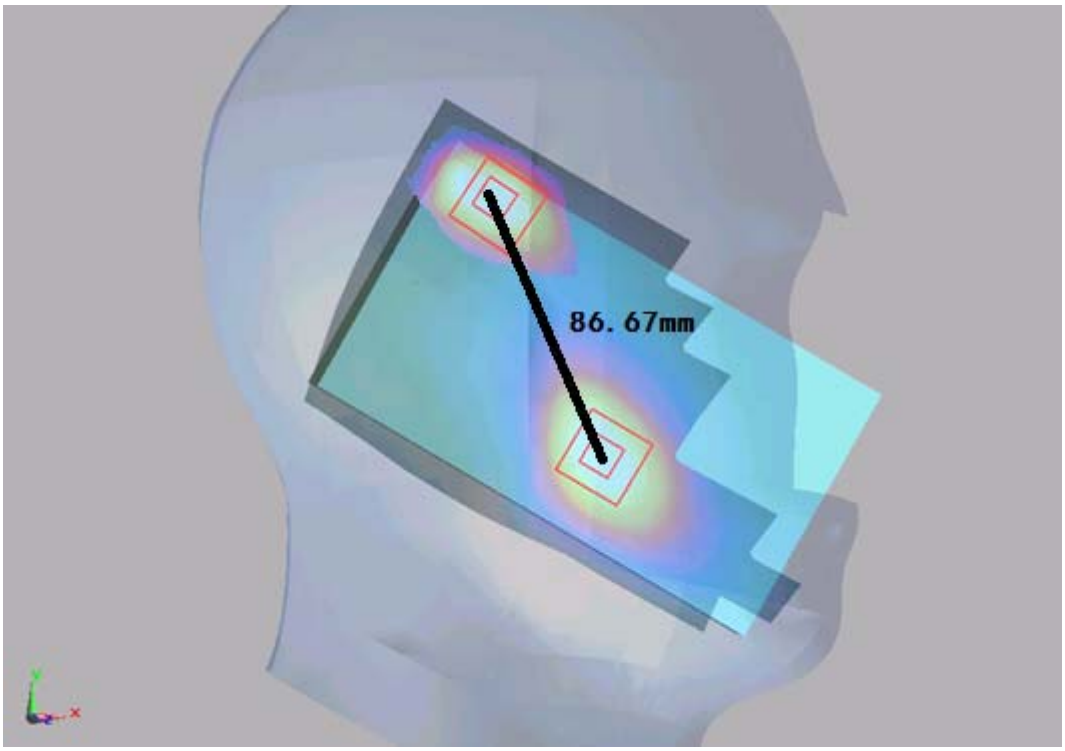
Note: 1.The value with blue color is the maximum ΣSAR_{1g} Value.
2. MAX. ΣSAR_{1g} =Unlicensed SAR_{MAX} +Licensed SAR_{MAX}

Simultaneous Transmission for test position of Left Touch

SAR_{1g} (W/kg) / Test Position	GSM 850	GSM 1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE B2	LTE B4	LTE B5	LTE B7	LTE B12	LTE B17	LTE B25	LTE B26	WiFi	MAX. ΣSAR_{1g}	Peak location separation ratio
Left, Touch	0.152	/	/	/	/	/	/	/	/	/	/	/	/	**1.154**	1.306	NA
	/	0.180	/	/	/	/	/	/	/	/	/	/	/	**1.154**	1.334	NA
	/	/	0.476	/	/	/	/	/	/	/	/	/	/	**1.154**	1.630	Yes
	/	/	/	0.371	/	/	/	/	/	/	/	/	/	**1.154**	1.525	NA
	/	/	/	/	0.171	/	/	/	/	/	/	/	/	**1.154**	1.325	NA
	/	/	/	/	/	0.412	/	/	/	/	/	/	/	**1.154**	1.566	NA
	/	/	/	/	/	/	0.397	/	/	/	/	/	/	**1.154**	1.551	NA
	/	/	/	/	/	/	/	0.190	/	/	/	/	/	**1.154**	1.344	NA
	/	/	/	/	/	/	/	/	0.376	/	/	/	/	**1.154**	1.53	NA
	/	/	/	/	/	/	/	/	/	0.201	/	/	/	**1.154**	1.355	NA
	/	/	/	/	/	/	/	/	/	/	0.202	/	/	**1.154**	1.356	NA
	/	/	/	/	/	/	/	/	/	/	/	0.536	/	**1.154**	1.690	Yes
	/	/	/	/	/	/	/	/	/	/	/	/	0.139	**1.154**	1.293	NA

- **Pair Simultaneous Transmission for UMTS Band II and WiFi**

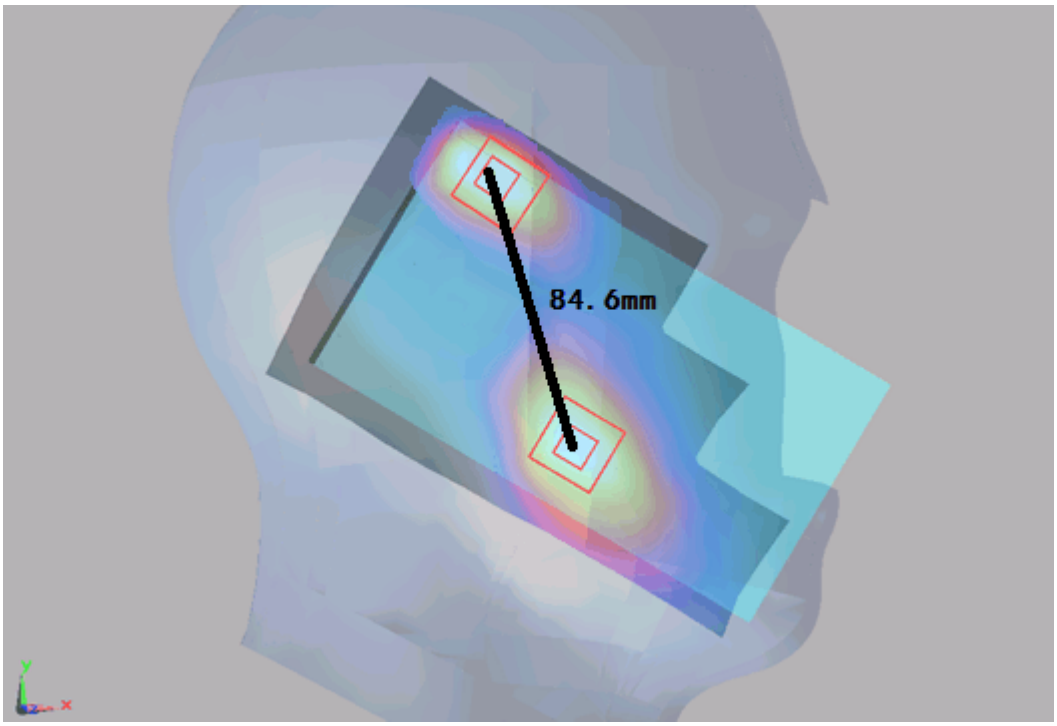
The position $SAR_{UMTS\ Band\ II}$ is (x_1= 71.59, y_1= 254.4, z_1= -171.1),
The position $SAR_{Max.WiFi}$ is(x_2= 37.82, y_2= 334.2, z_2= -173.1)
so the distance between the $SAR_{Max.\ UMTS\ Band\ II}$ and $SAR_{Max.WiFi}$ is 86.67mm.



The peak location separation ratio is 0.024<0.04, so the Simultaneous transimition SAR with volum scan are not required for WiFi and UMTS Band II antenna.

- **Pair Simultaneous Transmission for LTE 25 and WiFi**

The position $SAR_{LTE\ 25}$ is (x_1= 63.46, y_1= 253.6, z_1= -171.1),
The position $SAR_{Max.WiFi}$ is(x_2= 37.82, y_2= 334.2, z_2= -173.1)
so the distance between the $SAR_{Max.LTE\ 25}$ and $SAR_{Max.WiFi}$ is 84.6mm.



The peak location separation ratio is 0.027<0.04, so the Simultaneous transimition SAR with volum scan are not required for WiFi and LTE 25 antenna.

8. Measurement Uncertainty

The measured SAR were <1.5 W/kg for all frequency bands, therefore per KDB Publication 865664 D01v01r03, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2003 is not required in SAR reports.

9. Main Test Instruments

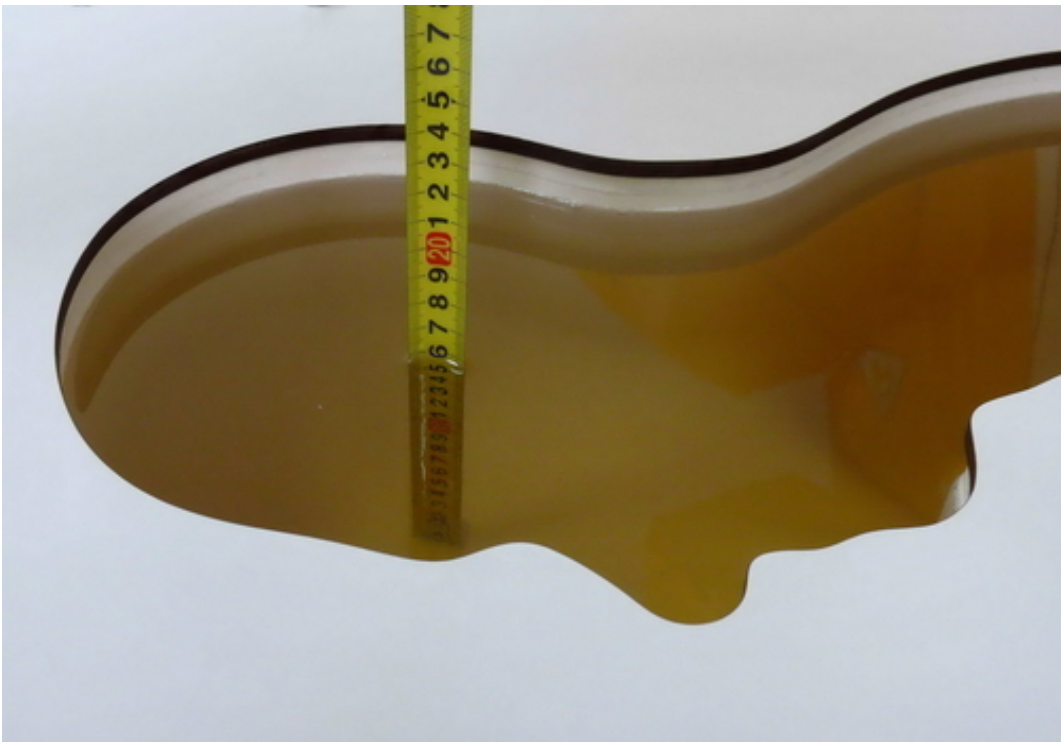
Table 70: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Expiration Time	Valid Period
01	Network analyzer	E5071B	MY42404014	2015-05-24	2016-05-23	1 year
02	Dielectric Probe Kit	Agilent 85070E	US44020115	No Calibration Requested		
03	Power meter	Agilent E4417A	GB41291714	2015-03-08	2016-03-07	1 year
04	Power sensor	Agilent N8481H	MY50350004	2014-09-24	2015-09-23	1 year
05	Power sensor	E9327A	US40441622	2015-01-02	2016-01-01	1 year
06	Signal Generator	HP 8341B	2730A00804	2014-09-02	2015-09-01	1 year
07	Dual directional coupler	778D-012	50519	2015-03-02	2016-03-01	1 year
08	Dual directional coupler	777D	50146	2015-03-02	2016-03-01	1 year
09	Amplifier	IXA-020	0401	No Calibration Requested		
10	Wideband radio communication tester	CMW 500	113645	2014-09-28	2015-09-27	1 year
11	E-field Probe	EX3DV4	3677	2015-01-30	2016-01-29	1 year
12	DAE	DAE4	1291	2014-11-14	2015-11-13	1 year
13	Validation Kit 750MHz	D750V3	1017	2014-08-28	2017-08-27	3 years
14	Validation Kit 835MHz	D835V2	4d020	2014-08-28	2017-08-27	3 years
15	Validation Kit 1750MHz	D1750V2	1033	2014-01-26	2017-01-25	3 years
16	Validation Kit 1900MHz	D1900V2	5d060	2014-09-01	2017-08-31	3 years
17	Validation Kit 2450MHz	D2450V2	786	2014-09-01	2017-08-31	3 years
18	Validation Kit 2600MHz	D2600V2	1025	2014-12-08	2017-12-07	3 years
19	Temperature Probe	JM222	AA1009129	2015-03-02	2016-03-01	1 year
20	Hygrothermograph	WS-1	64591	2014-09-25	2015-09-24	1 year

*******END OF REPORT *******

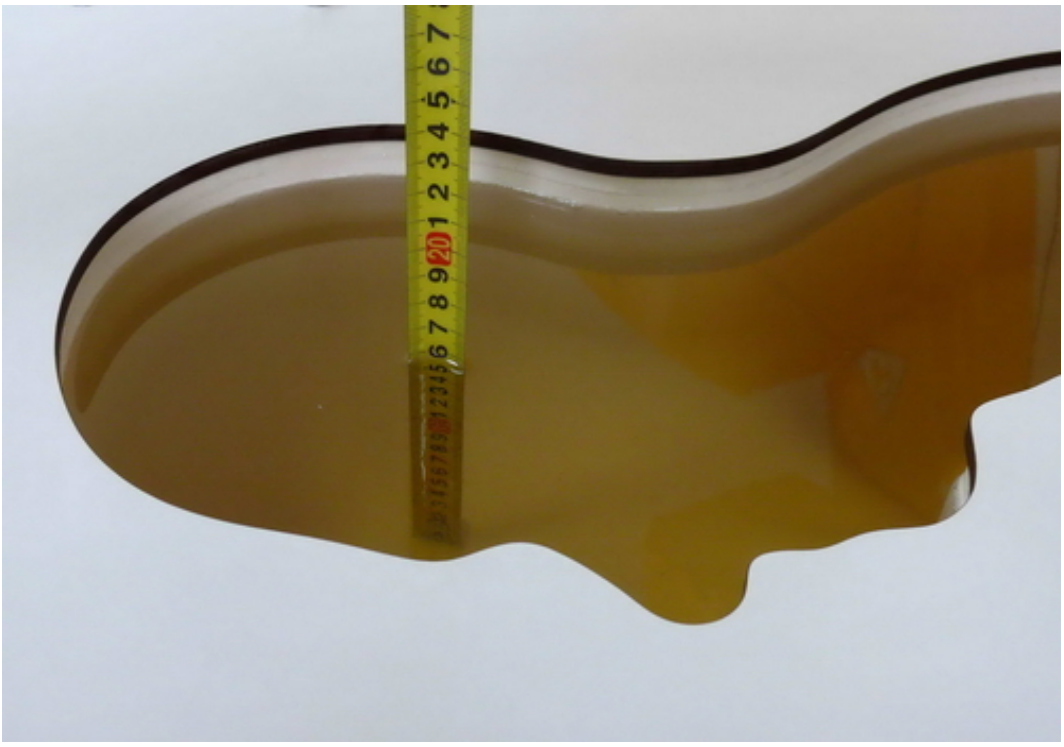
ANNEX A: Test Layout

Picture 1: Liquid depth in the flat Phantom (750MHz, 15.4cm depth)

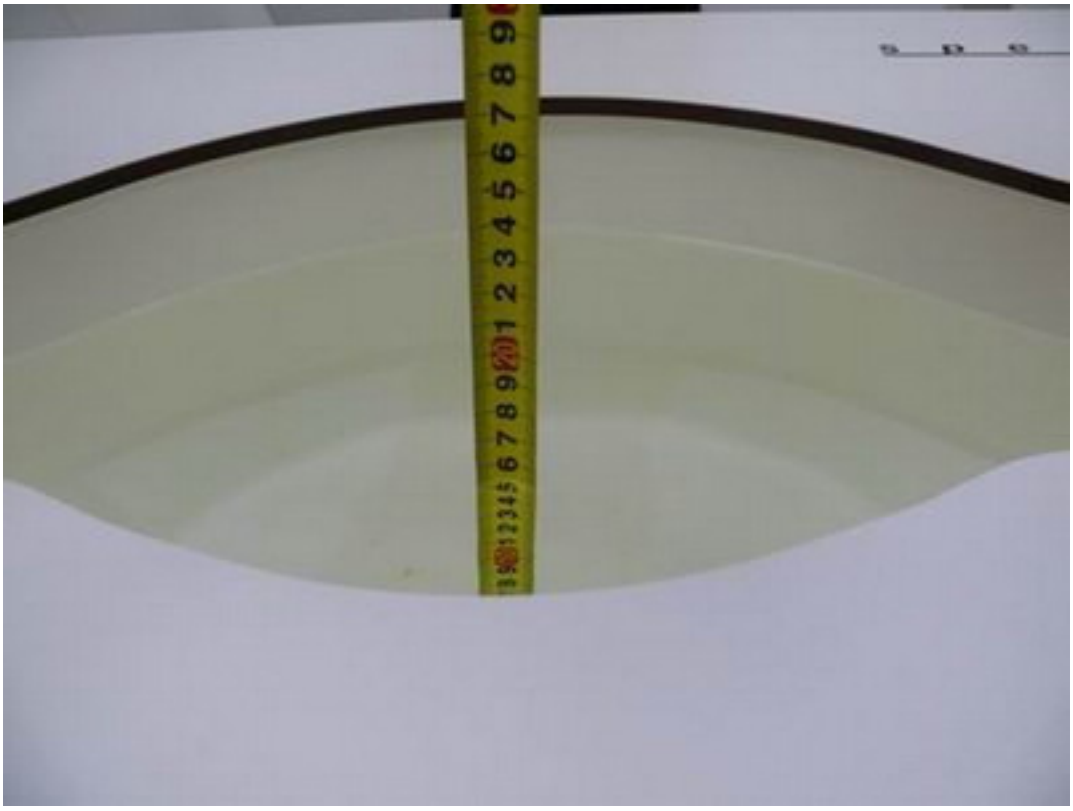


Picture 2: Liquid depth in the head Phantom (750MHz, 15.3cm depth)

Picture 3: Liquid depth in the flat Phantom (835MHz, 15.4cm depth)

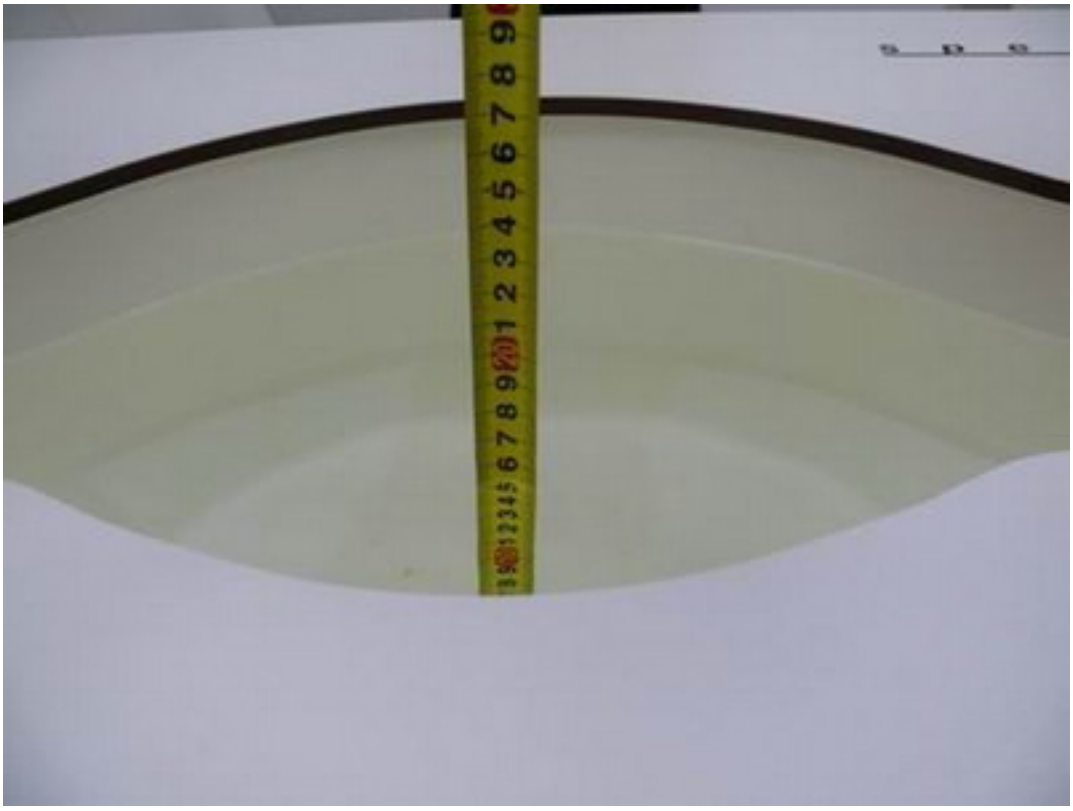


Picture 4: Liquid depth in the head Phantom (835MHz, 15.3cm depth)



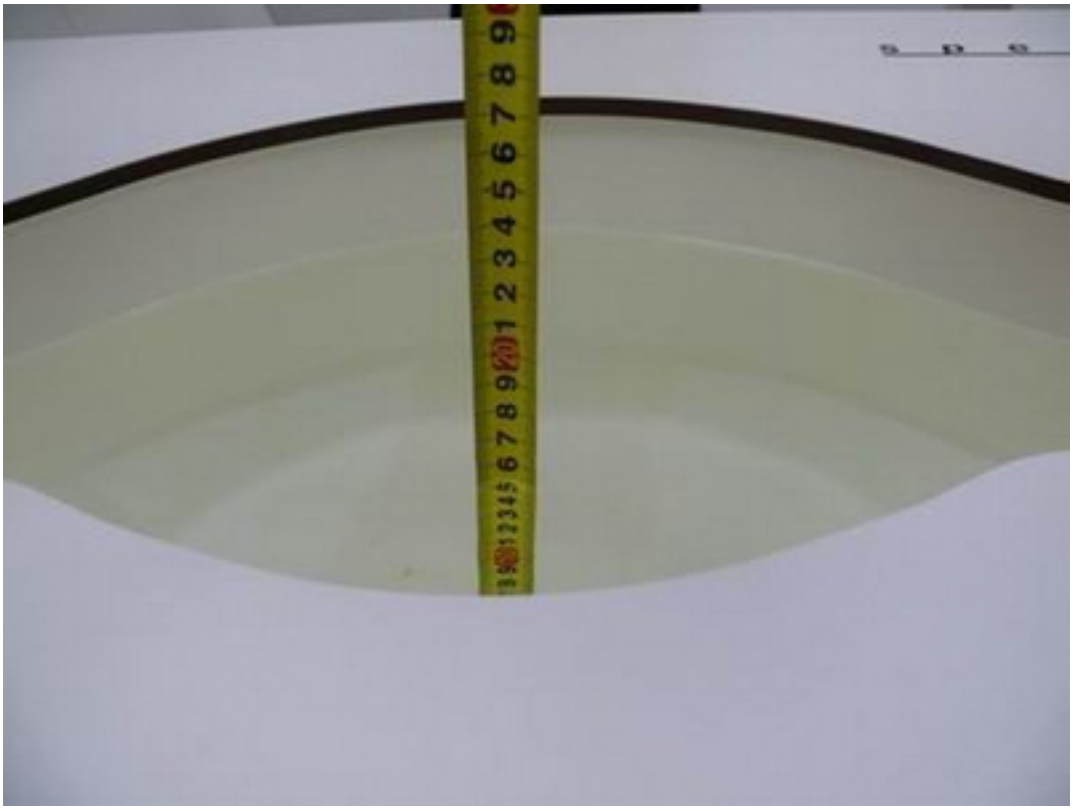
Picture 5: Liquid depth in the flat Phantom (1750 MHz, 15.2cm depth)

Picture 6: liquid depth in the head Phantom (1750 MHz, 15.3cm depth)



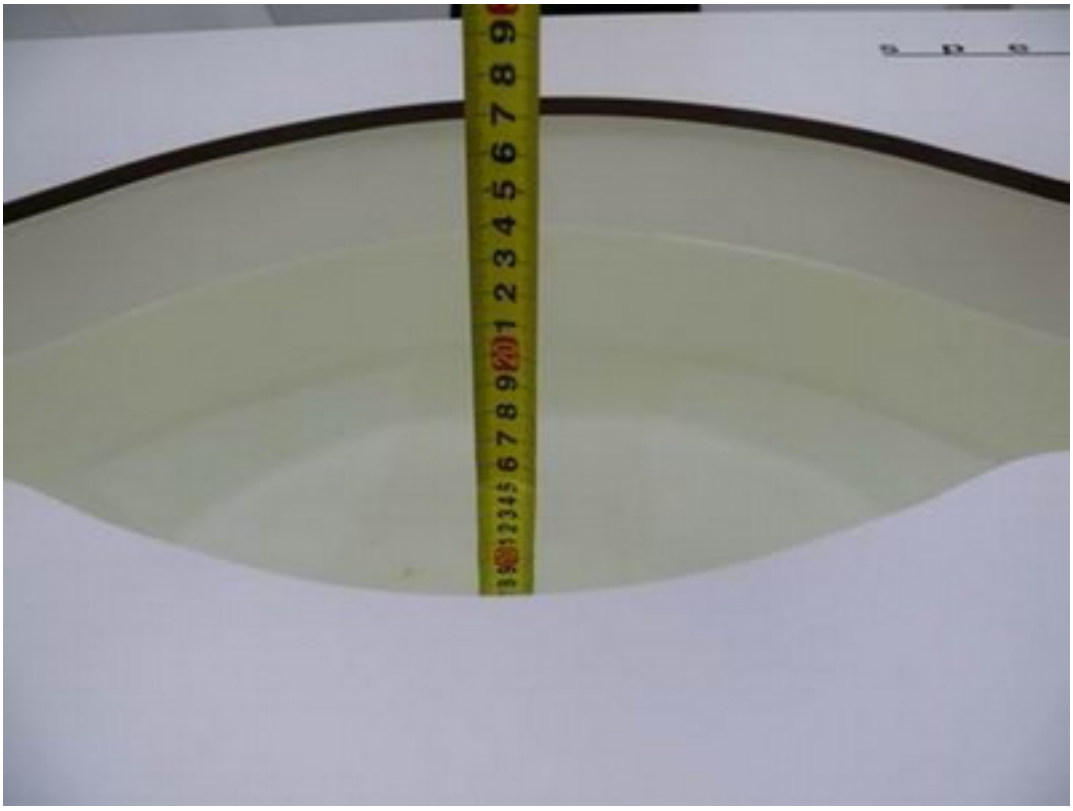
Picture 7: Liquid depth in the flat Phantom (1900 MHz, 15.2cm depth)

Picture 8: liquid depth in the head Phantom (1900 MHz, 15.3cm depth)



Picture 9: Liquid depth in the flat Phantom (2450 MHz, 15.3cm depth)

Picture 10: Liquid depth in the head Phantom (2450 MHz, 15.4cm depth)



Picture 11: Liquid depth in the flat Phantom (2600 MHz, 15.3cm depth)

Picture 12: Liquid depth in the head Phantom (2600 MHz, 15.4cm depth)

ANNEX B: System Check Results

System Performance Check at 750 MHz Head TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017

Date: 6/25/2015

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

Medium parameters used: f = 750 MHz; σ = 0.87 S/m; ε_r = 42.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=15mm,Pin=250mW/Area Scan (41x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

d=15mm,Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

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

Peak SAR (extrapolated) = 3.16 W/kg

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

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

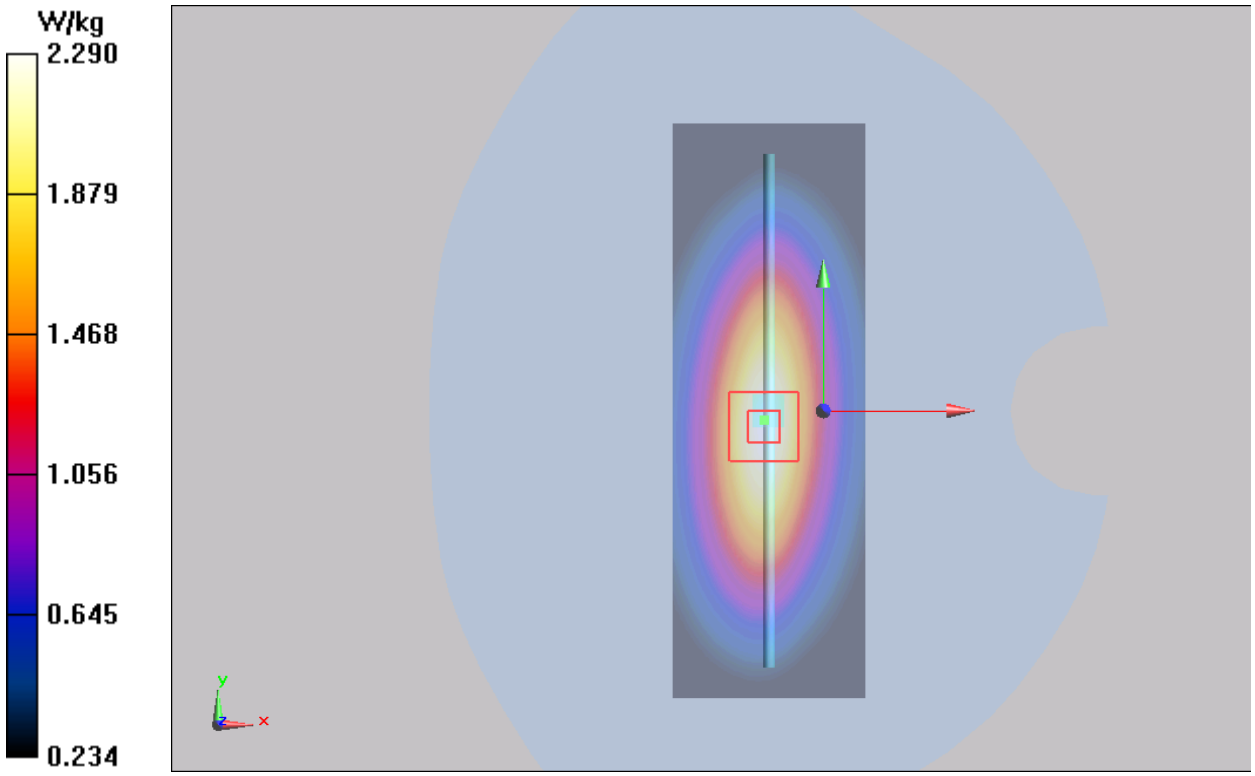


Figure 7 System Performance Check 750MHz 250mW

System Performance Check at 750 MHz Body TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017

Date: 6/26/2015

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

Medium parameters used: f = 750 MHz; σ = 0.95 S/m; ε_r = 57.0; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=15mm, Pin=250mW/Area Scan (41x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.36 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 48.998 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.24 W/kg

SAR(1 g) = 2.22 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (measured) = 2.39 W/kg

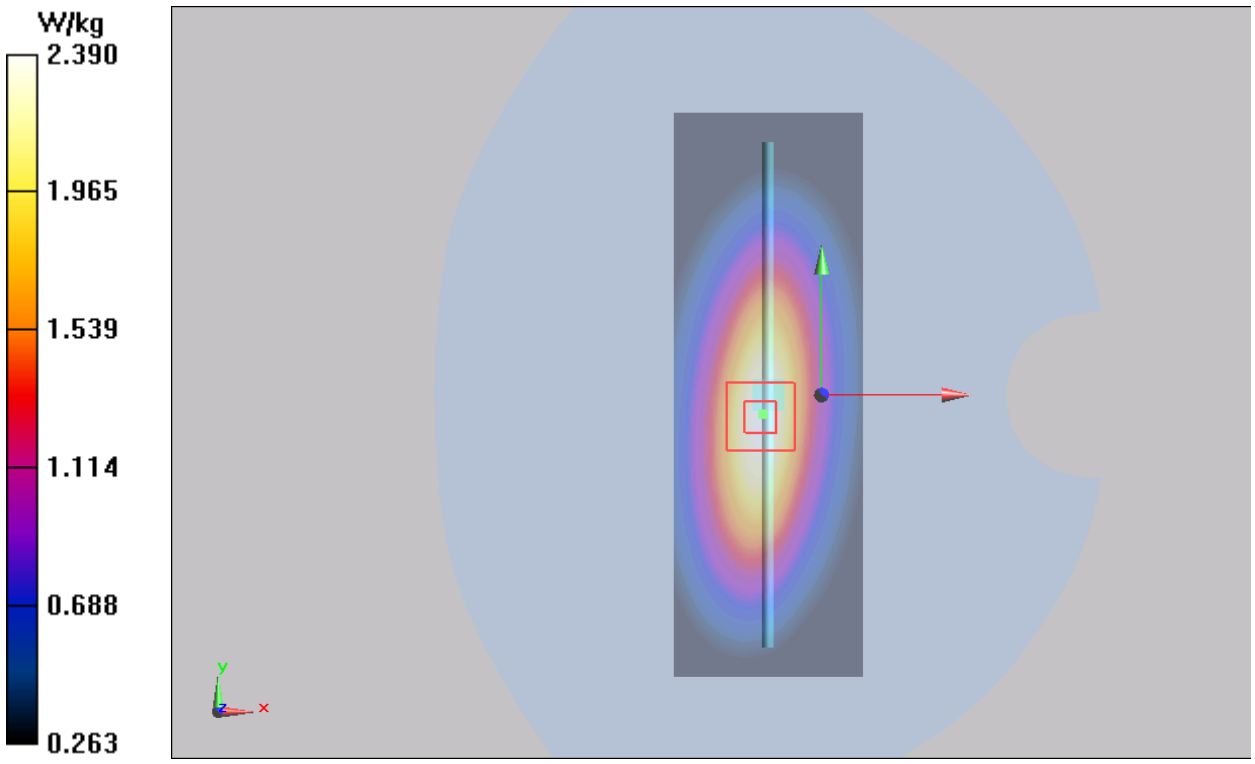


Figure 8 System Performance Check 750MHz 250mW

System Performance Check at 750 MHz Body TSL

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1017

Date: 6/27/2015

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

Medium parameters used: f = 750 MHz; σ = 0.97 S/m; ε_r = 56.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=15mm, Pin=250mW/Area Scan (41x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.36 W/kg

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 48.998 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.24 W/kg

SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.46 W/kg

Maximum value of SAR (measured) = 2.365 W/kg

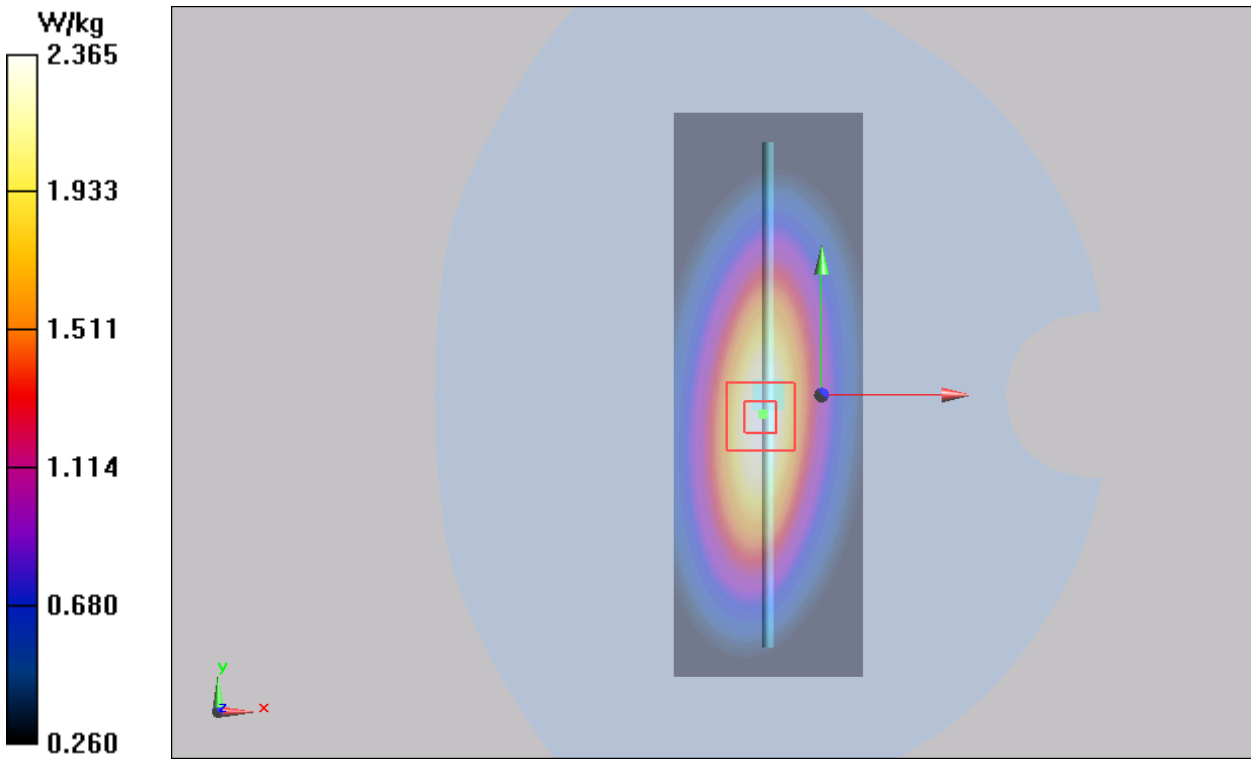


Figure 9 System Performance Check 750MHz 250mW

System Performance Check at 835 MHz Head TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020

Date: 6/30/2015

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=15mm, Pin=250mW/Area Scan (41x121x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

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

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, 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

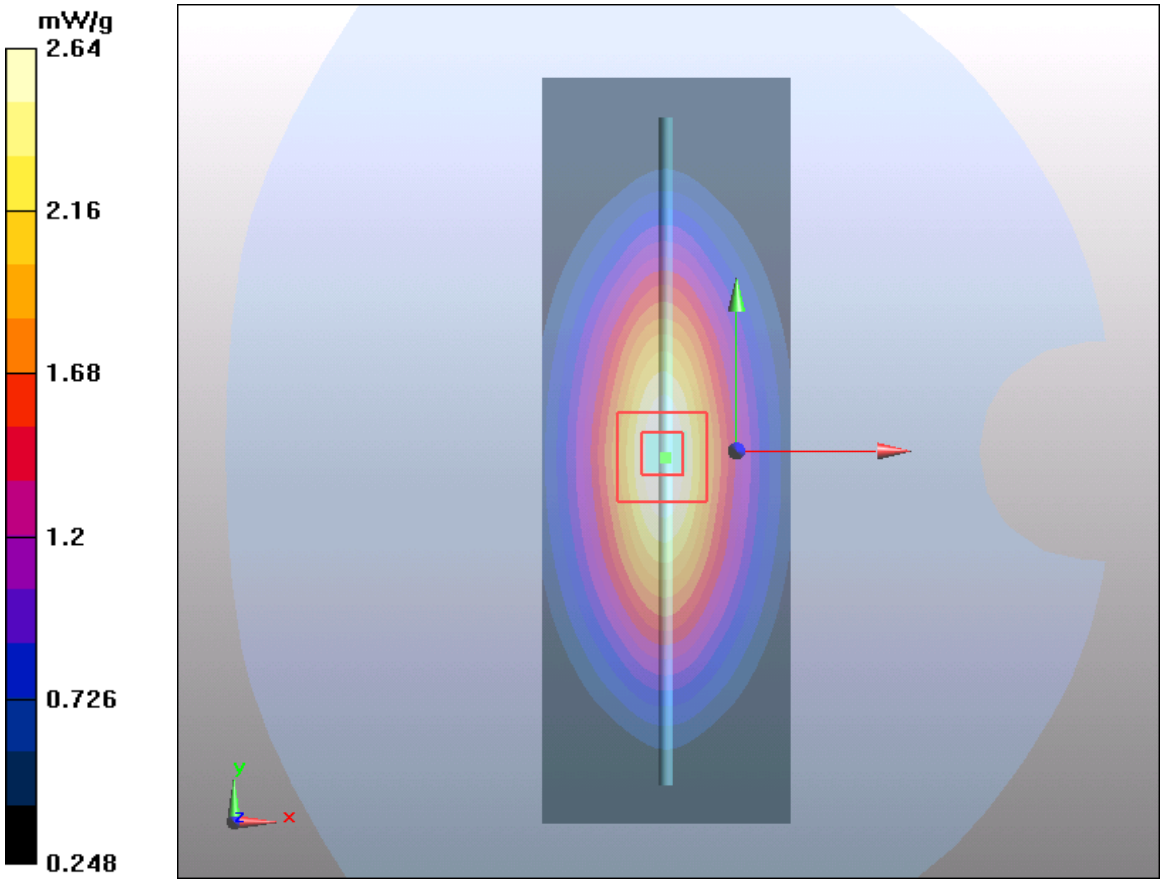


Figure 10 System Performance Check 835MHz 250mW

System Performance Check at 835 MHz Head TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020

Date: 7/2/2015

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

Medium parameters used: f = 835 MHz; σ = 0.89 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=15mm, Pin=250mW/Area Scan (41x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 2.71 mW/g

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

Reference Value = 55.2 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 3.79 W/kg

SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.58 mW/g

Maximum value of SAR (measured) = 2.66 mW/g

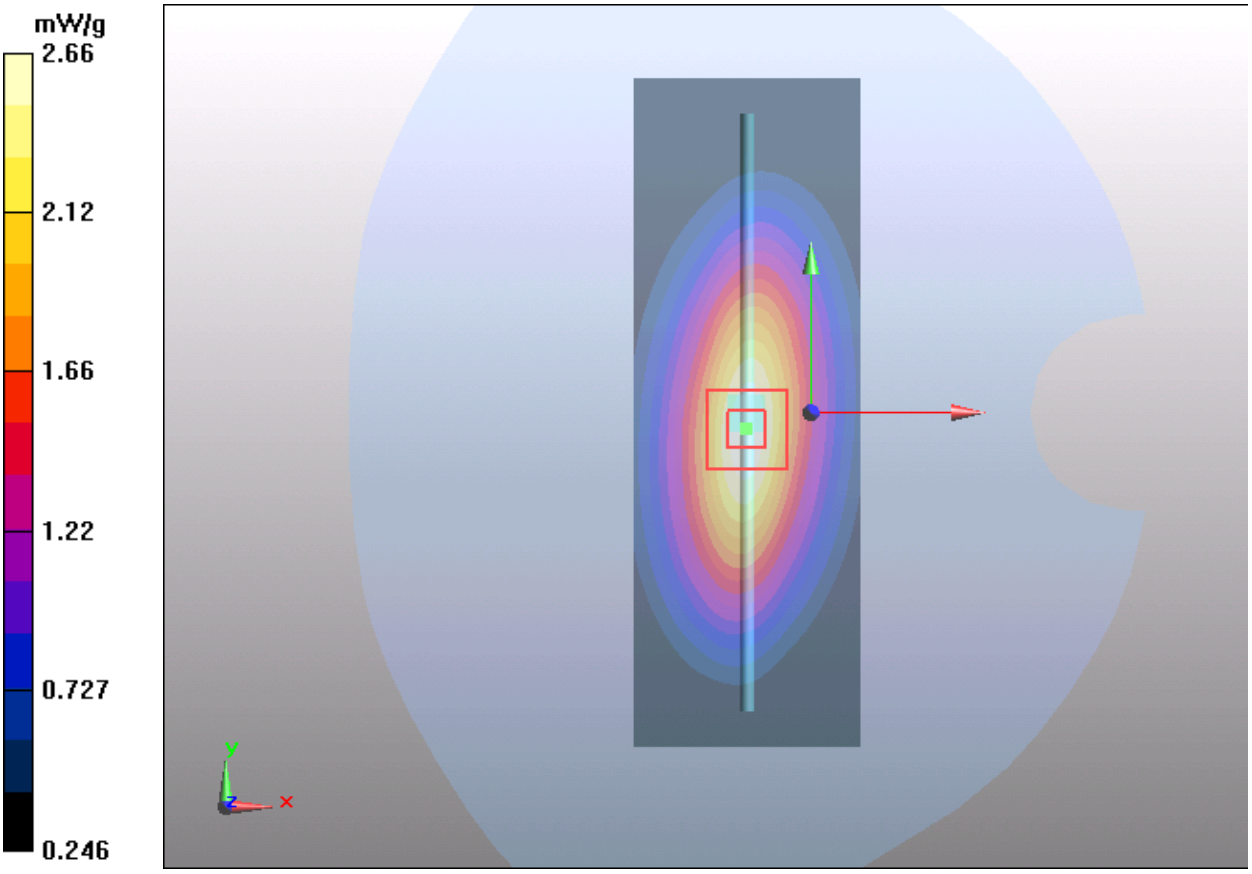


Figure 11 System Performance Check 835MHz 250mW

System Performance Check at 835 MHz Body TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020

Date: 7/1/2015

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

Medium parameters used: f = 835 MHz; σ = 1.01 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=15mm, Pin=250mW/Area Scan (41x121x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.58 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.9 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 3.5 W/kg

SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.6 mW/g

Maximum value of SAR (measured) = 2.6 mW/g

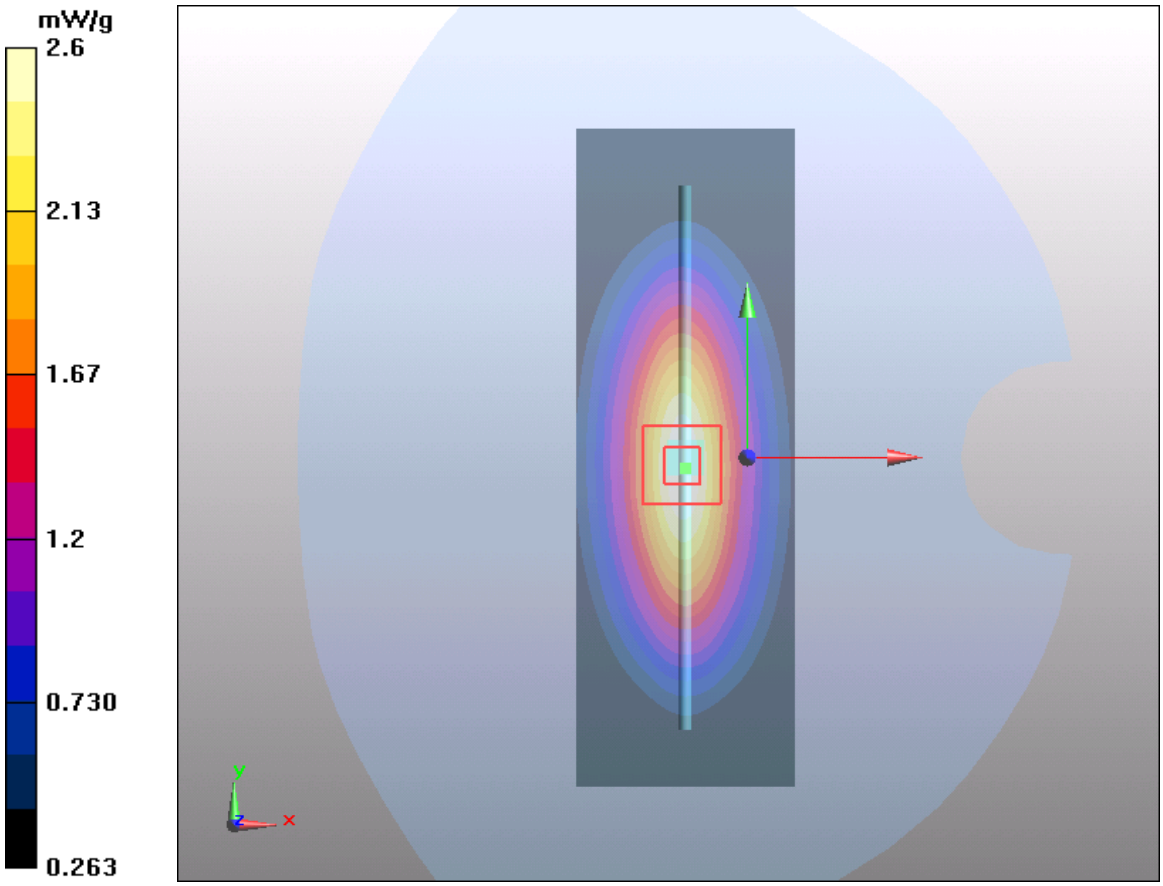


Figure 12 System Performance Check 835MHz 250mW

System Performance Check at 835 MHz Body TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020

Date: 7/3/2015

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

Medium parameters used: f = 835 MHz; σ = 0.98 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 59

d=15mm, Pin=250mW/Area Scan (41x121x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.61 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.09 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.48 W/kg

SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.67 mW/g

Maximum value of SAR (measured) = 2.73 mW/g

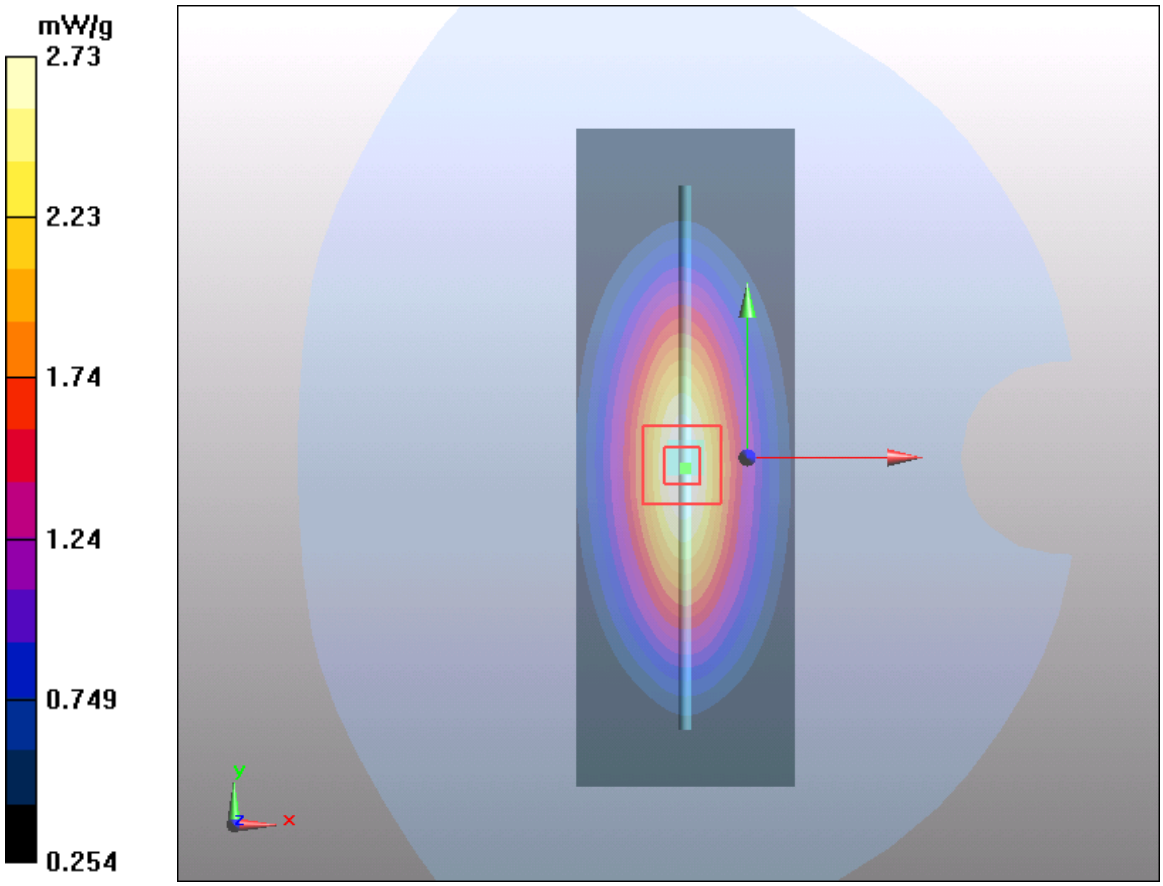


Figure 13 System Performance Check 835MHz 250mW

System Performance Check at 835 MHz Body TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020

Date: 7/4/2015

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

Medium parameters used: f = 835 MHz; σ = 0.97 mho/m; ε_r = 56.0; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 59

d=15mm, Pin=250mW/Area Scan (41x121x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.61 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.09 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 3.48 W/kg

SAR(1 g) = 2.49 mW/g; SAR(10 g) = 1. 72 mW/g

Maximum value of SAR (measured) = 2.79 mW/g

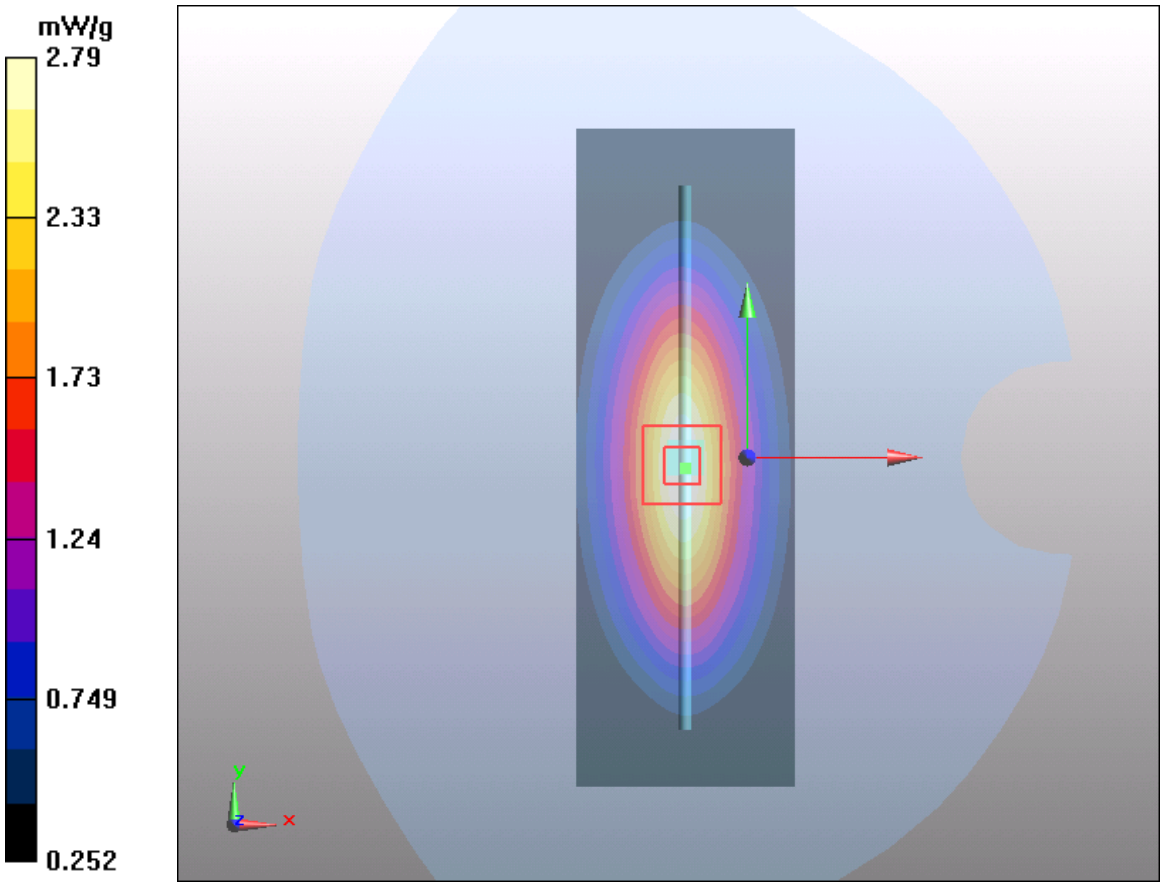


Figure 14 System Performance Check 835MHz 250mW

System Performance Check at 1750 MHz Head TSL

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

Date: 7/10/2015

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

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

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.02, 8.02, 8.02); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (51x81x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

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

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

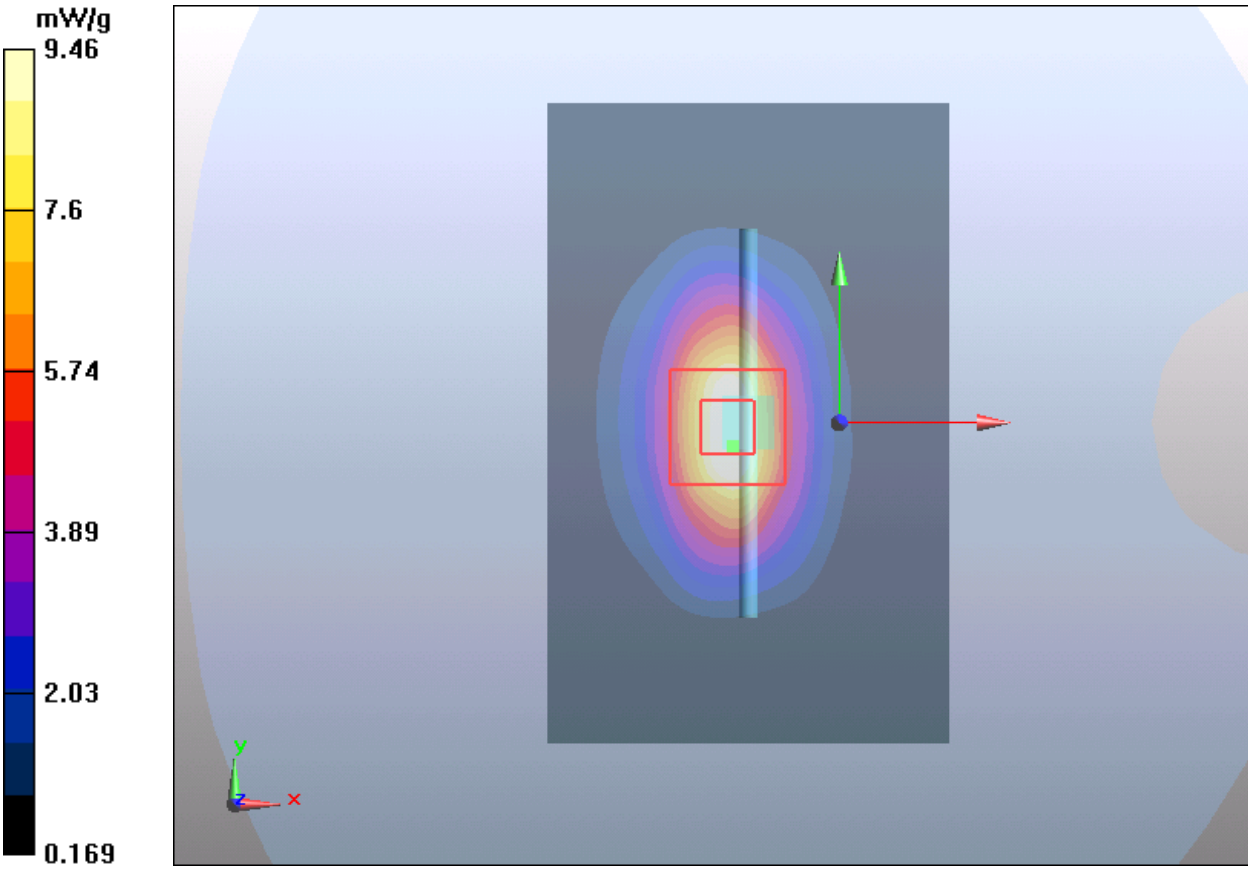


Figure 15 System Performance Check 1750MHz 250mW

System Performance Check at 1750 MHz Body TSL

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

Date: 7/7/2015

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

Medium parameters used: f = 1750 MHz; σ = 1.46 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.7℃

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (51x81x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.6 mW/g

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

Reference Value = 77.7 V/m; Power Drift = 0.097 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 9.24 mW/g; SAR(10 g) = 4.9 mW/g

Maximum value of SAR (measured) = 10.3 mW/g

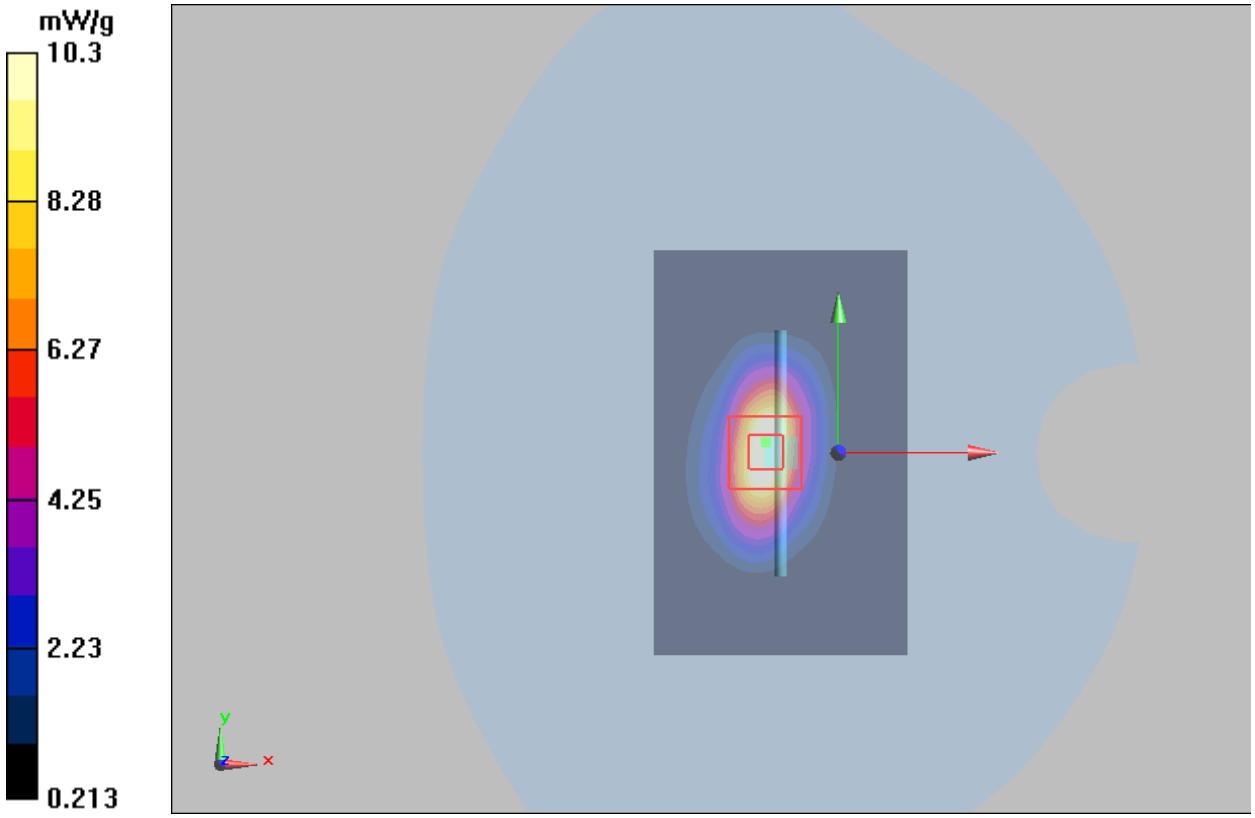


Figure 16 System Performance Check 1750MHz 250mW

System Performance Check at 1750 MHz Body TSL

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

Date: 7/9/2015

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

Medium parameters used: f = 1750 MHz; σ = 1.44 mho/m; ε_r = 53.0; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.7℃

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (51x81x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.6 mW/g

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

Reference Value = 77.7 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 9.27 mW/g; SAR(10 g) = 4.95 mW/g

Maximum value of SAR (measured) = 10.8 mW/g

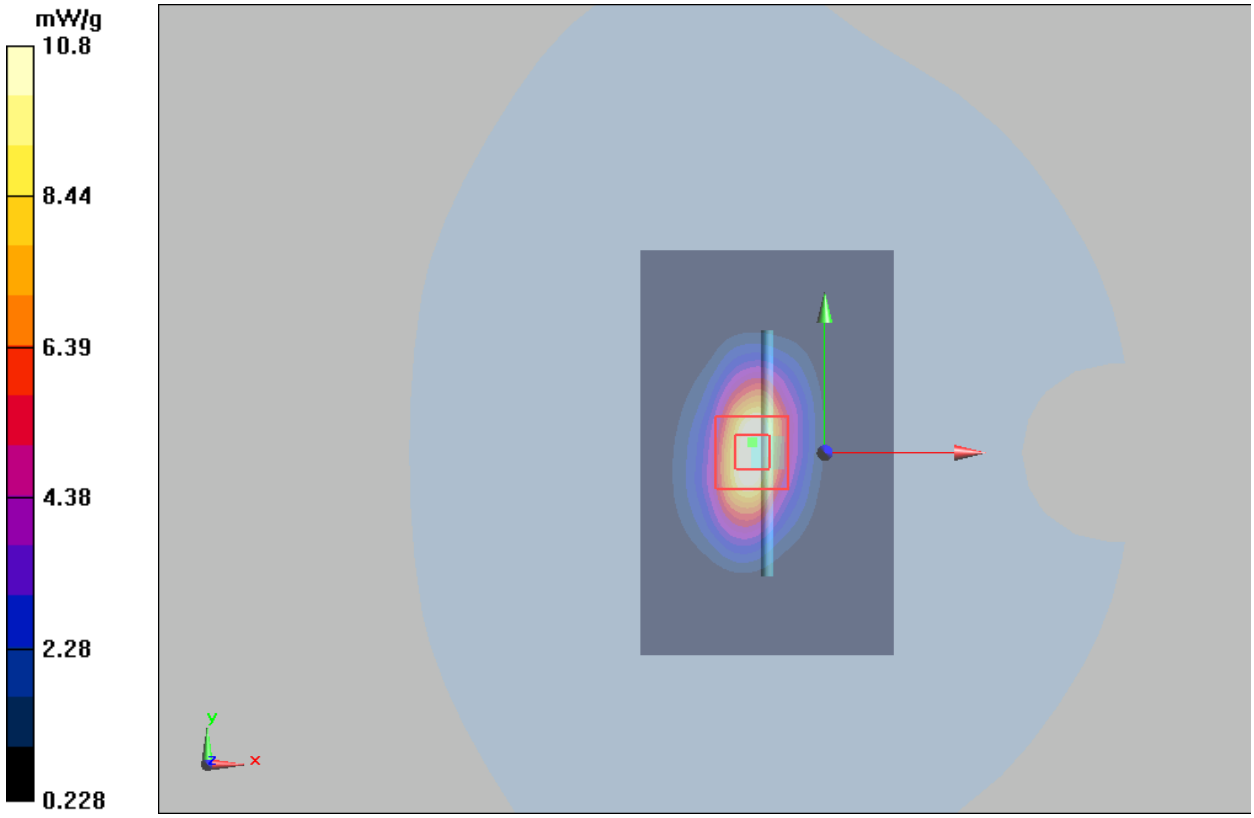


Figure 17 System Performance Check 1750MHz 250mW

System Performance Check at 1750 MHz Body TSL

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

Date: 8/3/2015

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

Medium parameters used: f = 1750 MHz; σ = 1.48 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.7℃

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (51x81x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 10.1 mW/g

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

Reference Value = 76.9 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 16.5 W/kg

SAR(1 g) = 9.25 mW/g; SAR(10 g) = 4.73 mW/g

Maximum value of SAR (measured) = 10.37 mW/g

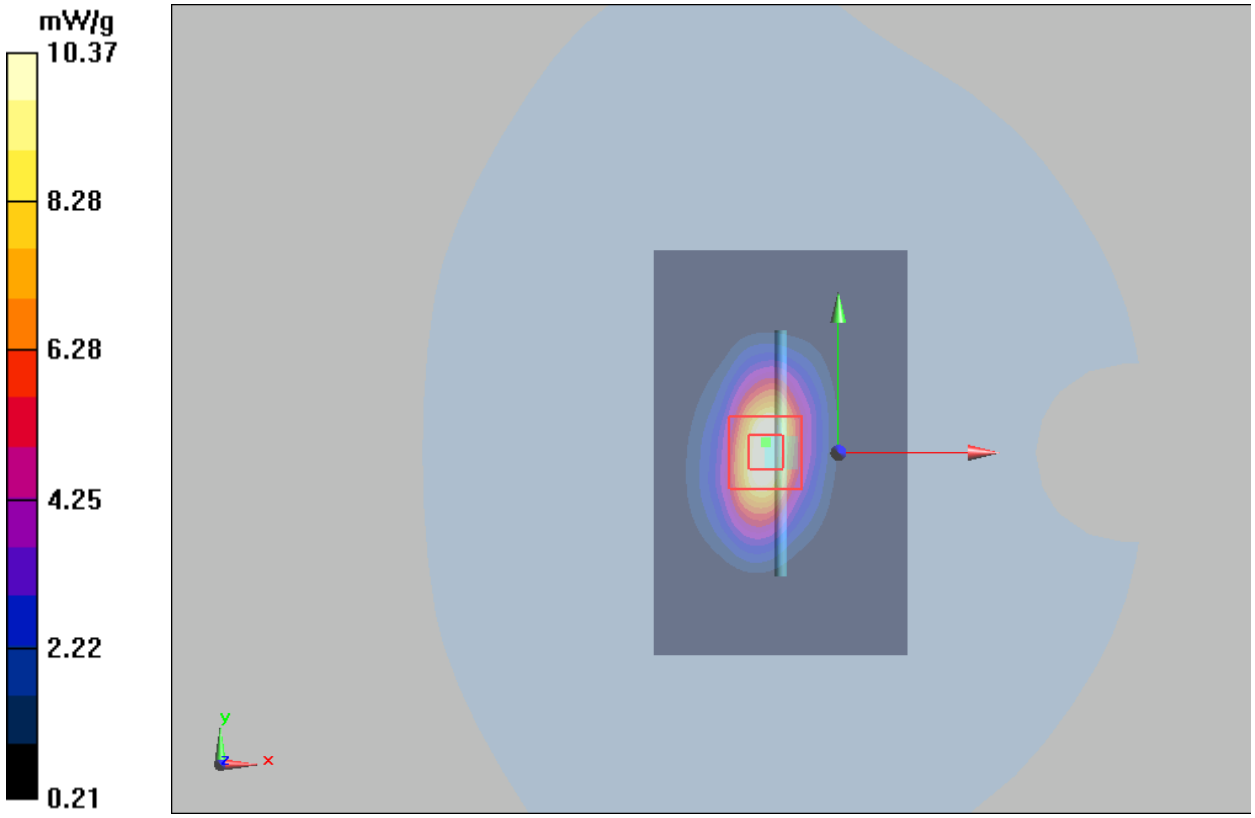


Figure 18 System Performance Check 1750MHz 250mW

System Performance Check at 1900 MHz Head TSL

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

Date: 7/13/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.41 mho/m; ε_r = 40.7; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

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

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

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

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 9.48 mW/g; SAR(10 g) = 4.9 mW/g

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

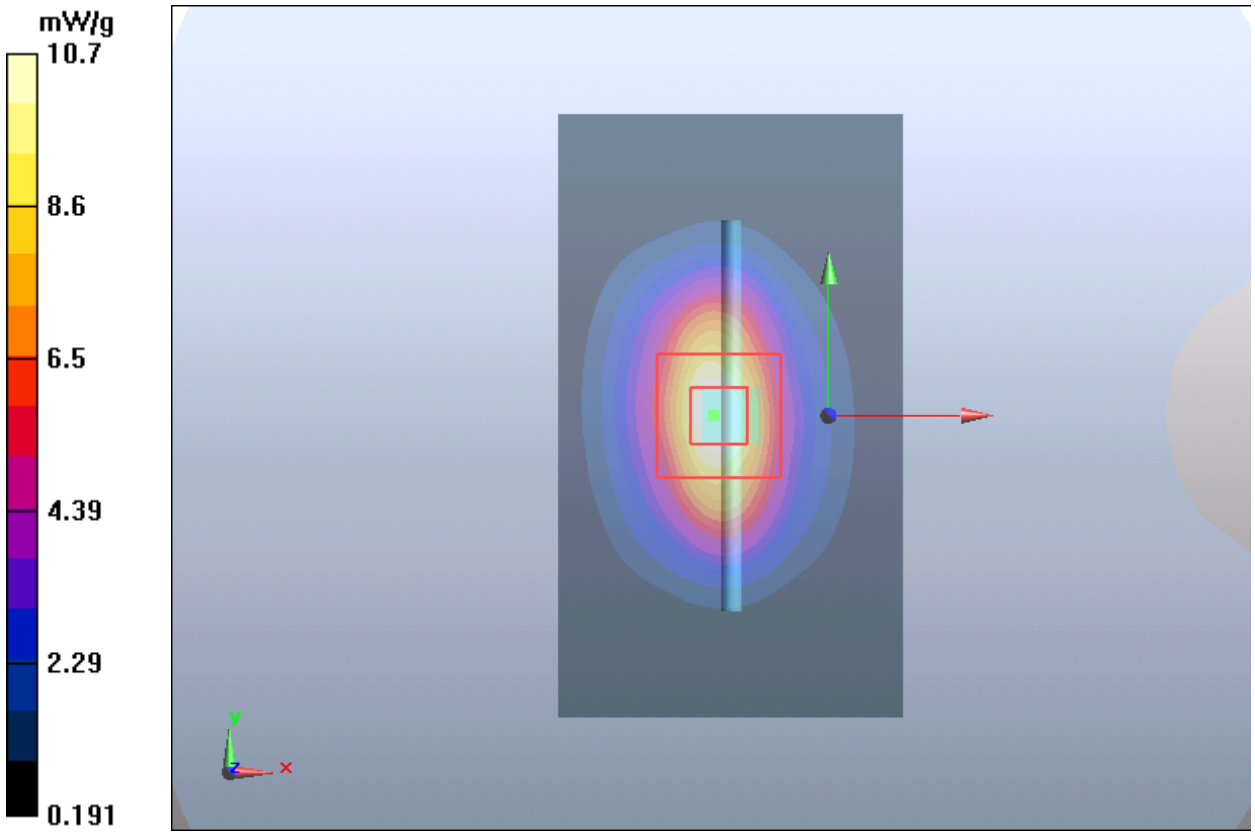


Figure 19 System Performance Check 1900MHz 250mW

System Performance Check at 1900 MHz Head TSL

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

Date: 7/16/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 12.9 mW/g

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

Reference Value = 87.8 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 20.1 W/kg

SAR(1 g) = 9.59 mW/g; SAR(10 g) = 5.09 mW/g

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

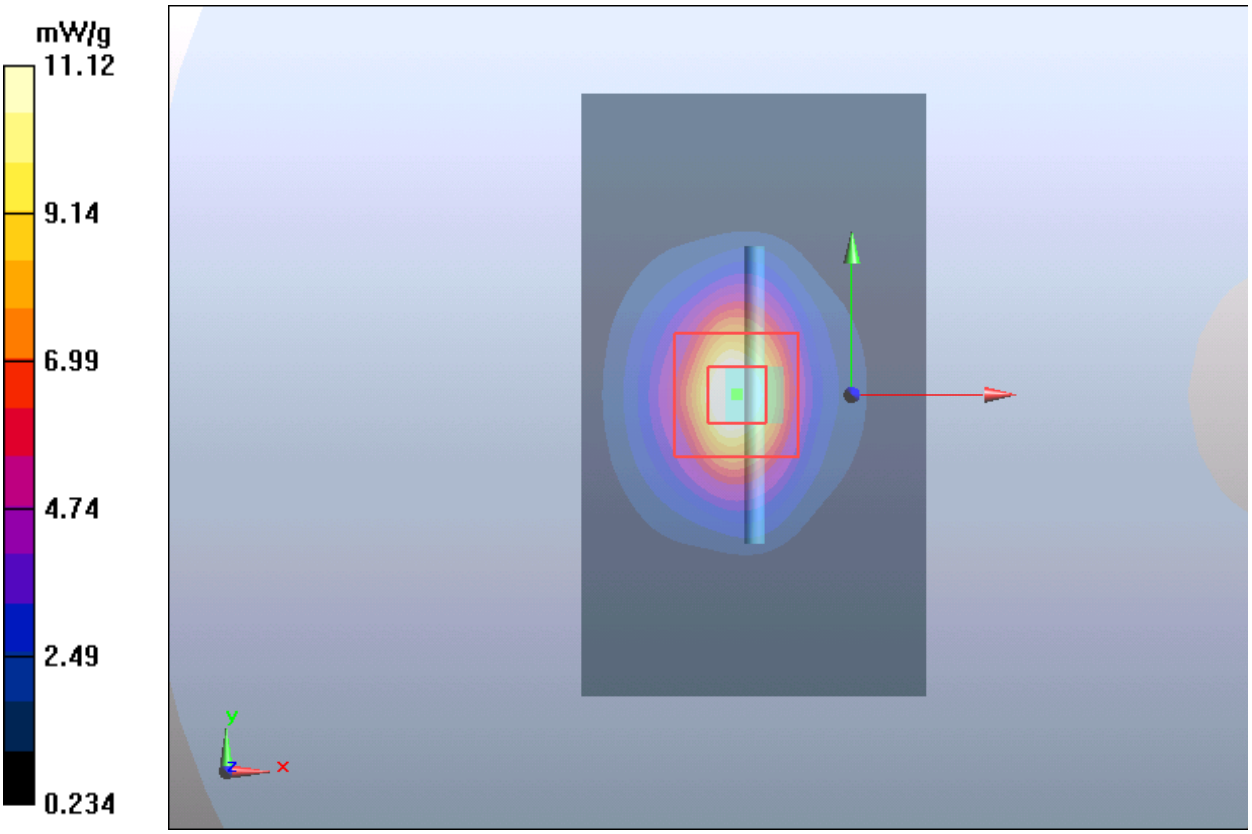


Figure 20 System Performance Check 1900MHz 250mW

System Performance Check at 1900 MHz Body TSL

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

Date: 7/8/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.51 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 12.2 mW/g

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

Reference Value = 82.3 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 9.93 mW/g; SAR(10 g) = 5.25 mW/g

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

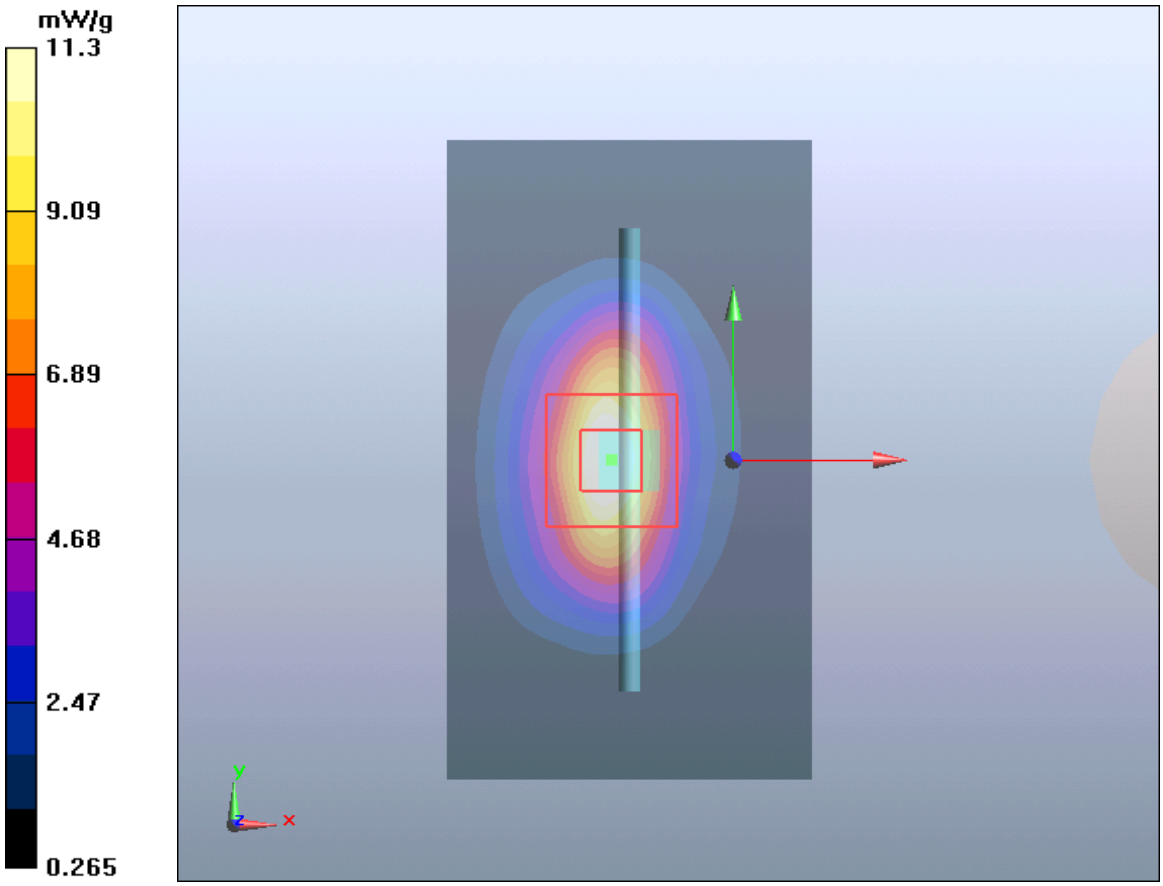


Figure 21 System Performance Check 1900MHz 250mW

System Performance Check at 1900 MHz Body TSL

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

Date: 7/14/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.48 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 11.9 mW/g

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

Reference Value = 80.8 V/m; Power Drift = -0.063 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 9.82 mW/g; SAR(10 g) = 5.2 mW/g

Maximum value of SAR (measured) = 11 mW/g

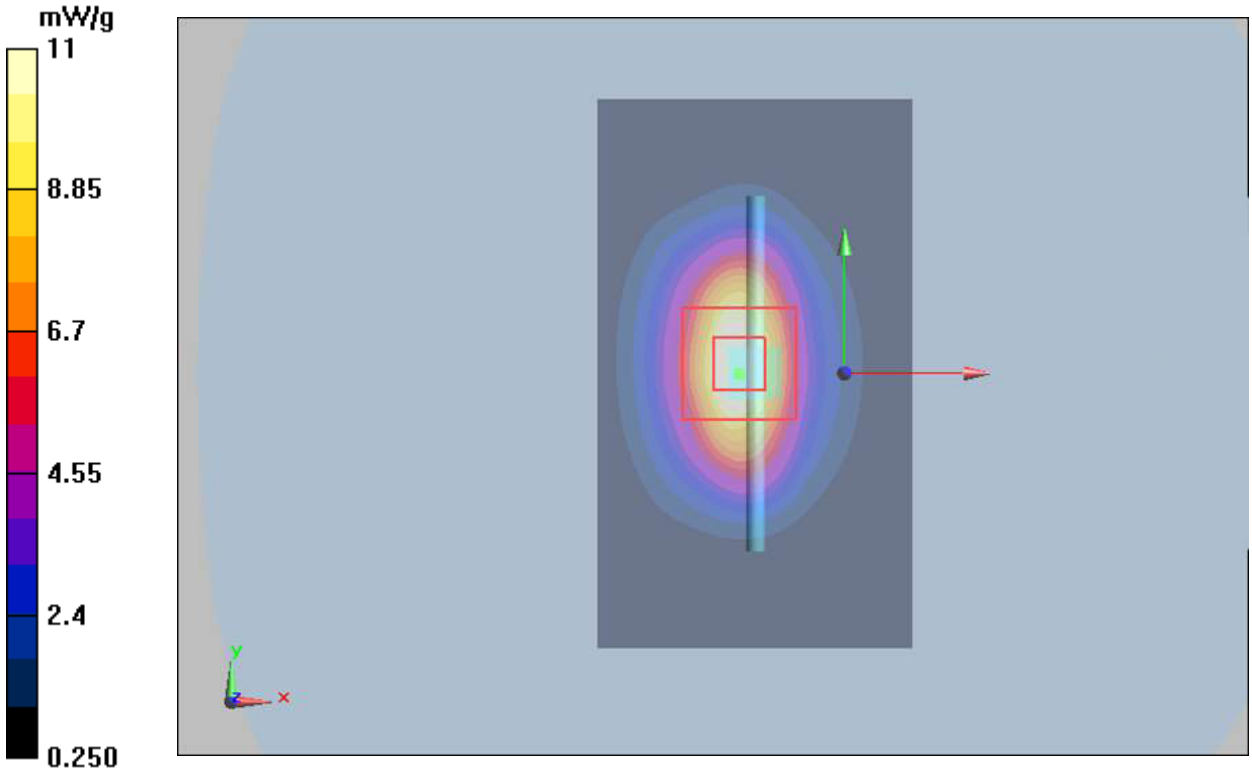


Figure 22 System Performance Check 1900MHz 250mW

System Performance Check at 1900 MHz Body TSL

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

Date: 7/15/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.49 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 11.9 mW/g

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

Reference Value = 80.8 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 9.83 mW/g; SAR(10 g) = 5.2 mW/g

Maximum value of SAR (measured) = 11.52 mW/g

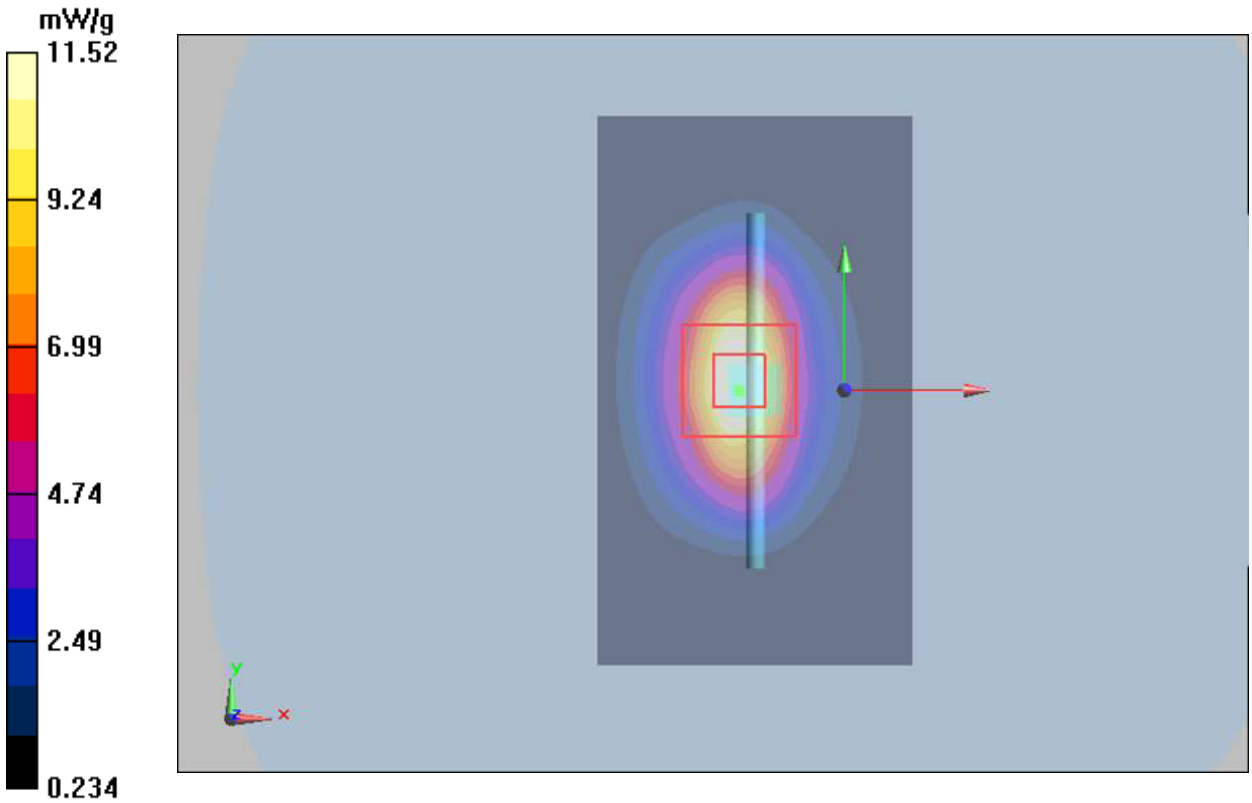


Figure 23 System Performance Check 1900MHz 250mW

System Performance Check at 2450 MHz Head TSL

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

Date: 7/5/2015

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

Medium parameters used: f = 2450 MHz; σ = 1.83 mho/m; ε_r = 38.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.22, 7.22, 7.22); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.200 mm, dy=1.200 mm

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

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

Reference Value = 88.8 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 30 W/kg

SAR(1 g) = 13.7 mW/g; SAR(10 g) = 6.22 mW/g

Maximum value of SAR (measured) = 15.9 mW/g

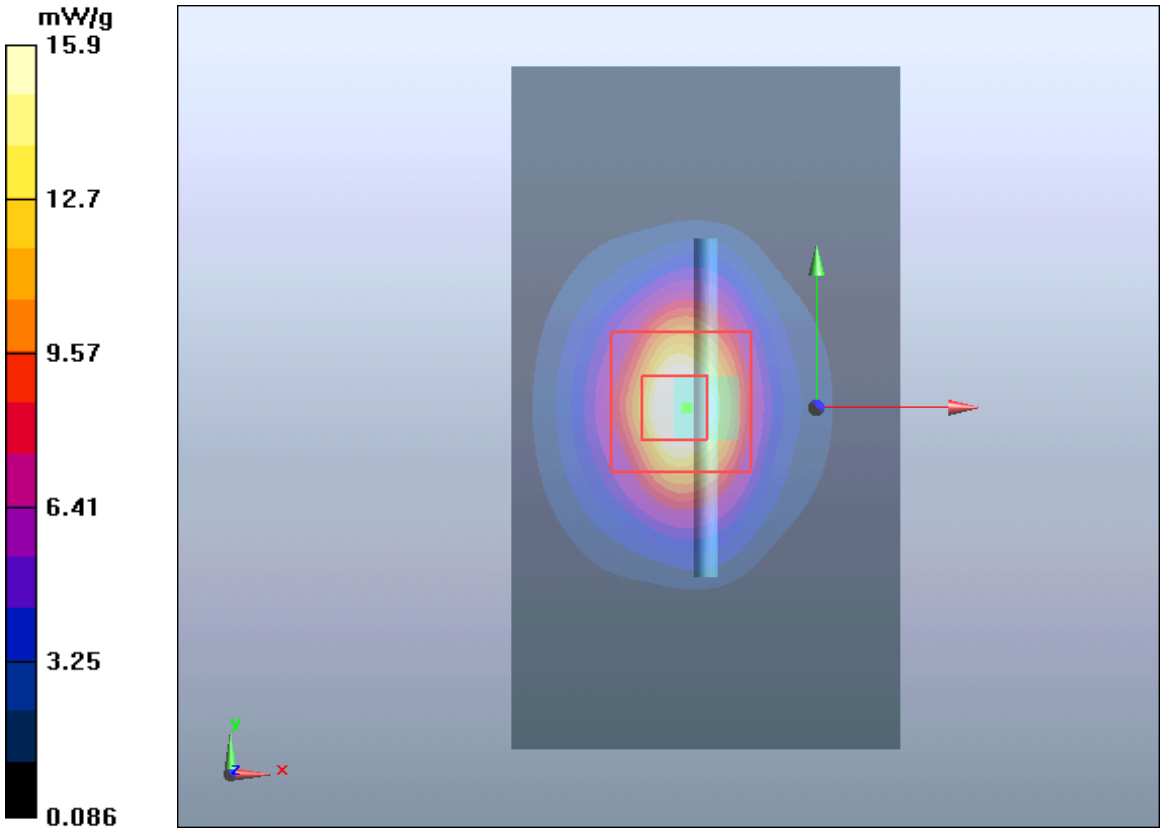


Figure 24 System Performance Check 2450MHz 250mW

System Performance Check at 2450 MHz Body TSL

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

Date: 7/11/2015

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

Medium parameters used: f = 2450 MHz; σ = 1.99 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.42, 7.42, 7.42); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM2; Type: SAM; Serial: TP-1524

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 16 mW/g

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

Reference Value = 81.2 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 25.4 W/kg

SAR(1 g) = 12.5 mW/g; SAR(10 g) = 6.20 mW/g

Maximum value of SAR (measured) = 14.4 mW/g

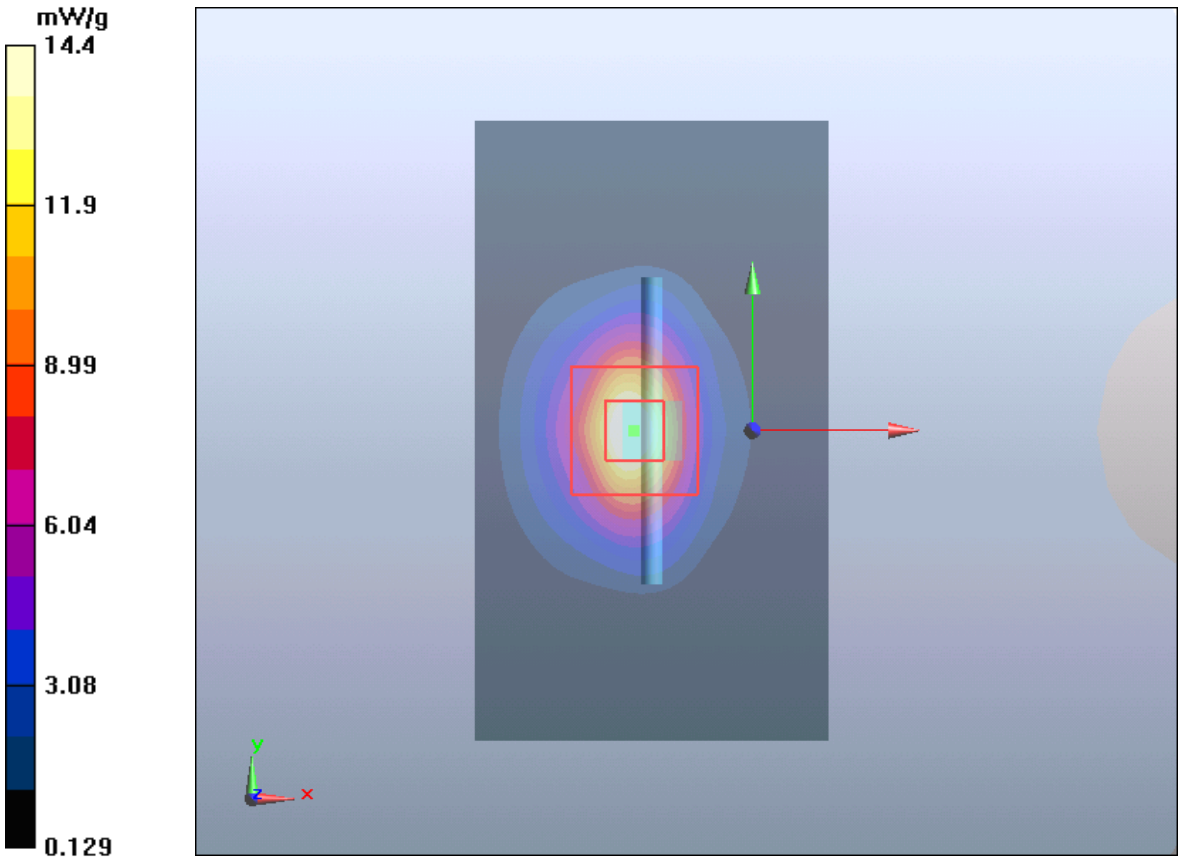


Figure 25 System Performance Check 2450MHz 250mW

System Performance Check at 2600 MHz Head TSL

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

Date: 7/17/2015

Communication System: CW; Frequency: 2600 MHz

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(6.94, 6.94, 6.94); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=1.200 mm, dy=1.200 mm

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

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

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

Peak SAR (extrapolated) = 31.858 W/kg

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

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

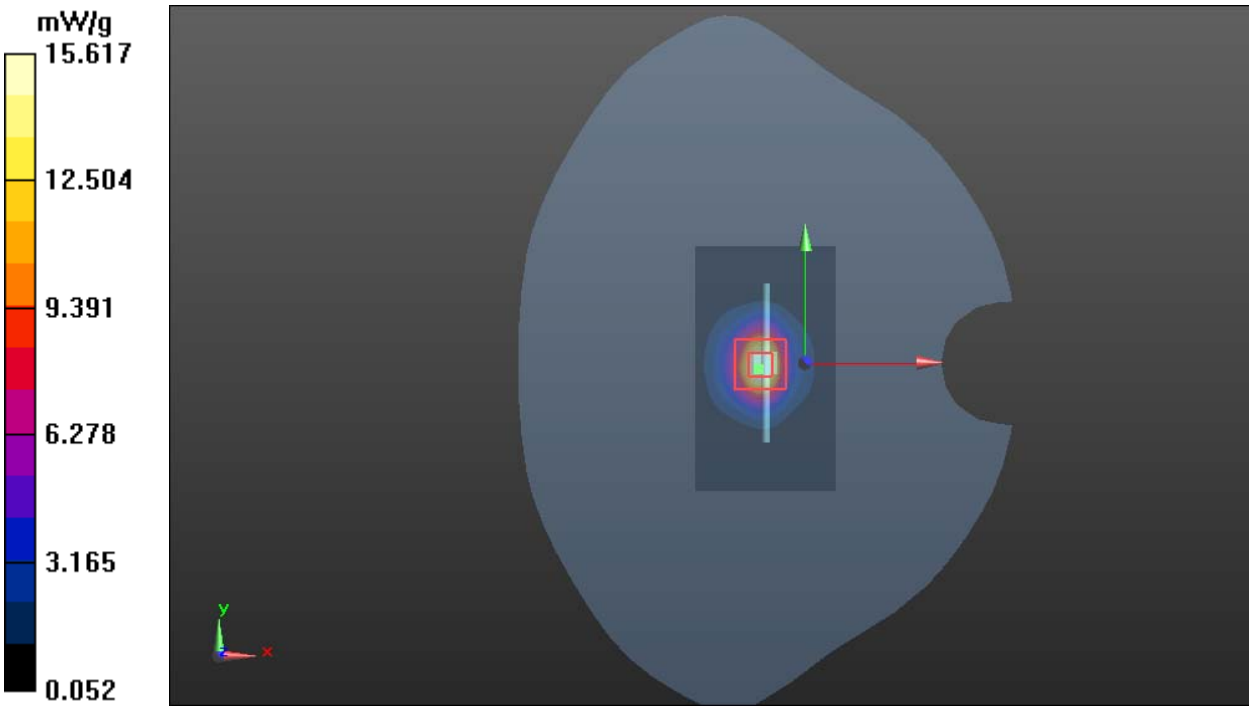


Figure 26 System Performance Check 2600MHz 250mW

System Performance Check at 2600 MHz Body TSL

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

Date: 7/18/2015

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

Medium parameters used: f = 2600 MHz; σ = 2.22 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.29, 7.29, 7.29); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

d=10mm, Pin=250mW /Area Scan (41x71x1): Measurement grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.7 mW/g

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

Reference Value = 74 V/m; Power Drift = -0.0027 dB

Peak SAR (extrapolated) = 28.5 W/kg

SAR(1 g) = 13.5 mW/g; SAR(10 g) = 5.99 mW/g

Maximum value of SAR (measured) = 15.7 mW/g

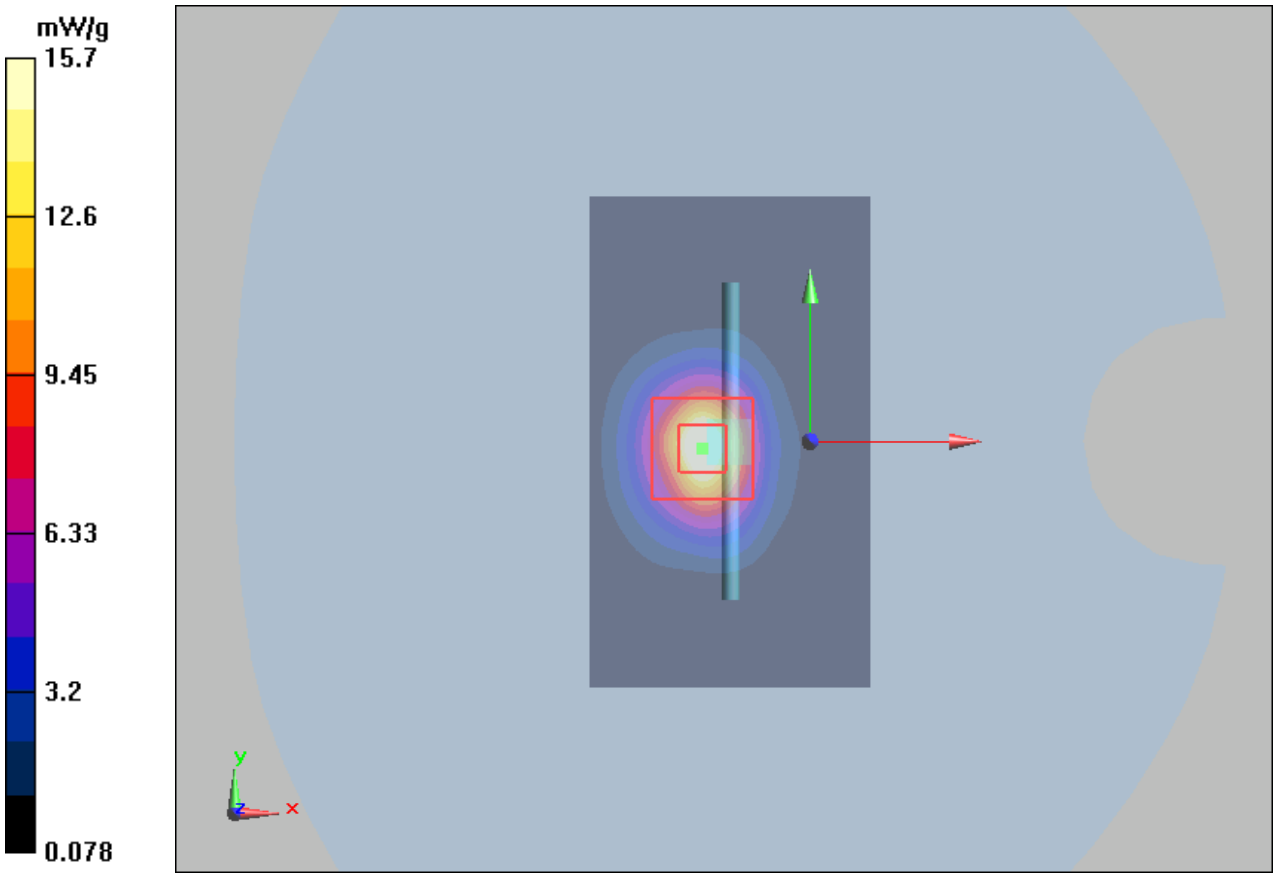


Figure 27 System Performance Check 2600MHz 250mW

ANNEX C: Highest Graph Results

ANNEX C1: Antenna 1

GSM 850 Right Cheek Middle (Battery 1)

Date: 6/30/2015

Communication System: GSM850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 0.923 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM 11; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Cheek Middle/Area Scan (71x131x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 1.28 mW/g

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

Reference Value = 22.9 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 2.38 W/kg

SAR(1 g) = 1.07 mW/g; SAR(10 g) = 0.537 mW/g

Maximum value of SAR (measured) = 1.23 mW/g

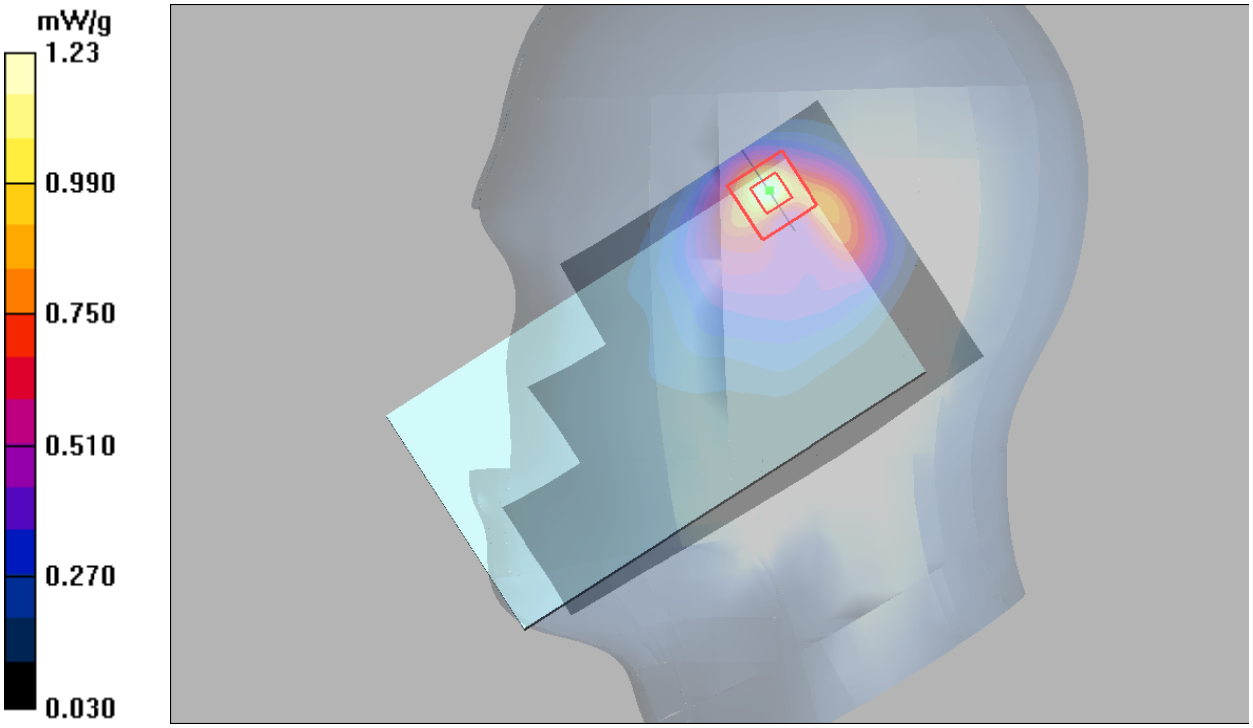


Figure 28 Right Hand Touch Cheek GSM 850 Channel 190

GSM 850 Back Side Middle (Battery 1, Distance 15mm)

Date: 7/1/2015

Communication System: GSM850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 MHz; σ = 1 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM 11; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.170 mW/g

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

Reference Value = 11.8 V/m; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 0.211 W/kg

SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.110 mW/g

Maximum value of SAR (measured) = 0.168 mW/g

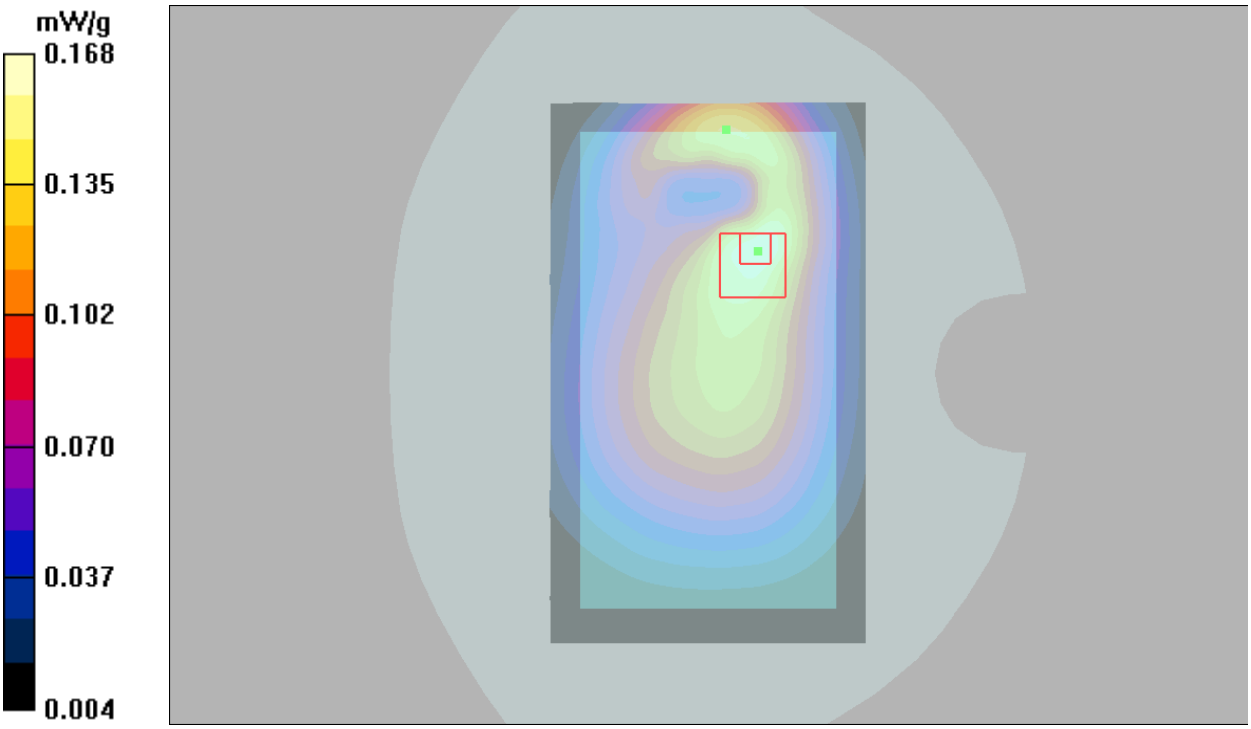


Figure 29 Body, Back Side, GSM 850 Channel 190

GSM 850 GPRS (2Txslots) Back Side Middle (Battery 1, Distance 10mm)

Date: 7/1/2015

Communication System: GSM850+GPRS(2Up) ; Frequency: 836.6 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 837 MHz; σ = 1 mho/m; ε_r = 54.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

Phantom: SAM 11; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.412 mW/g

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

Reference Value = 13.3 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.754 W/kg

SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.460 mW/g

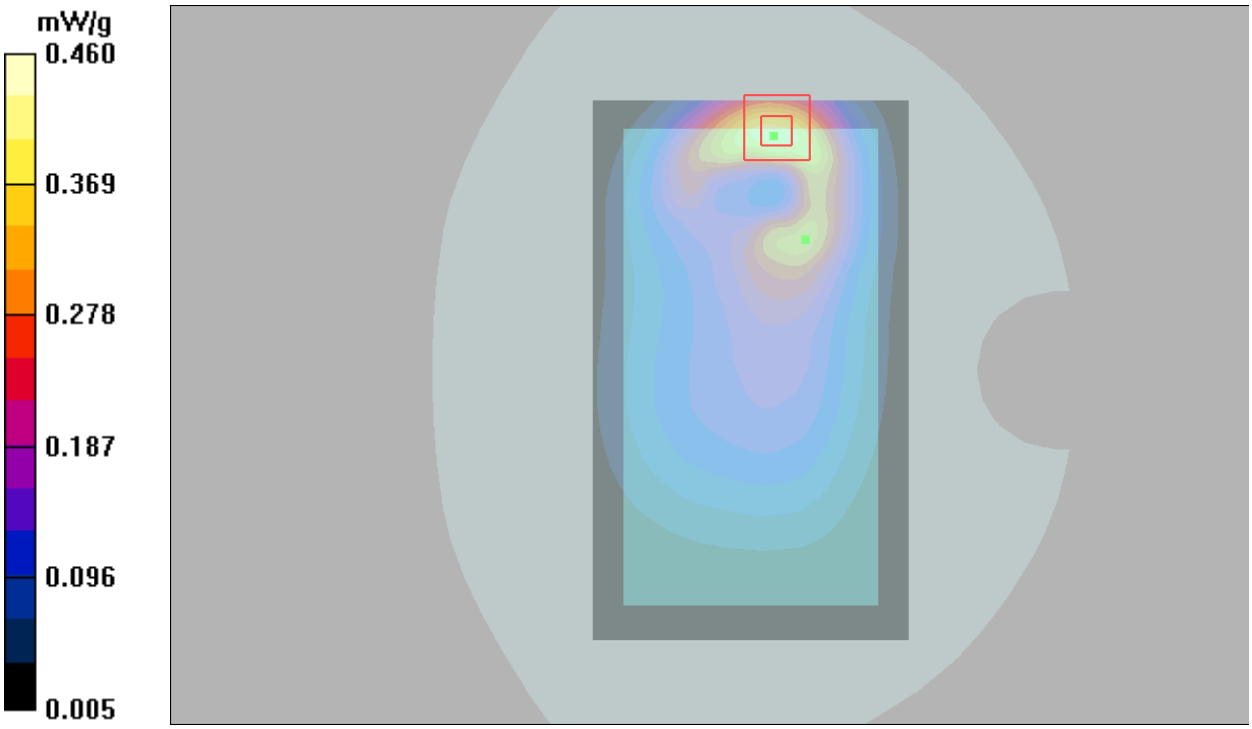


Figure 30 Body, Back Side, GSM 850 GPRS (2Txslots) Channel 190

GSM 1900 Right Cheek Low (Battery 2)

Date: 7/16/2015

Communication System: PCS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3

Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (71x131x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.890 mW/g

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

Reference Value = 9.95 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.837 mW/g; SAR(10 g) = 0.461 mW/g

Maximum value of SAR (measured) = 0.864 mW/g

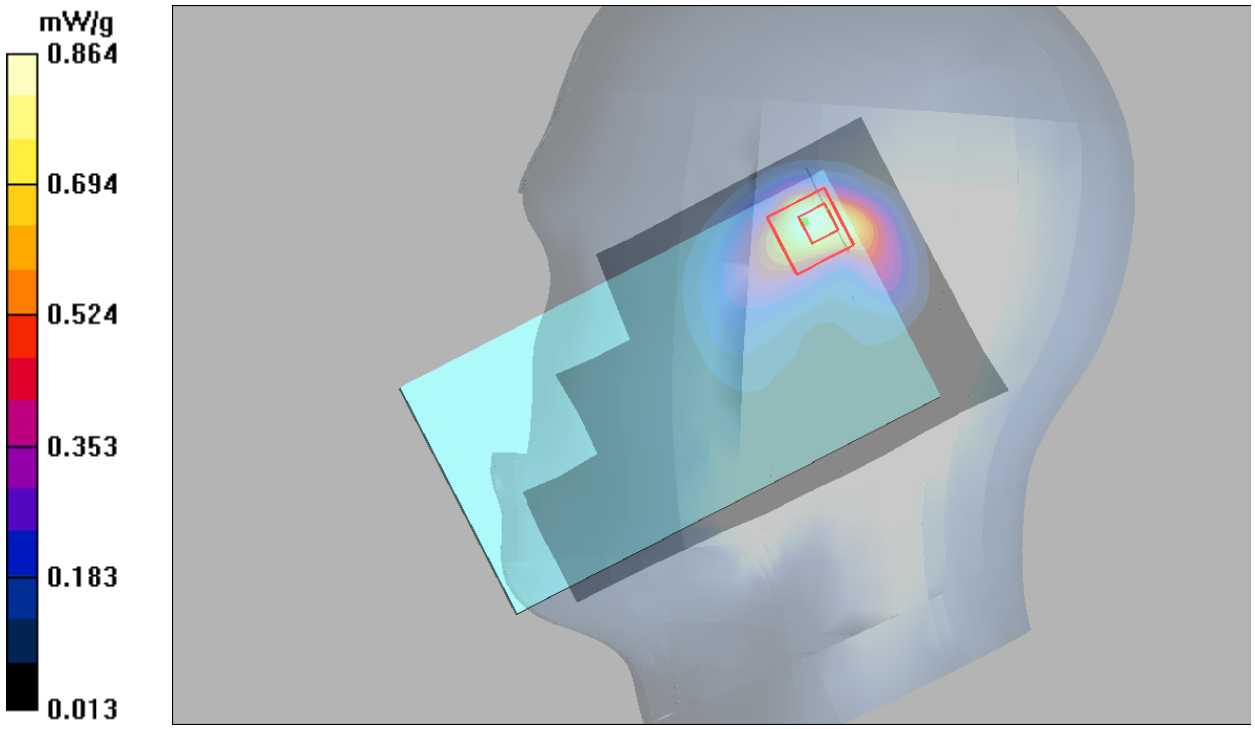


Figure 31 Right Hand Touch Cheek GSM 1900 Channel 512

GSM 1900 Front Side Middle (Battery 1, Distance 15mm)

Date: 7/8/2015

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.048 mW/g

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

Reference Value = 3.97 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.082 W/kg

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.050 mW/g

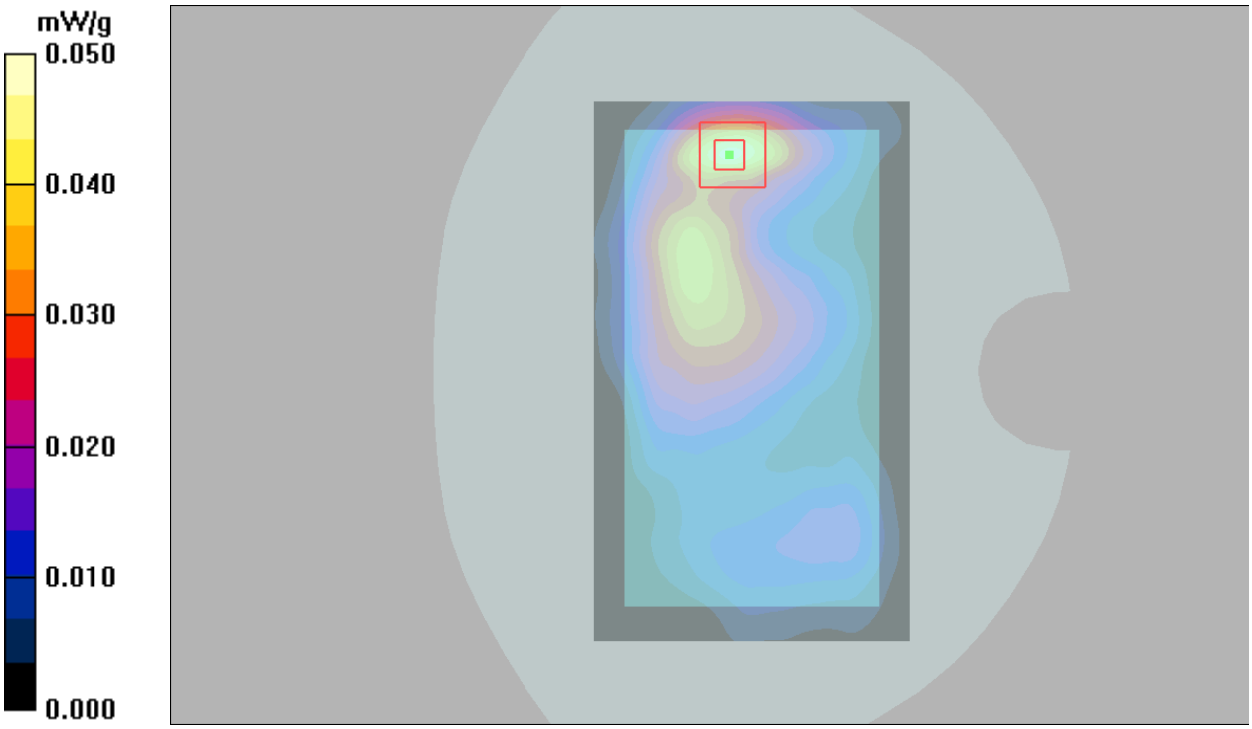


Figure 32 Body, Front Side, GSM 1900 Channel 661

GSM 1900 GPRS (2Txslots) Top Edge Middle (Battery 1, Distance 10mm)

Date: 7/8/2015

Communication System: PCS 1900+GPRS(2Up); Frequency: 1880 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (51x121x1): Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 0.177 mW/g

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

Reference Value = 10.0 V/m; Power Drift = -0.161 dB

Peak SAR (extrapolated) = 0.280 W/kg

SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.079 mW/g

Maximum value of SAR (measured) = 0.172 mW/g

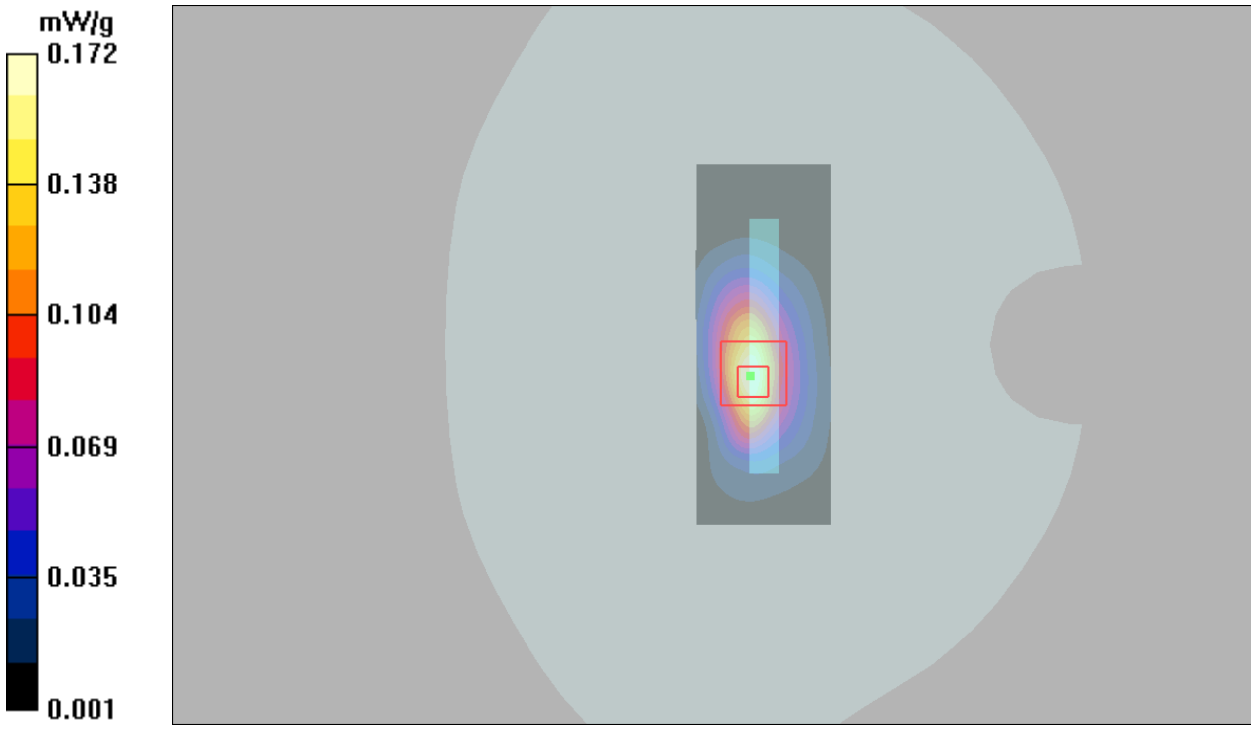


Figure 33 Body, Left Edge, GSM 1900 GPRS (2Txslots) Channel 661

UMTS Band II Right Cheek High (Battery 1)

Date: 7/16/2015
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.43 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Cheek High/Area Scan (71x131x1): Measurement grid: dx=1.500mm, dy=1.500mm
Maximum value of SAR (interpolated) = 0.875 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.9 V/m; Power Drift = 0.130 dB
Peak SAR (extrapolated) = 1.75 W/kg
SAR(1 g) = 0.857 mW/g; SAR(10 g) = 0.493 mW/g
Maximum value of SAR (measured) = 0.890 mW/g

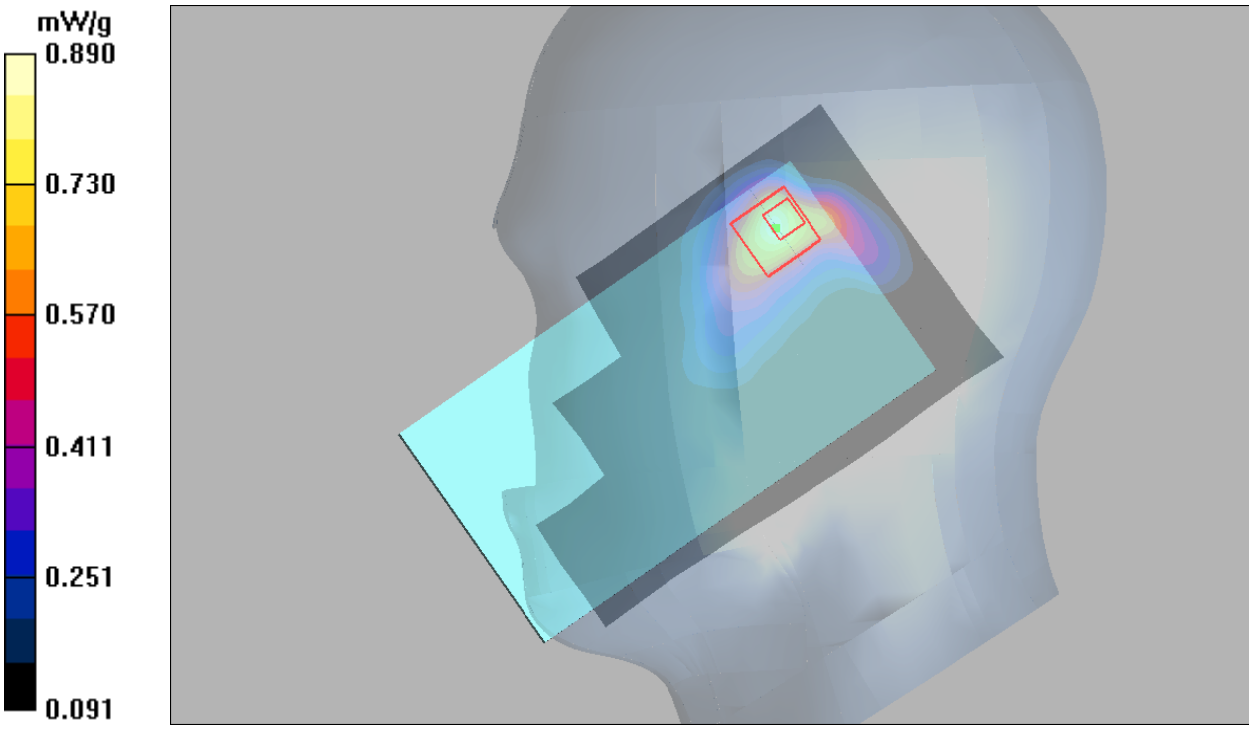


Figure 34 Right Hand Touch Cheek UMTS Band II Channel 9538

UMTS Band II Front Side Middle (Battery 1, Distance 15mm)

Date: 7/8/2015

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.085 mW/g

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

Reference Value = 3.05 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.118 W/kg

SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.051 mW/g

Maximum value of SAR (measured) = 0.083 mW/g

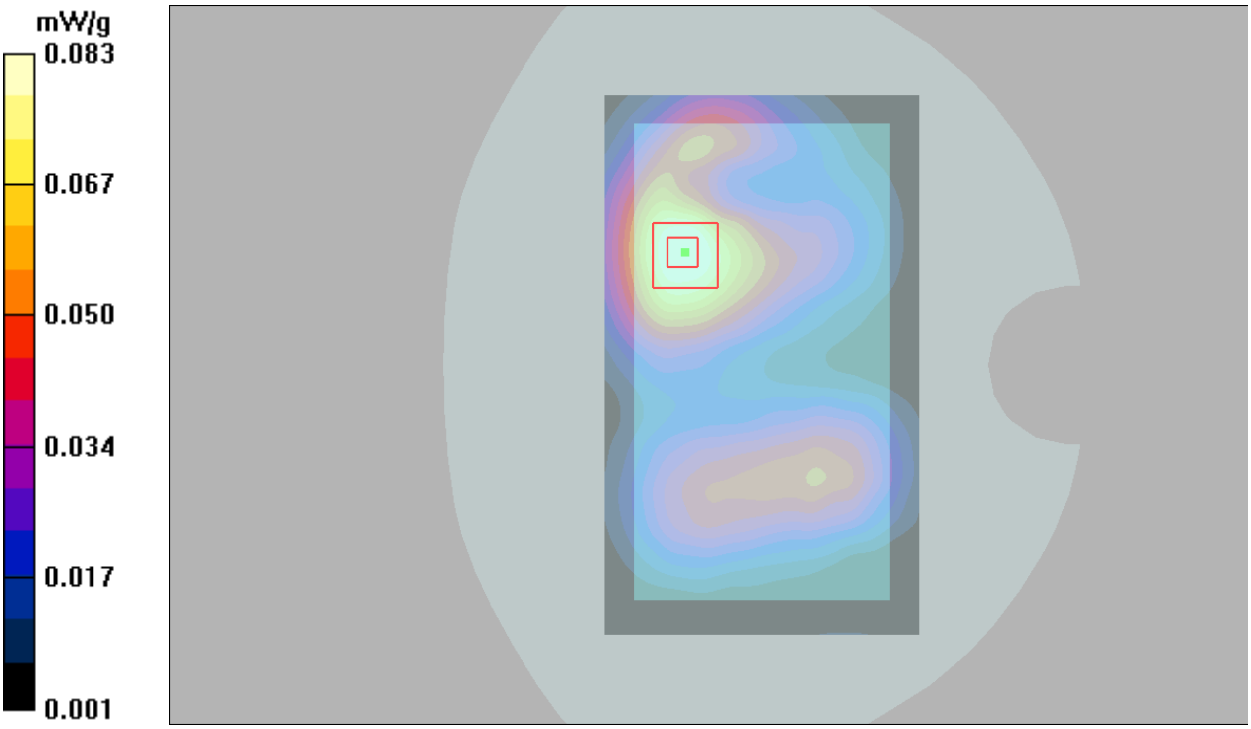


Figure 35 Body, Front Side, UMTS Band II Channel 9400

UMTS Band II Back side Middle (Battery 2, Distance 10mm)

Date: 7/8/2015

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.5 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle /Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.164 mW/g

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

Reference Value = 4.14 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.296 W/kg

SAR(1 g) = 0.156 mW/g; SAR(10 g) = 0.082 mW/g

Maximum value of SAR (measured) = 0.178 mW/g

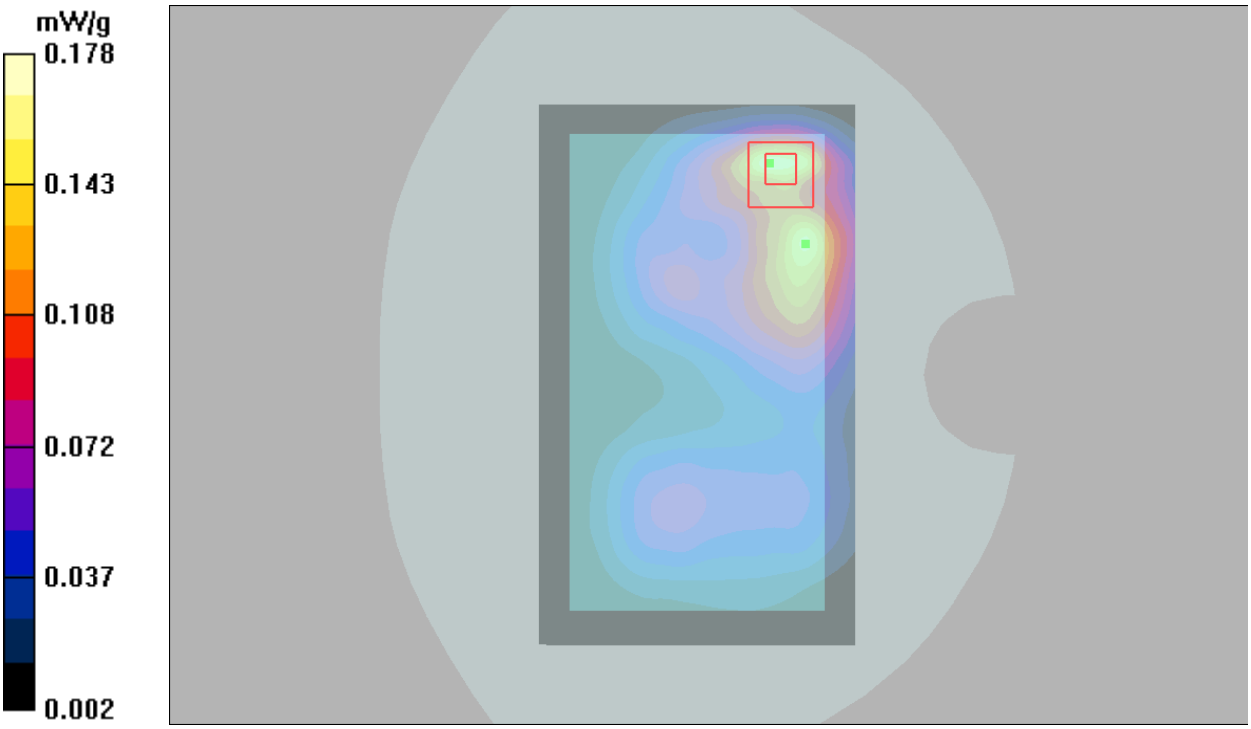


Figure 36 Body, Left Edge, UMTS Band II Channel 9400

UMTS Band IV Right Tilt Middle (Battery 1)

Date: 7/10/2015
Communication System: WCDMA Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1733 MHz; σ = 1.31 mho/m; ε_r = 39.7; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.02, 8.02, 8.02); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Tilt Middle/Area Scan (71x131x1): Measurement grid: dx=1.500mm, dy=1.500mm
Maximum value of SAR (interpolated) = 0.710 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = 0.030dB
Peak SAR (extrapolated) = 1.60 W/kg
SAR(1 g) = 0.662 mW/g; SAR(10 g) = 0.322 mW/g
Maximum value of SAR (measured) = 0.777 mW/g

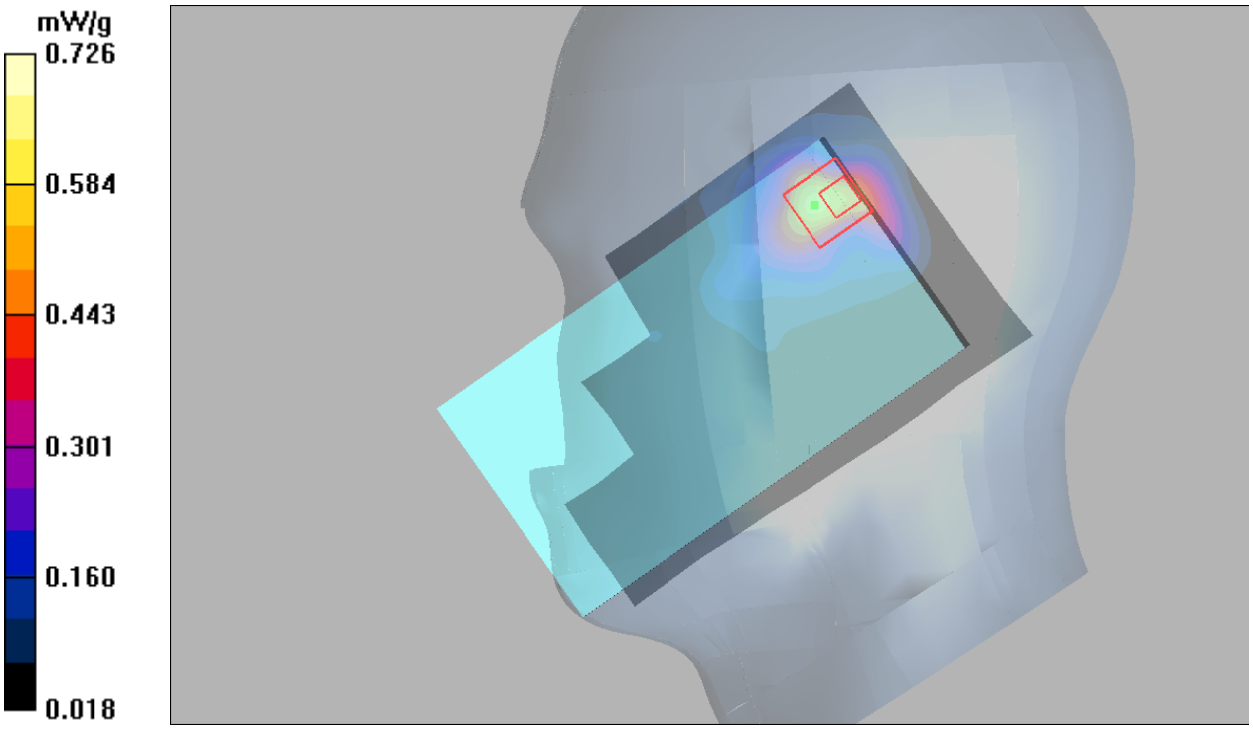


Figure 37 Right Hand Tilt 15° UMTS Band IV Channel 1413

UMTS Band IV Back Side Middle (Battery 1, Distance 15mm)

Date: 7/7/2015

Communication System: WCDMA Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1733 MHz; σ = 1.49 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.068 mW/g

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

Reference Value = 3.86 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 0.106 W/kg

SAR(1 g) = 0.061 mW/g; SAR(10 g) = 0.033 mW/g

Maximum value of SAR (measured) = 0.068 mW/g

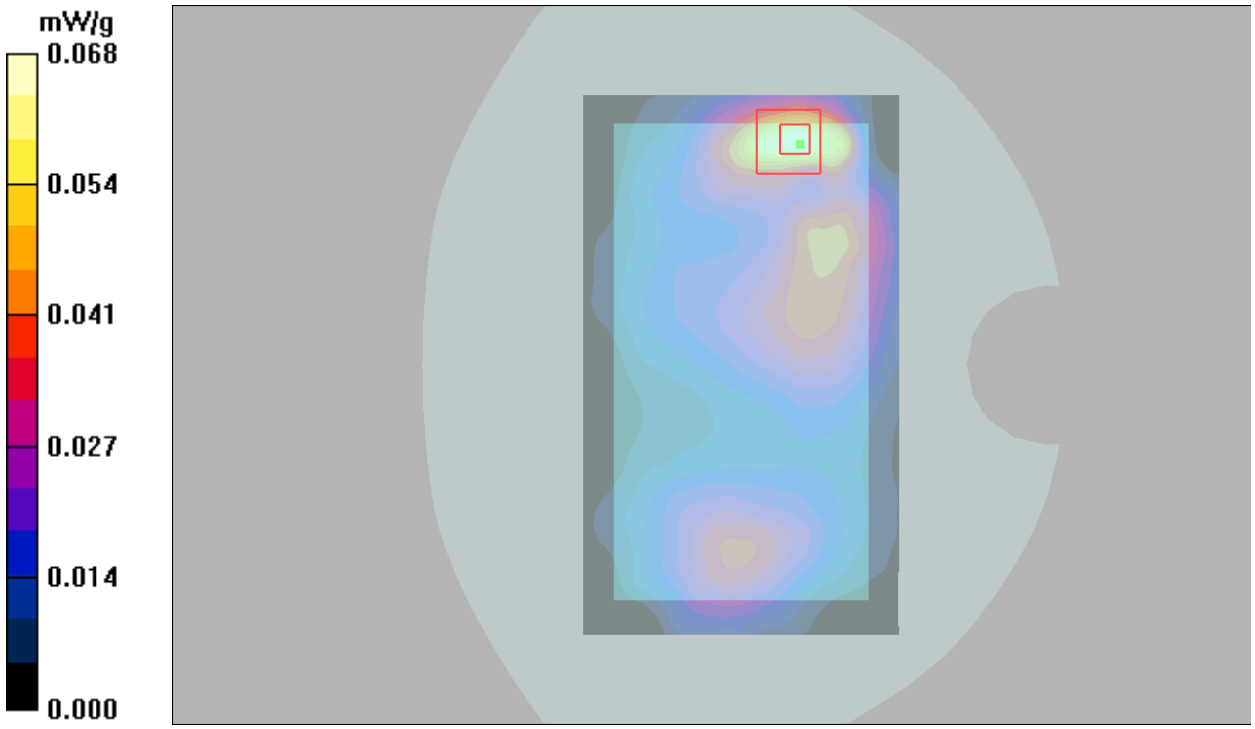


Figure 38 Body, Back Side, UMTS Band IV Channel 1413

UMTS Band IV Front Side Middle (Battery 1, Distance 10mm)

Date: 7/7/2015

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

Medium parameters used: f = 1733 MHz; σ = 1.443 S/m; ε_r = 51.909; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.279 W/kg

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

Reference Value = 11.46 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.191 W/kg

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

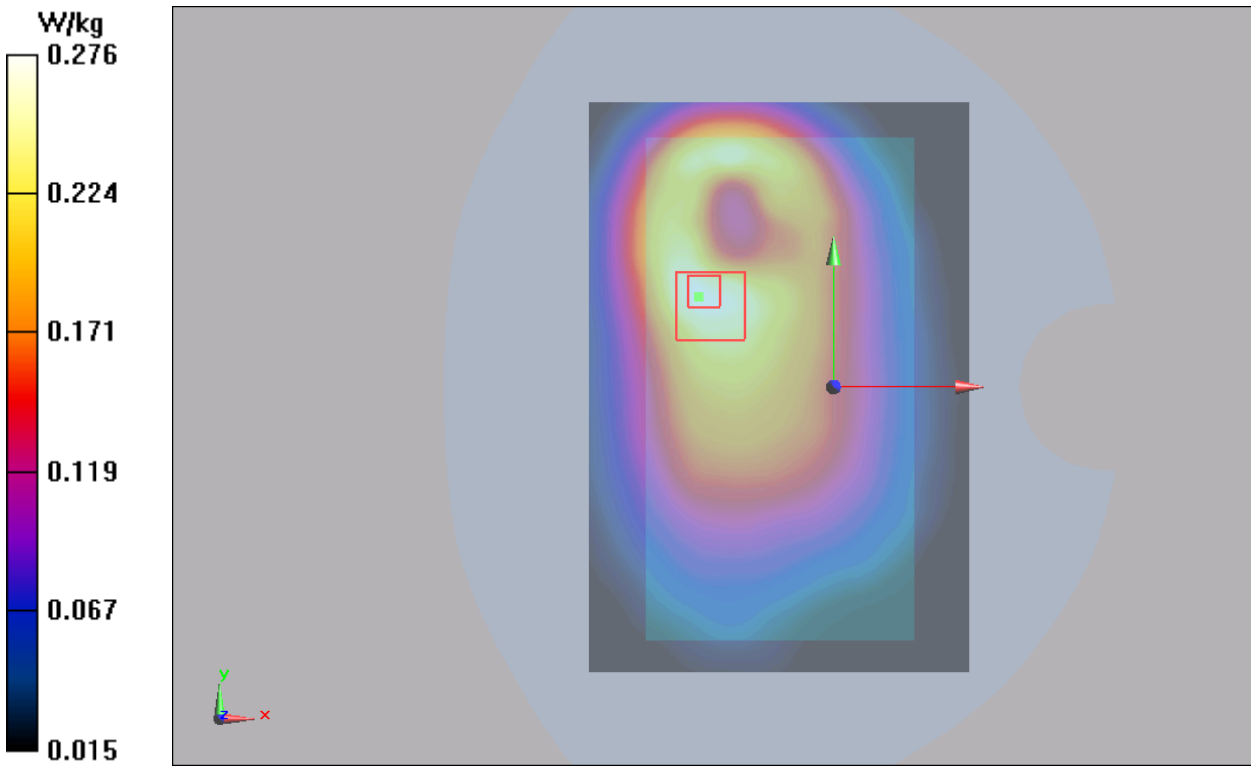


Figure 39 Body, Front Side, UMTS Band IV Channel 1413

UMTS Band V Right Tilt High (Battery 2)

Date: 6/30/2015

Communication System: UID 0, WCDMA (0); Frequency: 846.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 847 MHz; σ = 0.943 S/m; ε_r = 41.323; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High /Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.19 W/kg

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

Reference Value = 23.89 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.16 W/kg

SAR(1 g) = 0.996 W/kg; SAR(10 g) = 0.502 W/kg

Maximum value of SAR (measured) = 1.15 W/kg

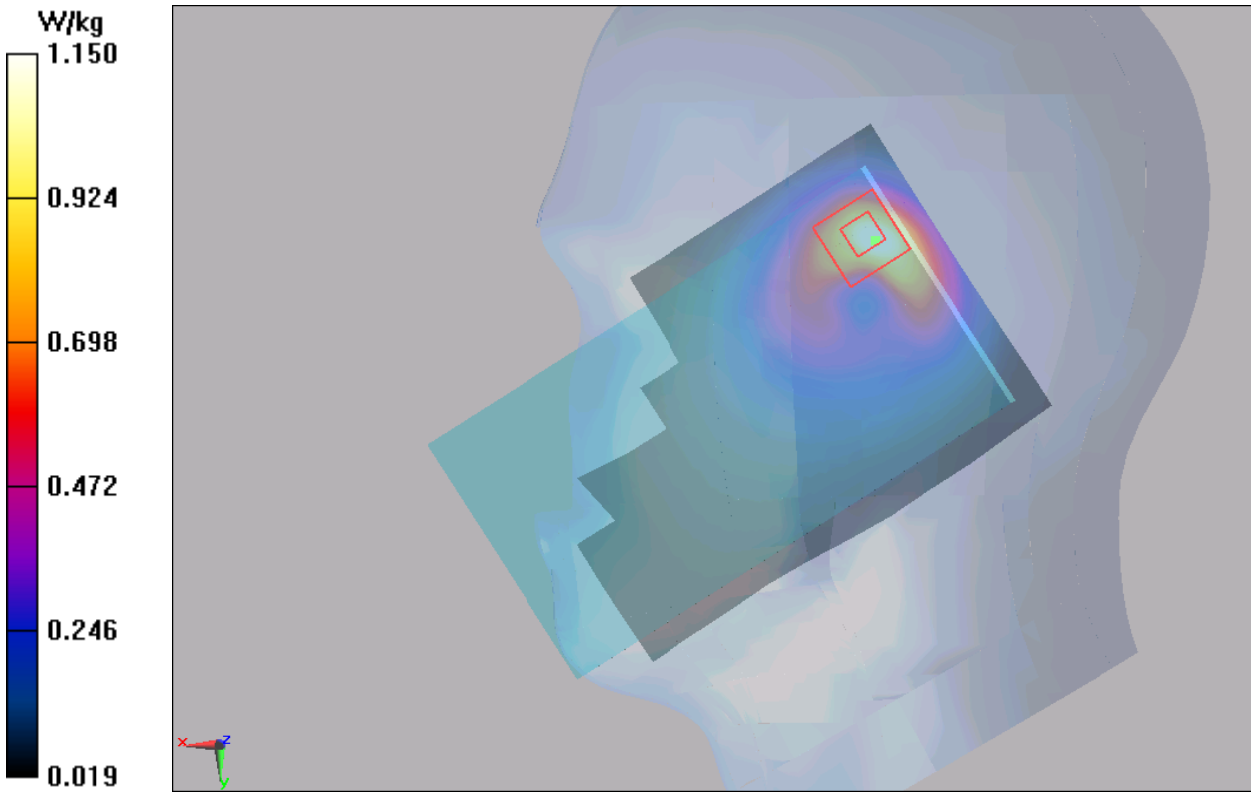


Figure 40 Right Hand Tilt 15° UMTS Band V Channel 4233

UMTS Band V Back Side Middle (Battery 1, Distance 15mm)

Date: 7/1/2015

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

Medium parameters used: f = 837 MHz; σ = 0.992 S/m; ε_r = 55.882; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.124 W/kg

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

Reference Value = 8.498 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.200 W/kg

SAR(1 g) = 0.122 W/kg; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.125 W/kg

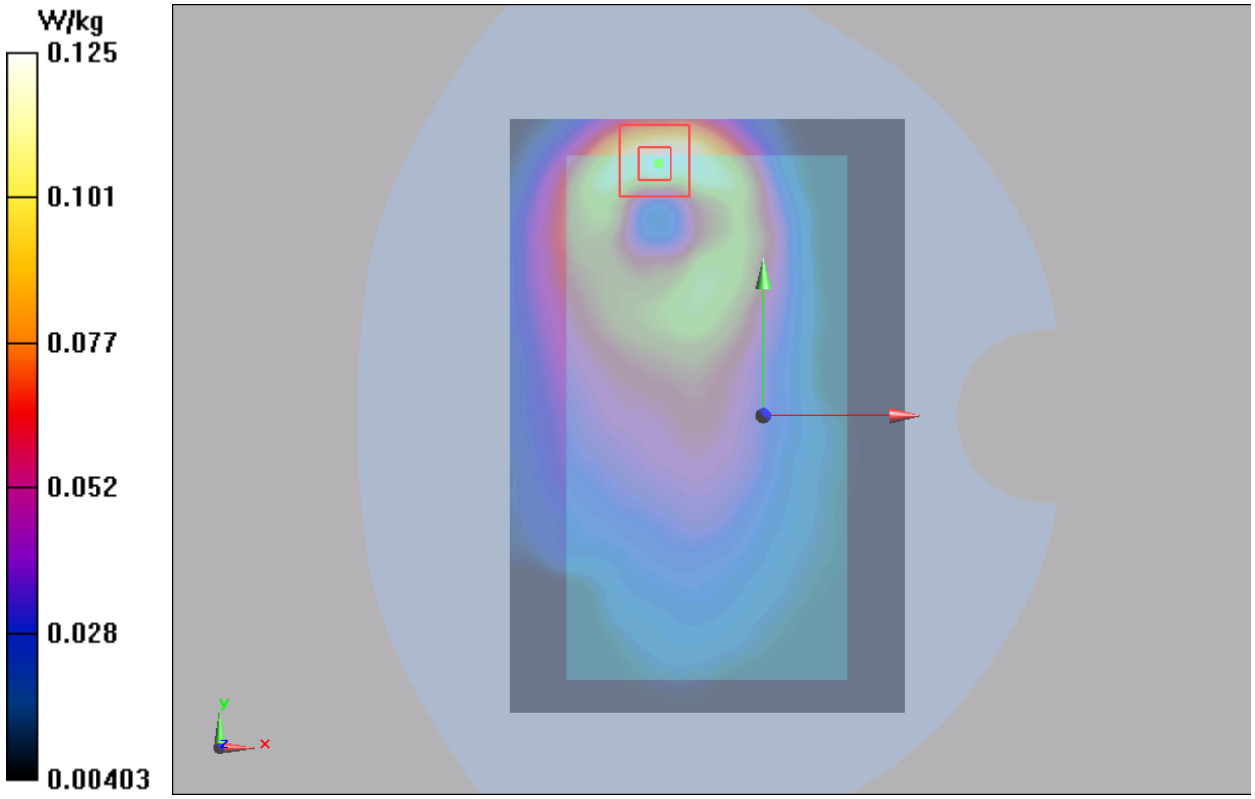


Figure 41 Body, Back Side, UMTS Band V Channel 4183

UMTS Band V Back Side Middle (Battery 1, Distance 10mm)

Date: 7/1/2015

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

Medium parameters used: f = 837 MHz; σ = 0.992 S/m; ε_r = 55.882; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.273 W/kg

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

Reference Value = 8.738 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.484 W/kg

SAR(1 g) = 0.269 W/kg; SAR(10 g) = 0.149 W/kg

Maximum value of SAR (measured) = 0.289 W/kg

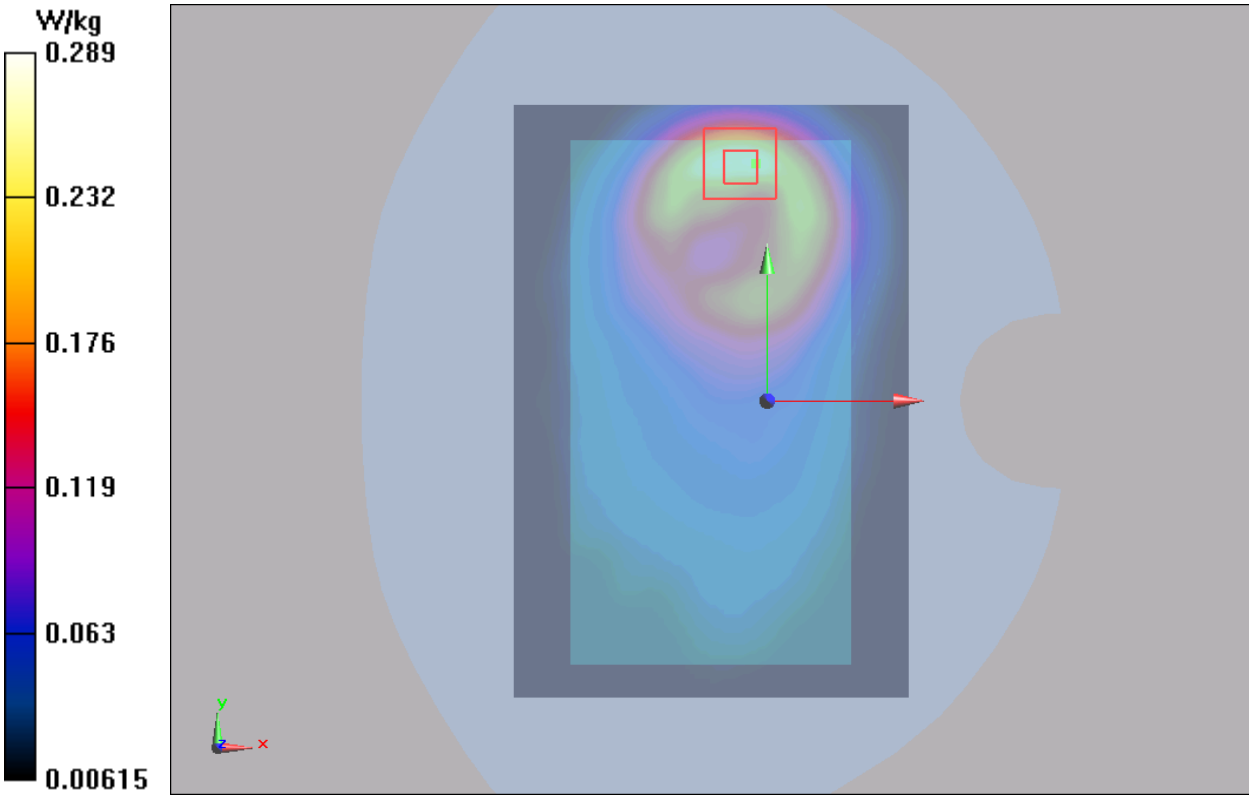


Figure 42 Body, Back Sid, UMTS Band V Channel 4183

LTE Band 2 1RB Right Cheek Low (Battery 1)

Date: 7/13/2015
Communication System: UID 0, LTE (0); Frequency: 1860 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1860 MHz; σ = 1.366 S/m; ε_r = 40.845; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.21 W/kg

Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.36 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 2.05 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.558 W/kg
Maximum value of SAR (measured) = 1.05 W/kg

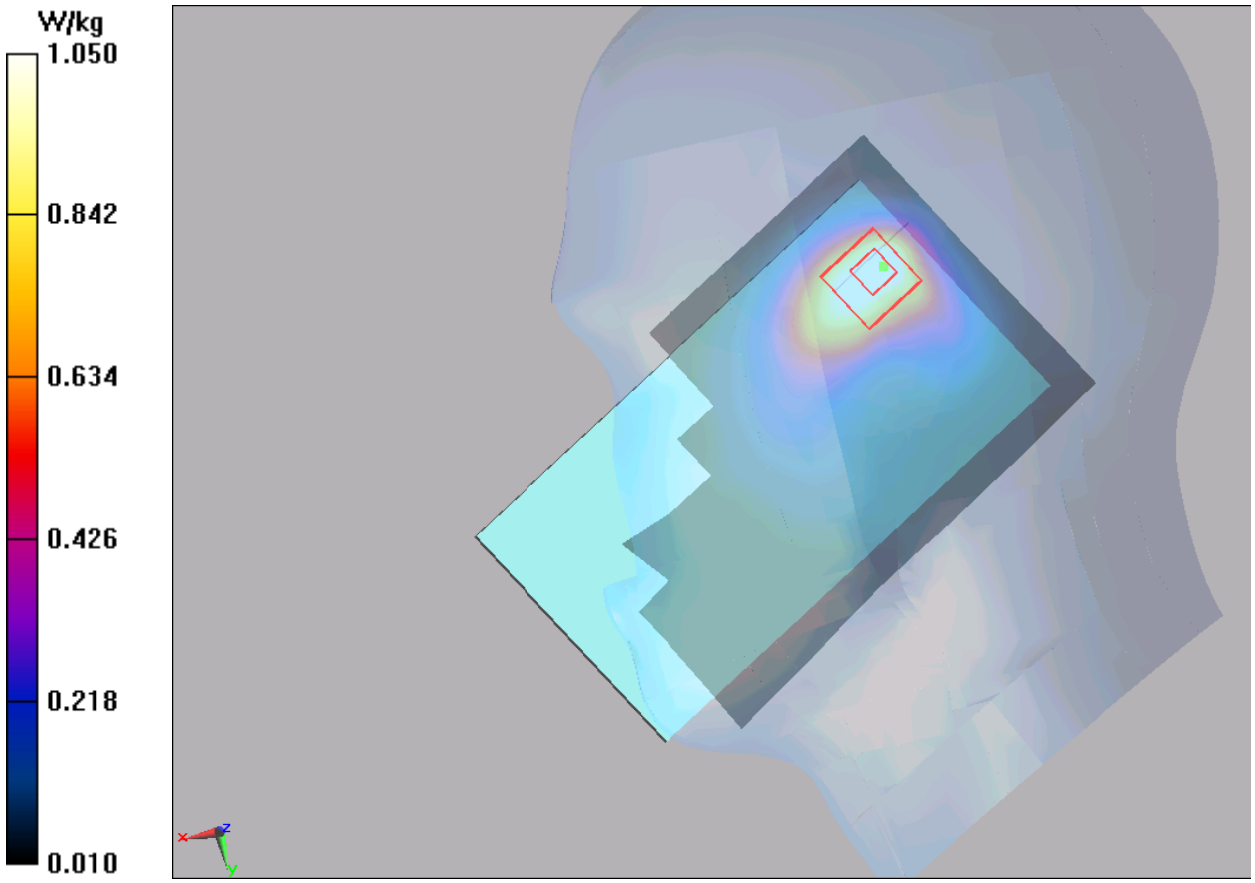


Figure 43 Right Hand Touch Cheek LTE Band 2 1RB Channel 18700

LTE Band 2 1RB Back Side High (Battery 1, Distance 15mm)

Date: 7/14/2015

Communication System: LTE Band 2; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.51 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.077 mW/g

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

Reference Value = 4.58 V/m; Power Drift = -0.194 dB

Peak SAR (extrapolated) = 0.117 W/kg

SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.037 mW/g

Maximum value of SAR (measured) = 0.074 mW/g

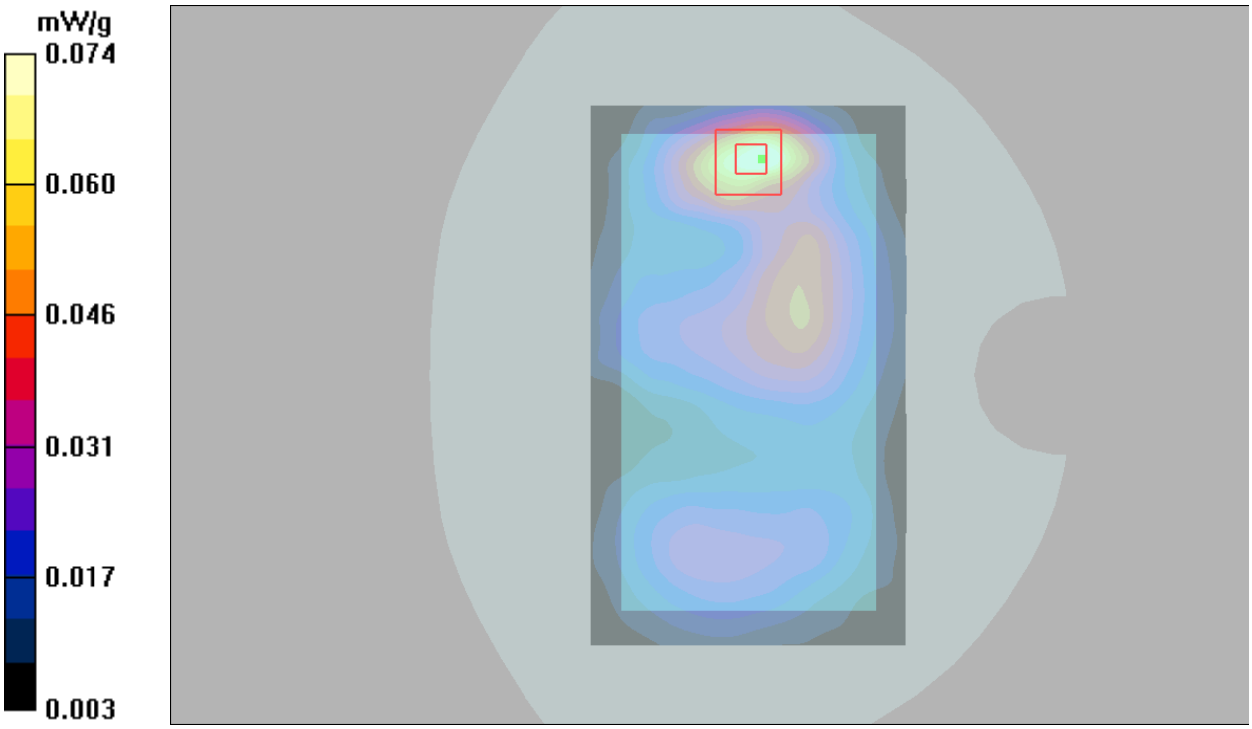


Figure 44 Body, Back Side, LTE Band 2 50%RB Channel 19100

LTE Band 2 1RB Back Side High (Battery 1, Distance 10mm)

Date: 7/14/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.513 S/m; ε_r = 52.567; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.374 W/kg

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

Reference Value = 9.394 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 0.591 W/kg

SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.202 W/kg

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

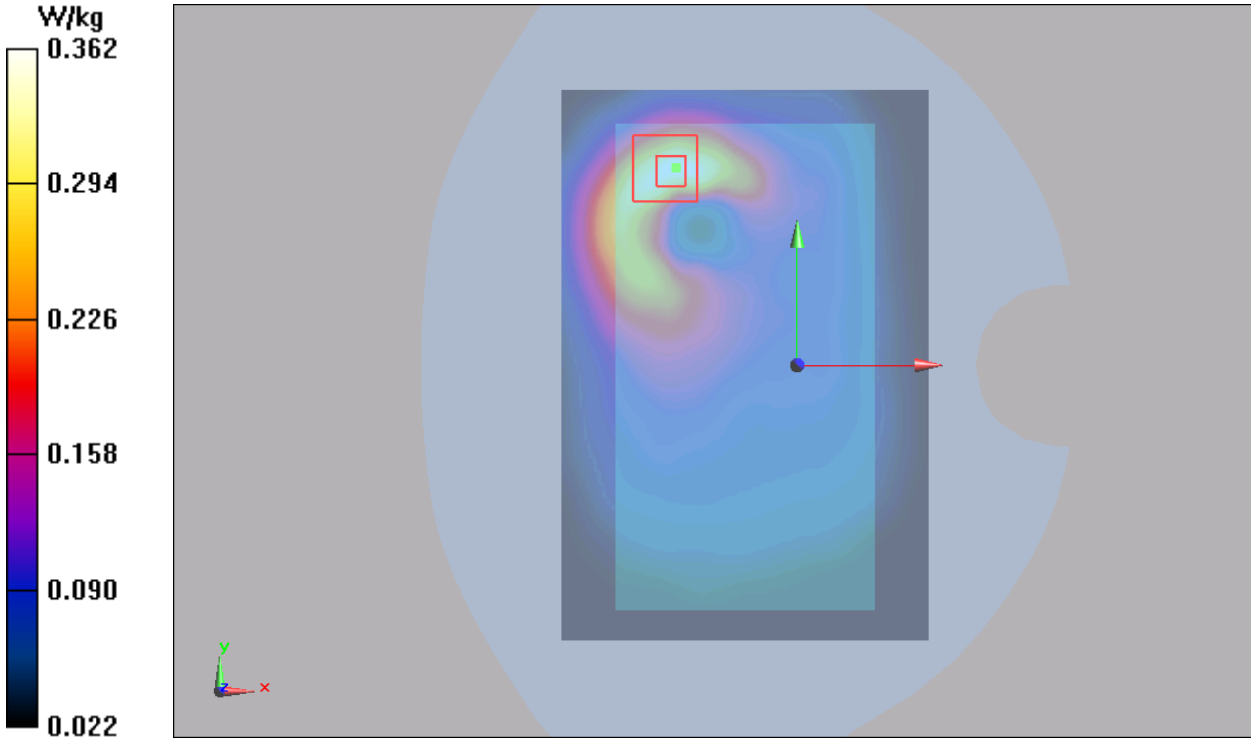


Figure 45 Body, Back Side, LTE Band 2 50%RB Channel 19100

LTE Band 4 1RB Right Cheek High (Battery 1)

Date: 7/10/2015
Communication System: LTE Band 4; Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1745 MHz; σ = 1.37 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.02, 8.02, 8.02); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Cheek High /Area Scan (71x131x1): Measurement grid: dx=1.500mm, dy=1.500mm
Maximum value of SAR (interpolated) = 0.859 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.7 V/m; Power Drift = 0.146 dB
Peak SAR (extrapolated) = 1.81 W/kg
SAR(1 g) = 0.954 mW/g; SAR(10 g) = 0.580 mW/g
Maximum value of SAR (measured) = 1.00 mW/g

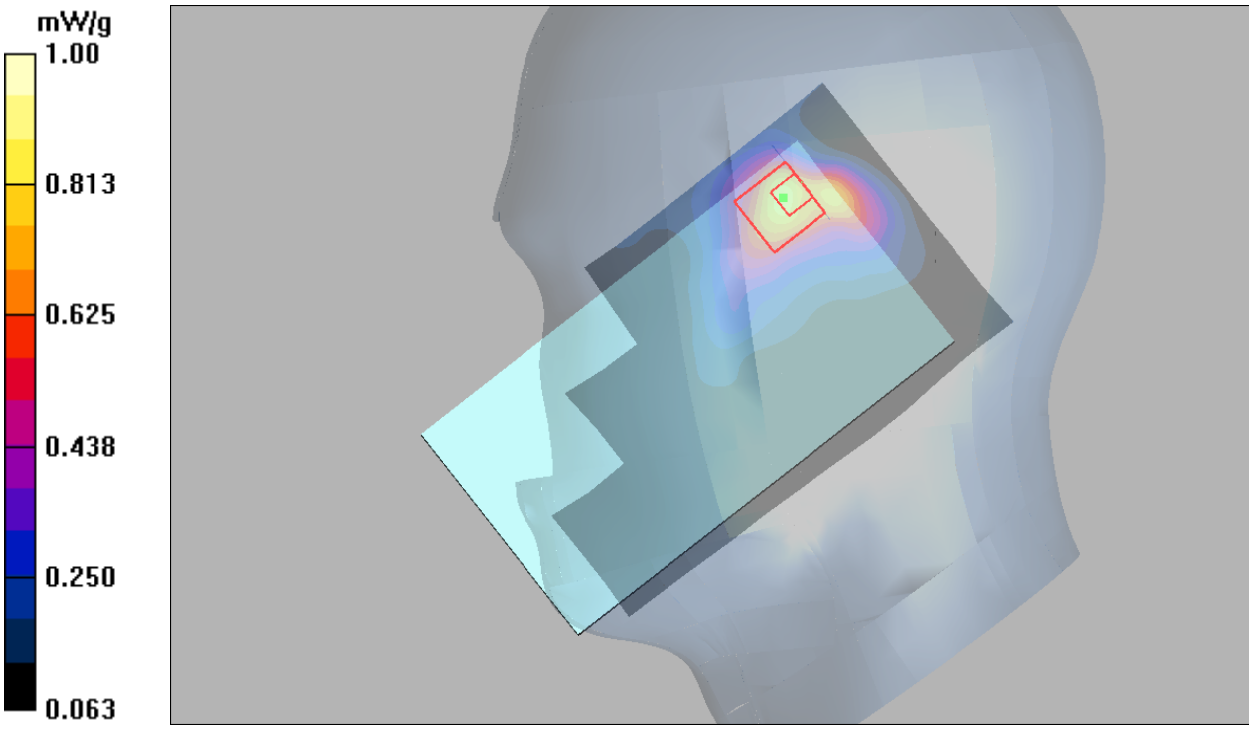


Figure 46 Right Hand Touch Cheek LTE Band 4 1RB Channel 20300

LTE Band 4 50%RB Back Side High (Battery 1, Distance 15mm)

Date: 7/9/2015

Communication System: LTE Band 4; Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used: f = 1745 MHz; σ = 1.5 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.095 mW/g

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

Reference Value = 4.55 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(1 g) = 0.081 mW/g; SAR(10 g) = 0.044 mW/g

Maximum value of SAR (measured) = 0.090 mW/g

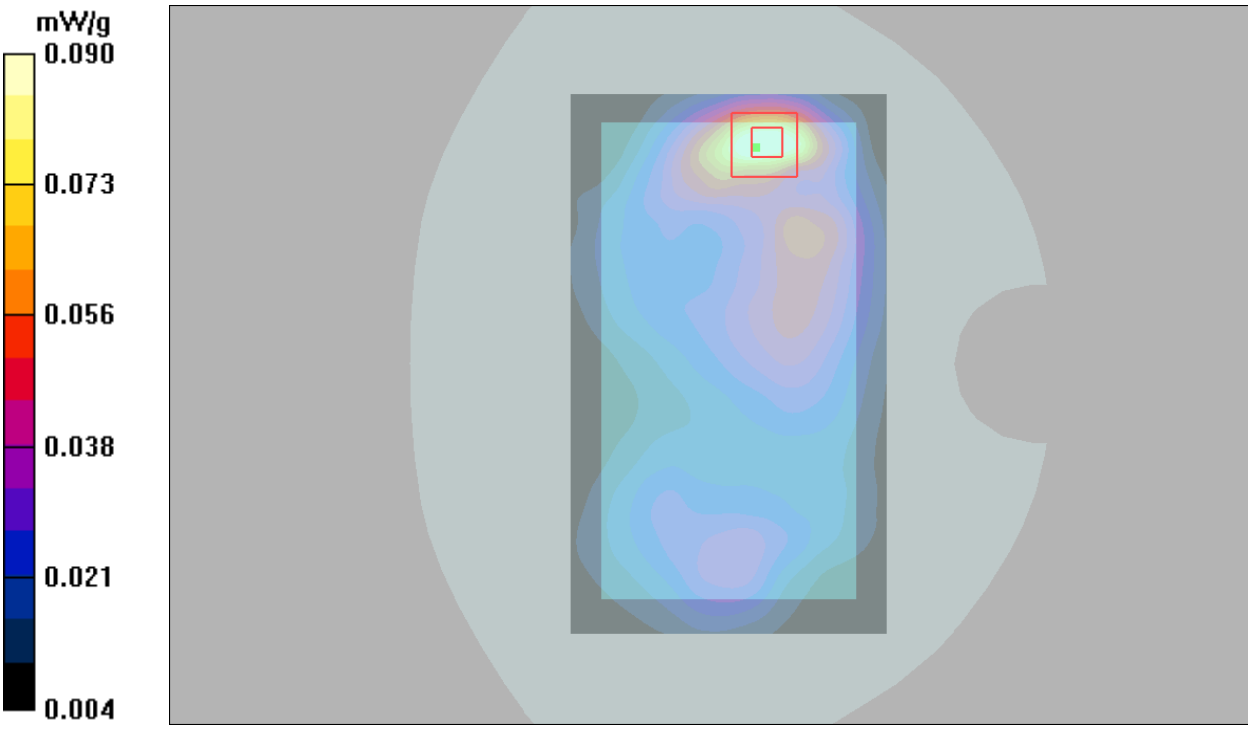


Figure 47 Body, Back Side, LTE Band 4 50%RB Channel 20300

LTE Band 4 1RB Back Side High (Battery 1, Distance 10mm)

Date: 7/9/2015
Communication System: UID 0, LTE (0); Frequency: 1732.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.42 S/m; ε_r = 52.801; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.379 W/kg

Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.227 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.576 W/kg
SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.198 W/kg
Maximum value of SAR (measured) = 0.358 W/kg

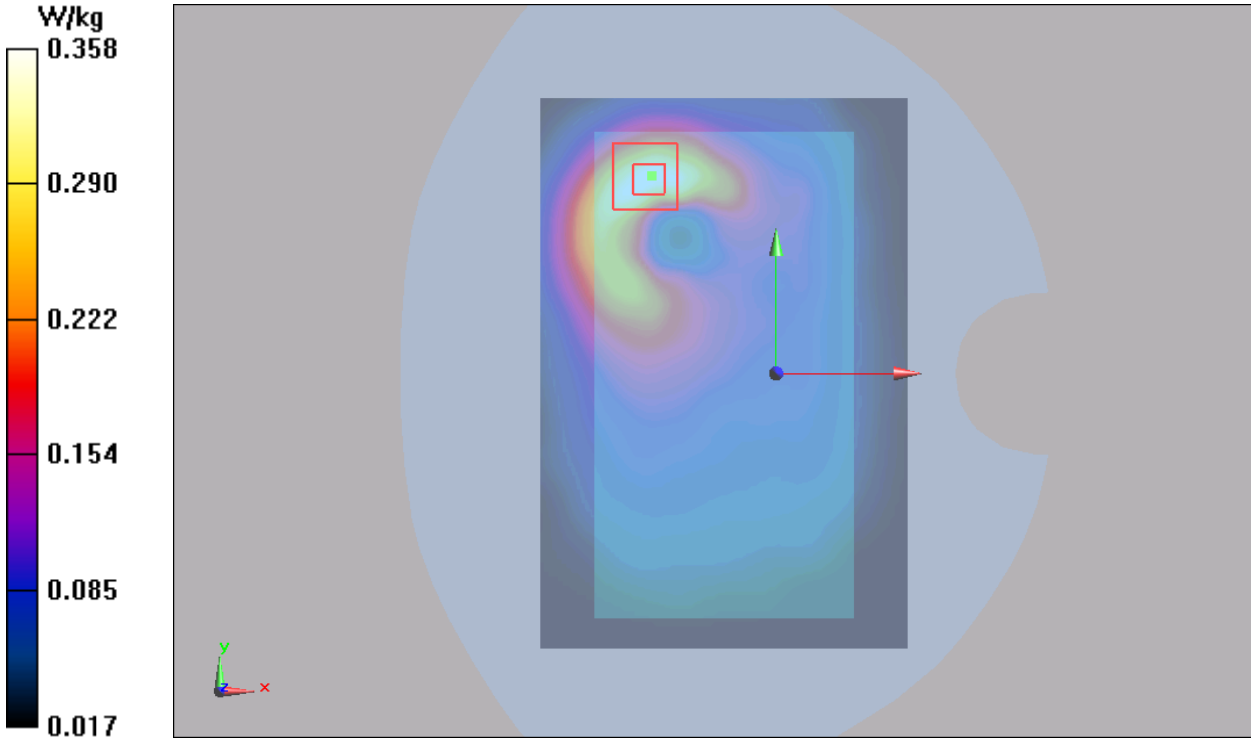


Figure 48 Body, Back Side, LTE Band 4 1RB Channel 20175

LTE Band 5 1RB Right Cheek Middle (Battery 1)

Date: 7/2/2015
Communication System: UID 0, LTE (0); Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.931 S/m; ε_r = 41.362; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.25 W/kg

Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 23.47 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 2.26 W/kg
SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.609 W/kg
Maximum value of SAR (measured) = 1.19 W/kg

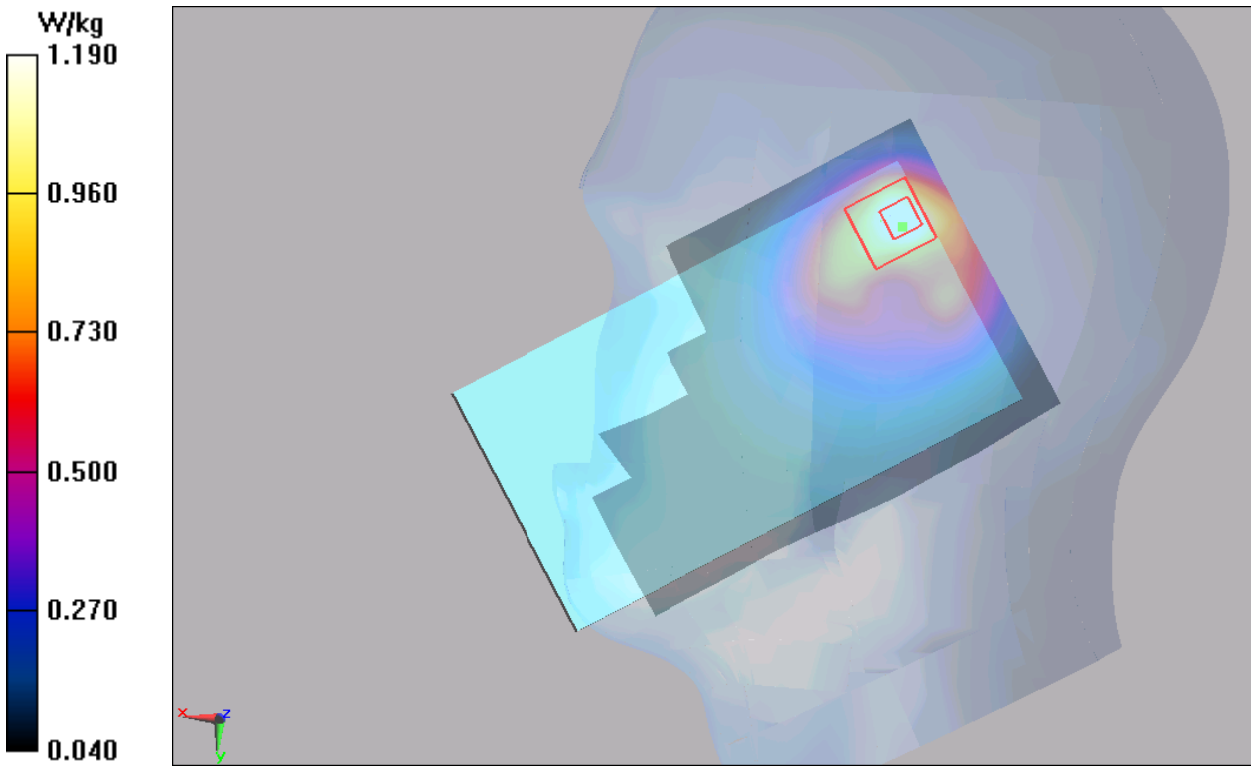


Figure 49 Right Hand Touch Cheek LTE Band 5 1RB Channel 20525

LTE Band 5 50%RB Back Side Middle (Battery 1, Distance 15mm)

Date: 7/3/2015

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

Medium parameters used (interpolated): f = 836.5 MHz; σ = 1.012 S/m; ε_r = 54.539; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 11.30 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.306 W/kg

SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.110 W/kg

Maximum value of SAR (measured) = 0.196 W/kg

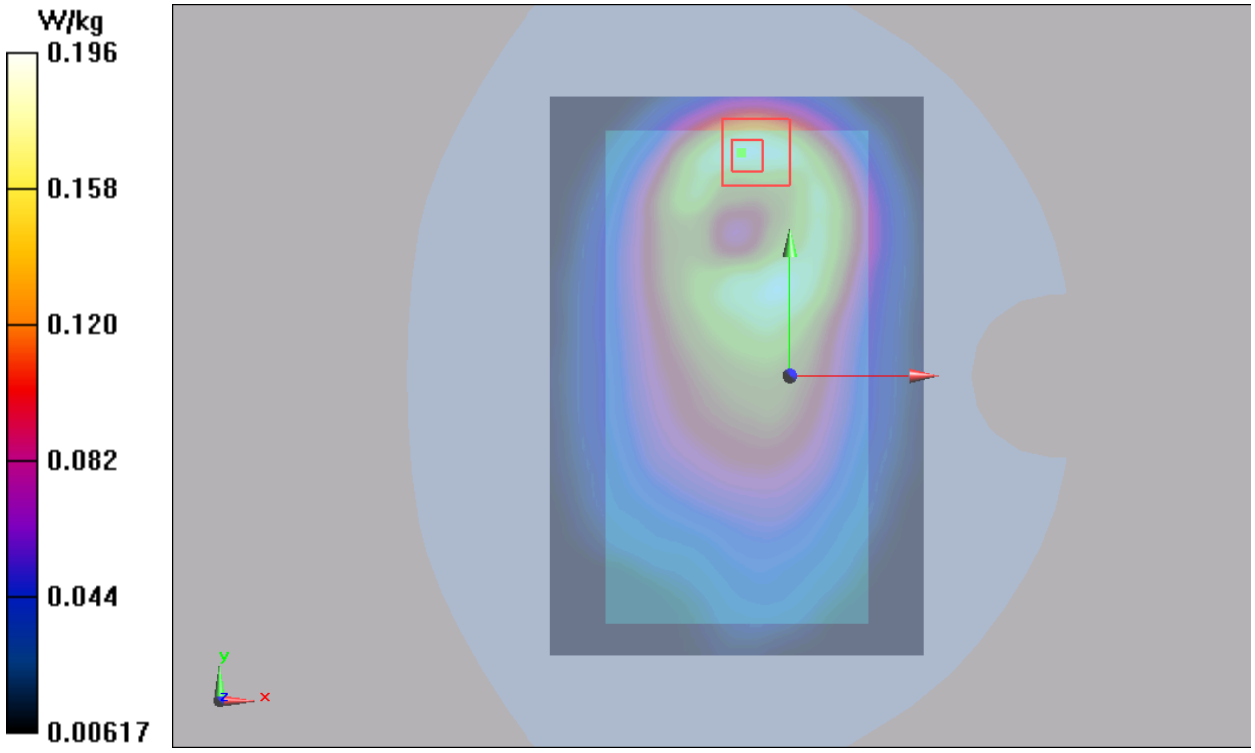


Figure 50 Body, Back Side, LTE Band 5 50%RB Channel 20525

LTE Band 5 50%RB Back Side Middle (Battery 2, Distance 10mm)

Date: 7/3/2015

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

Medium parameters used (interpolated): f = 836.5 MHz; σ = 1.012 S/m; ε_r = 54.539; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.445 W/kg

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

Reference Value = 12.50 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.769 W/kg

SAR(1 g) = 0.423 W/kg; SAR(10 g) = 0.234 W/kg

Maximum value of SAR (measured) = 0.435 W/kg

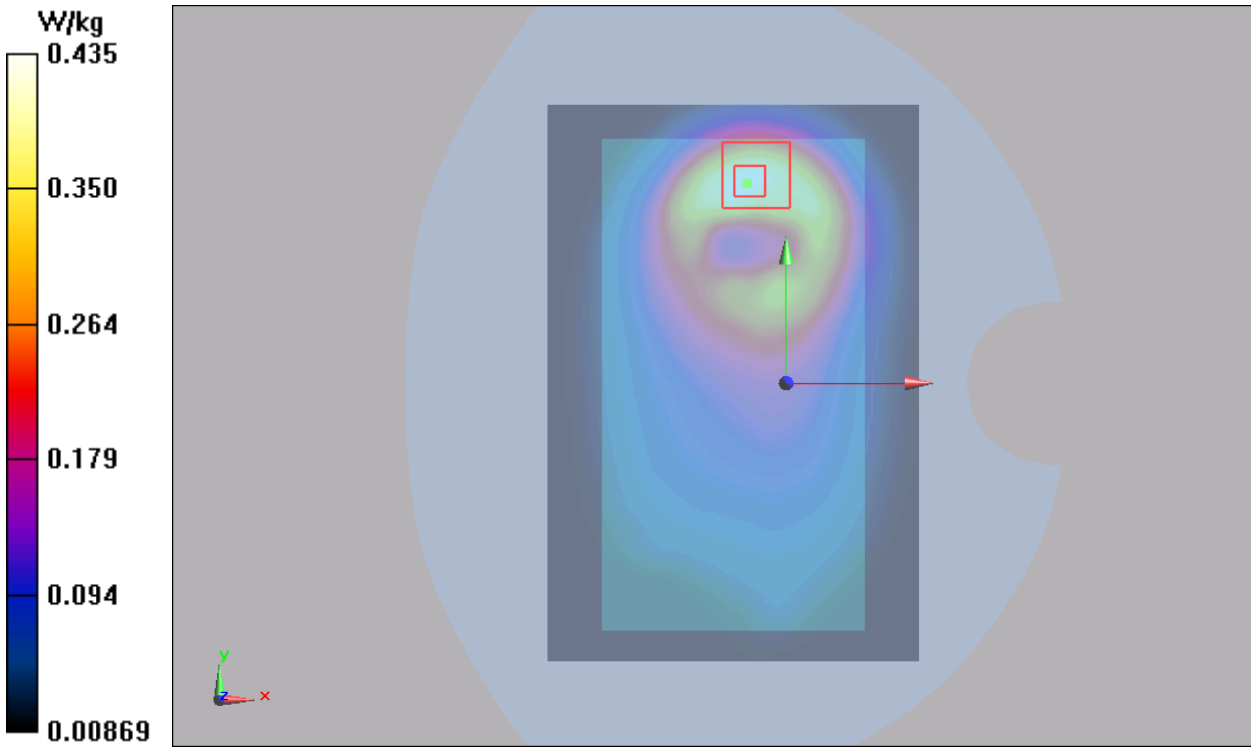


Figure 51 Body, Back Side, LTE Band 5 50%RB Channel 20525

LTE Band 7 1RB Right Cheek Middle (Battery 1)

Date: 7/17/2015
Communication System: UID 0, LTE (0); Frequency: 2535 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2535 MHz; σ = 1.915 S/m; ε_r = 38.869; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(6.94, 6.94, 6.94); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.13 W/kg

Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.411 V/m; Power Drift = 0.053 dB
Peak SAR (extrapolated) = 2.12 W/kg
SAR(1 g) = 0.986 W/kg; SAR(10 g) = 0.459 W/kg
Maximum value of SAR (measured) = 1.10 W/kg

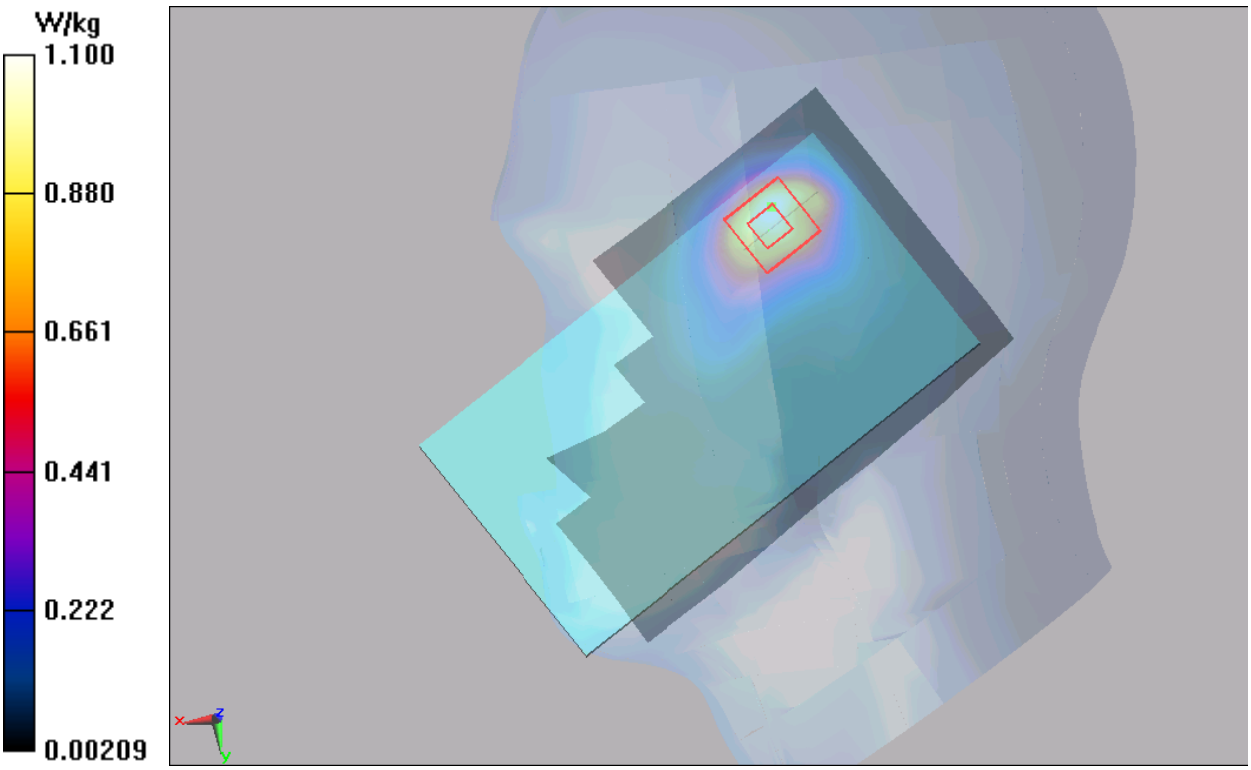


Figure 52 Right Hand Touch Cheek LTE Band 7 1RB Channel 21100

LTE Band 7 1RB Back Side High (Battery 1, Distance 15mm)

Date: 7/18/2015

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

Medium parameters used: f = 2560 MHz; σ = 2.151 S/m; ε_r = 52.442; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.29, 7.29, 7.29); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High /Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.199 W/kg

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

Reference Value = 5.605 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.099 W/kg

Maximum value of SAR (measured) = 0.183 W/kg

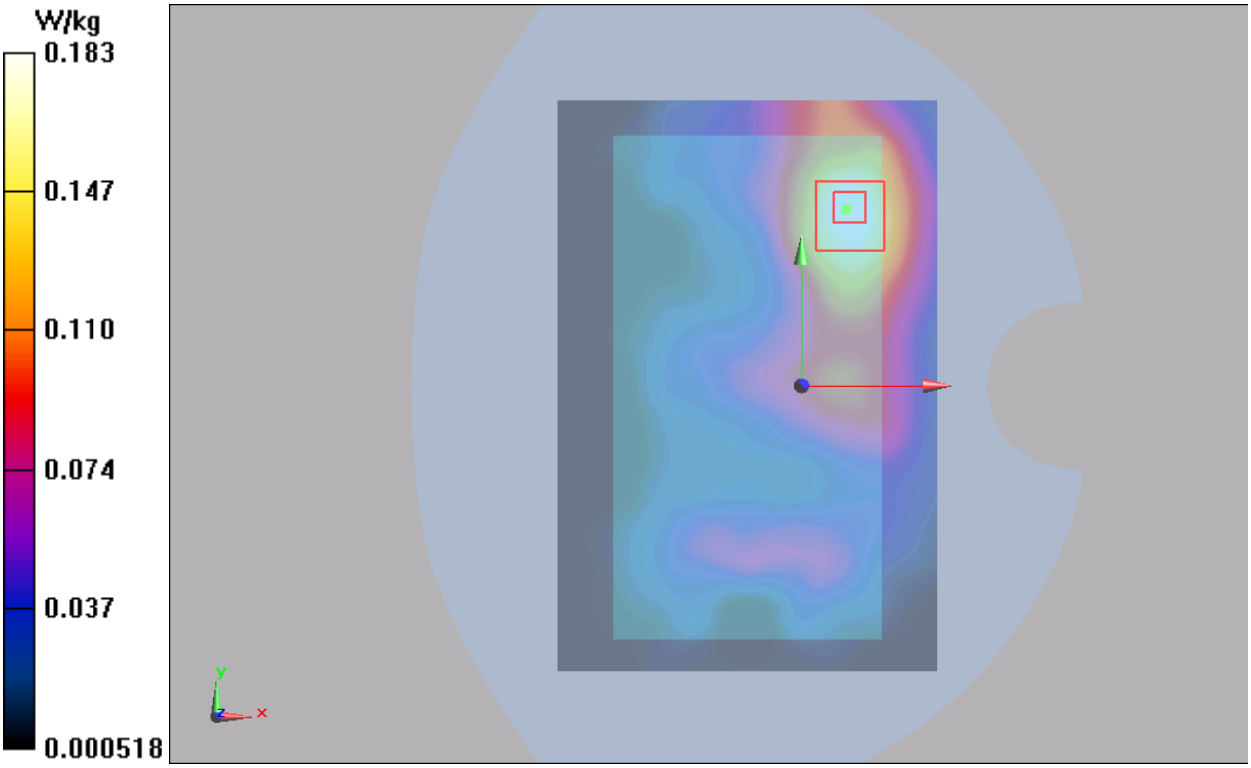


Figure 53 Body, Back Side, LTE Band 7 1RB Channel 21350

LTE Band 7 1RB Left Edge High (Battery 1, Distance 10mm)

Date: 7/18/2015

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

Medium parameters used: f = 2535 MHz; σ = 2.121 S/m; ε_r = 52.544; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.29, 7.29, 7.29); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High /Area Scan (51x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 6.623 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.273 W/kg

SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.086 W/kg

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

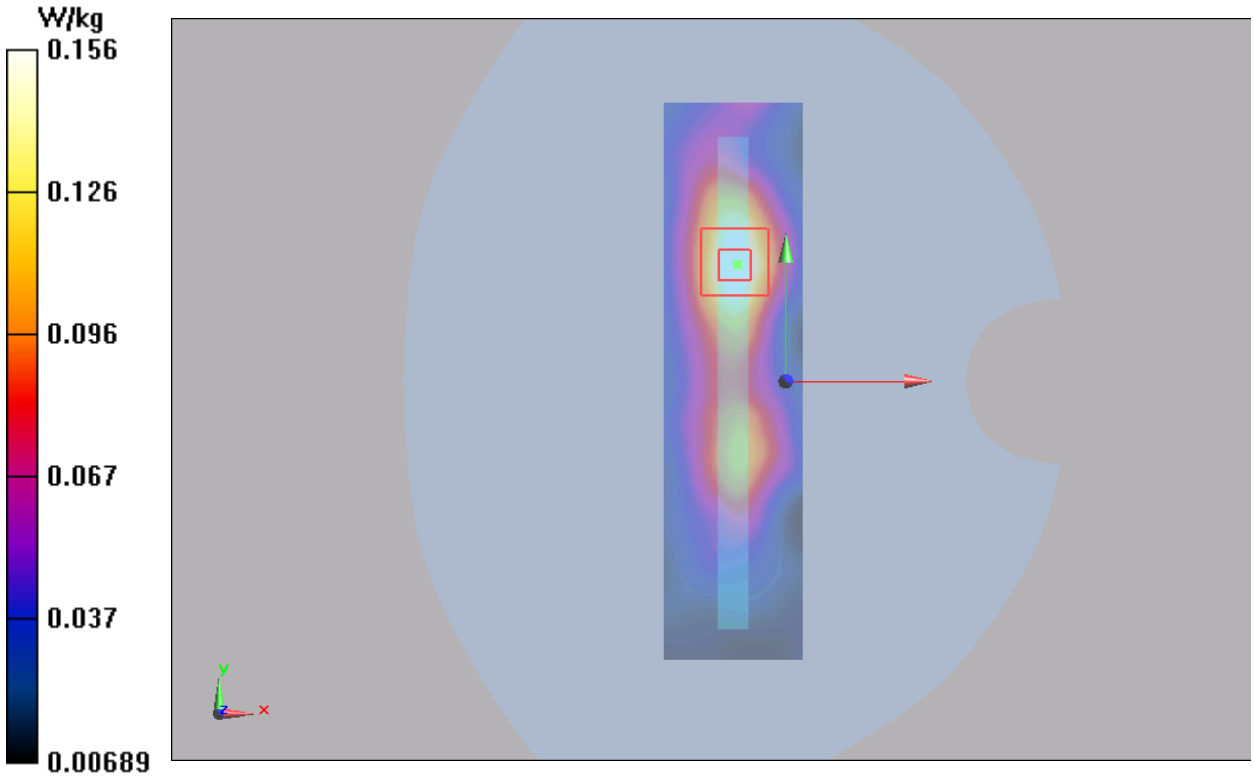


Figure 54 Body, Left Edge, LTE Band 7 1RB Channel 21350

LTE Band 12 50%RB Right Tilt Low (Battery 2)

Date: 6/25/2015
Communication System: UID 0, LTE (0); Frequency: 704 MHz;Duty Cycle: 1:1
Medium parameters used: f = 704 MHz; σ = 0.865 S/m; ε_r = 42.628; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Tilt Low /Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.608 W/kg

Tilt Low /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.47 V/m; Power Drift = -0.057 dB
Peak SAR (extrapolated) = 1.14 W/kg
SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.270 W/kg
Maximum value of SAR (measured) = 0.581 W/kg

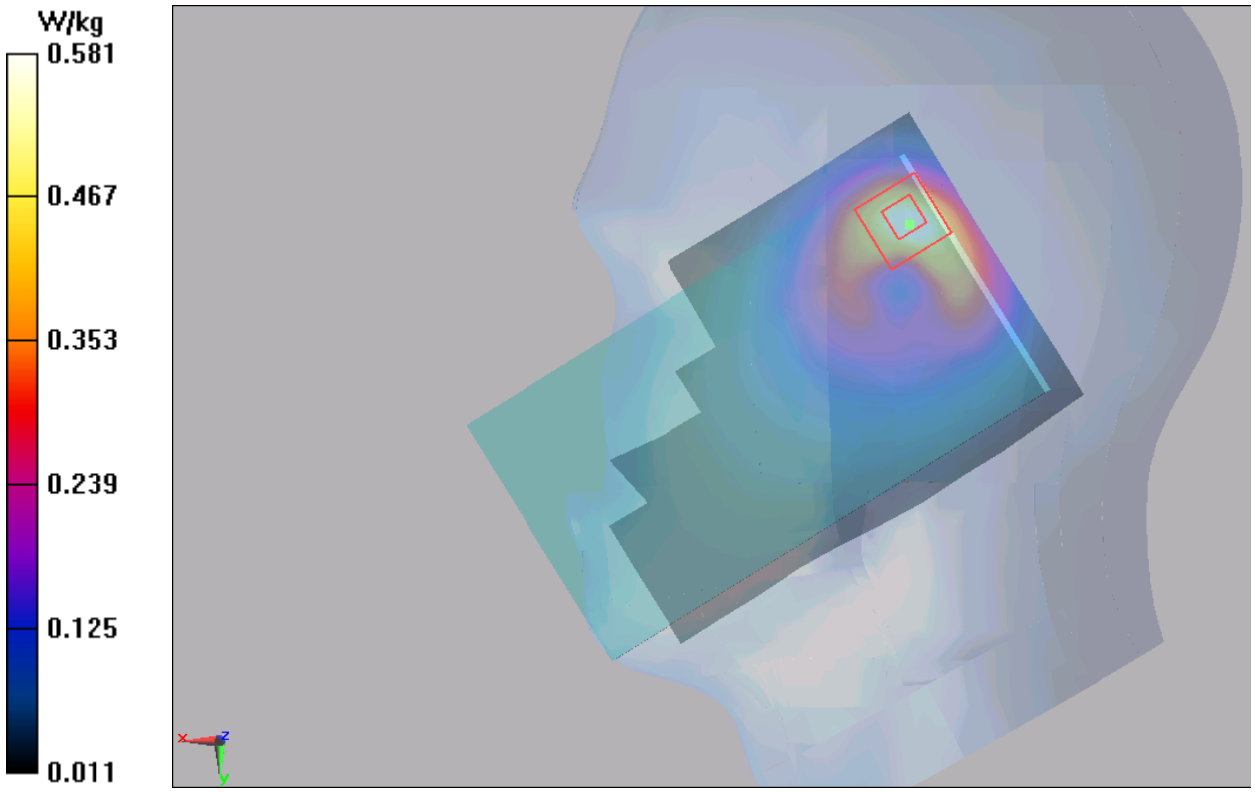


Figure 55 Right Hand Touch Tilt 15° LTE Band 12 50%RB Channel 23060

LTE Band 12 1RB Back Side Low (Battery 1, Distance 15mm)

Date: 6/27/2015

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

Medium parameters used: f = 704 MHz; σ = 0.911 S/m; ε_r = 57.29; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.128 W/kg

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

Reference Value = 10.48 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.164 W/kg

SAR(1 g) = 0.121 W/kg; SAR(10 g) = 0.089 W/kg

Maximum value of SAR (measured) = 0.127 W/kg

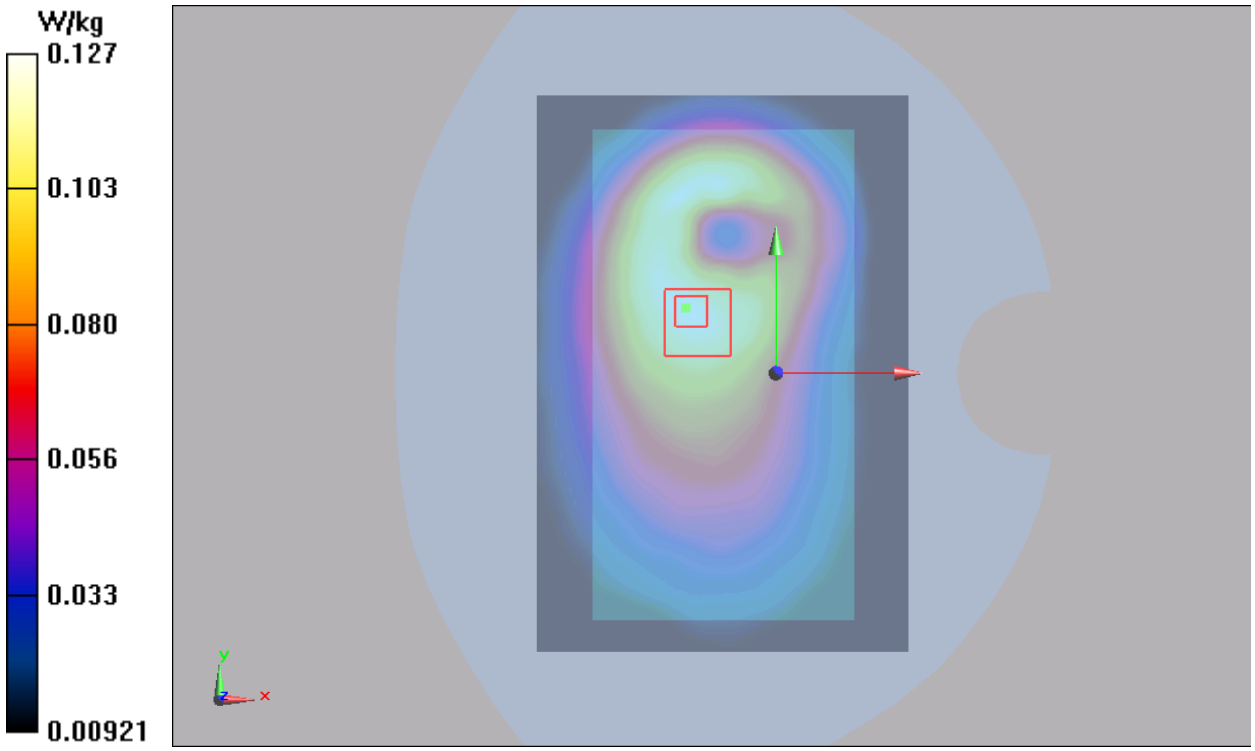


Figure 56 Body, Back Side, LTE Band 12 1RB Channel 23060

LTE Band 12 50%RB Back Side Middle (Battery 1, Distance 10mm)

Date: 6/27/2015

Communication System: UID 0, LTE (0); Frequency: 707.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 707.5 MHz; σ = 0.913 S/m; ε_r = 57.265; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.327 W/kg

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

Reference Value = 5.985 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.491 W/kg

SAR(1 g) = 0.286 W/kg; SAR(10 g) = 0.170 W/kg

Maximum value of SAR (measured) = 0.307 W/kg

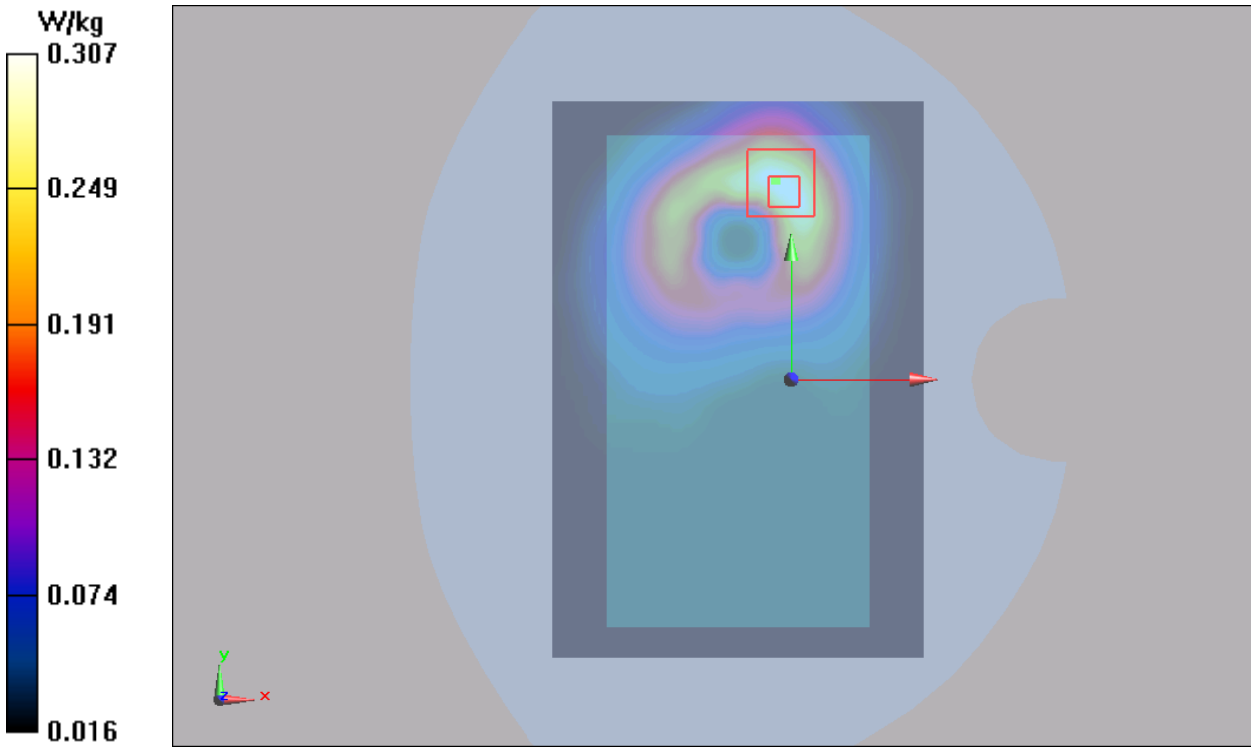


Figure 57 Body, Back Side, LTE Band 12 50%RB Channel 23095

LTE Band 17 1RB Right Tilt High (Battery 1)

Date: 6/25/2015
Communication System: UID 0, LTE (0); Frequency: 711 MHz;Duty Cycle: 1:1
Medium parameters used: f = 711 MHz; σ = 0.871 S/m; ε_r = 42.542; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Tilt High/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.617 W/kg

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.66 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 1.17 W/kg
SAR(1 g) = 0.528 W/kg; SAR(10 g) = 0.265 W/kg
Maximum value of SAR (measured) = 0.595 W/kg

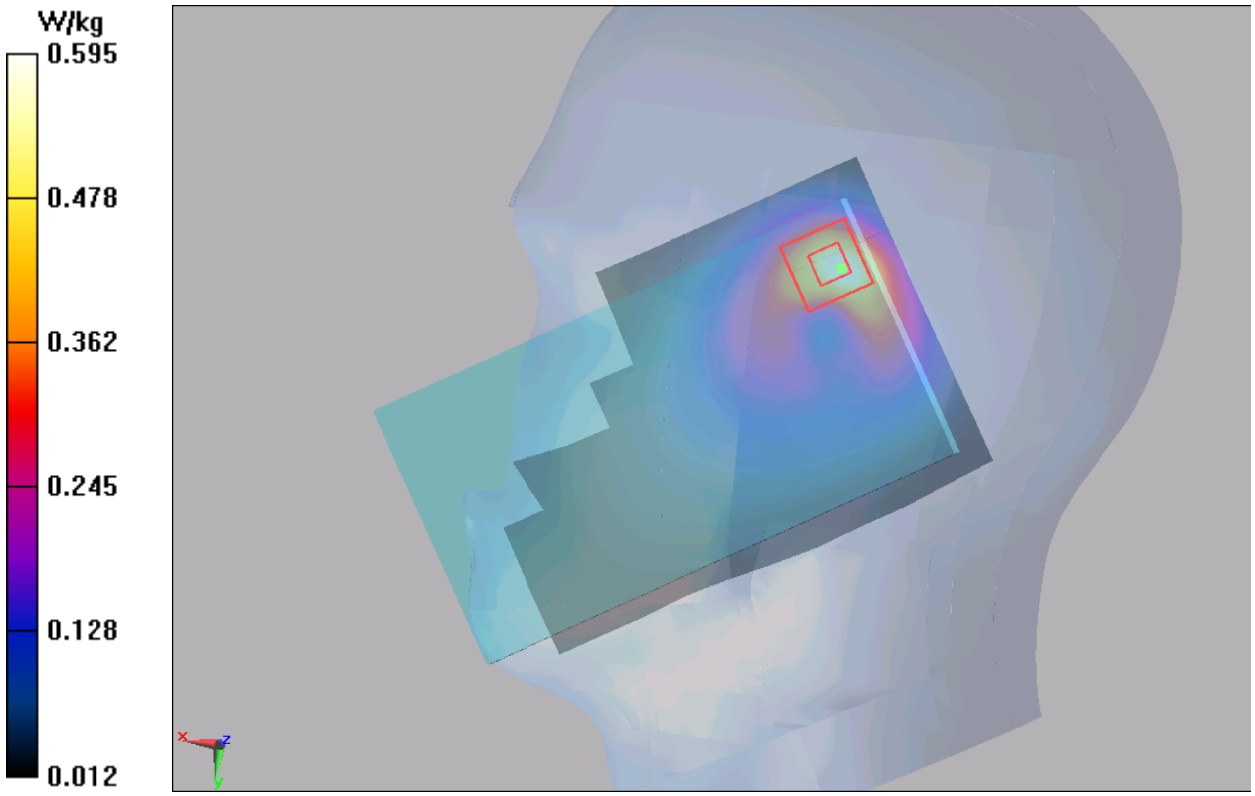


Figure 58 Right Hand Tilt 15° LTE Band 17 1RB Channel 23800

LTE Band 17 1RB Back Side High (Battery1, Distance 15mm)

Date: 6/26/2015
Communication System: LTE B17; Frequency: 711 MHz;Duty Cycle: 1:1
Medium parameters used: f = 711 MHz; σ = 0.915 mho/m; ε_r = 57.2; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Flat Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM 11; Type: SAM V4.0; Serial: TP-1246
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm
Maximum value of SAR (interpolated) = 0.103 mW/g

High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.91 V/m; Power Drift = 0.178 dB
Peak SAR (extrapolated) = 0.156 W/kg
SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.059 mW/g
Maximum value of SAR (measured) = 0.103 mW/g

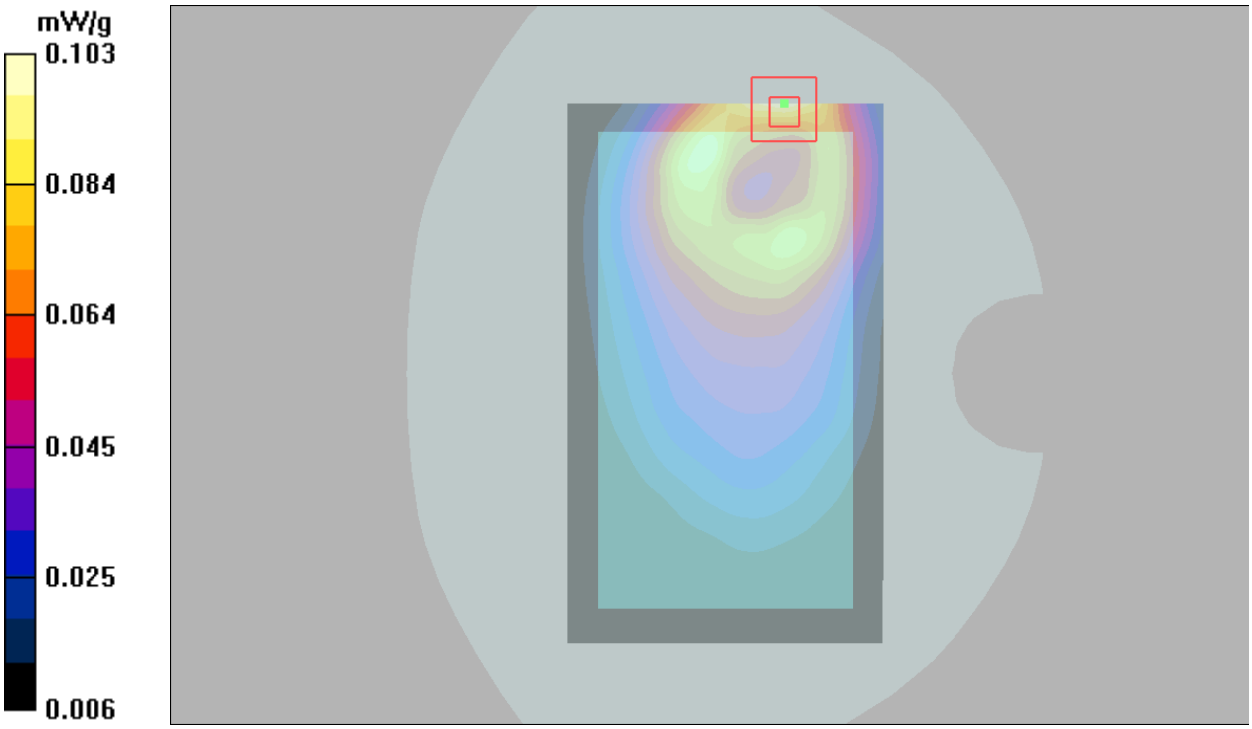


Figure 59 Body, Back Side, LTE Band 17 1RB Channel 23800

LTE Band 17 50%RB Back Side Low (Battery 1, Distance 10mm)

Date: 6/26/2015

Communication System: UID 0, LTE (0); Frequency: 709 MHz;Duty Cycle: 1:1

Medium parameters used: f = 709 MHz; σ = 0.914 S/m; ε_r = 57.25; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 5.783 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 0.465 W/kg

SAR(1 g) = 0.271 W/kg; SAR(10 g) = 0.161 W/kg

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

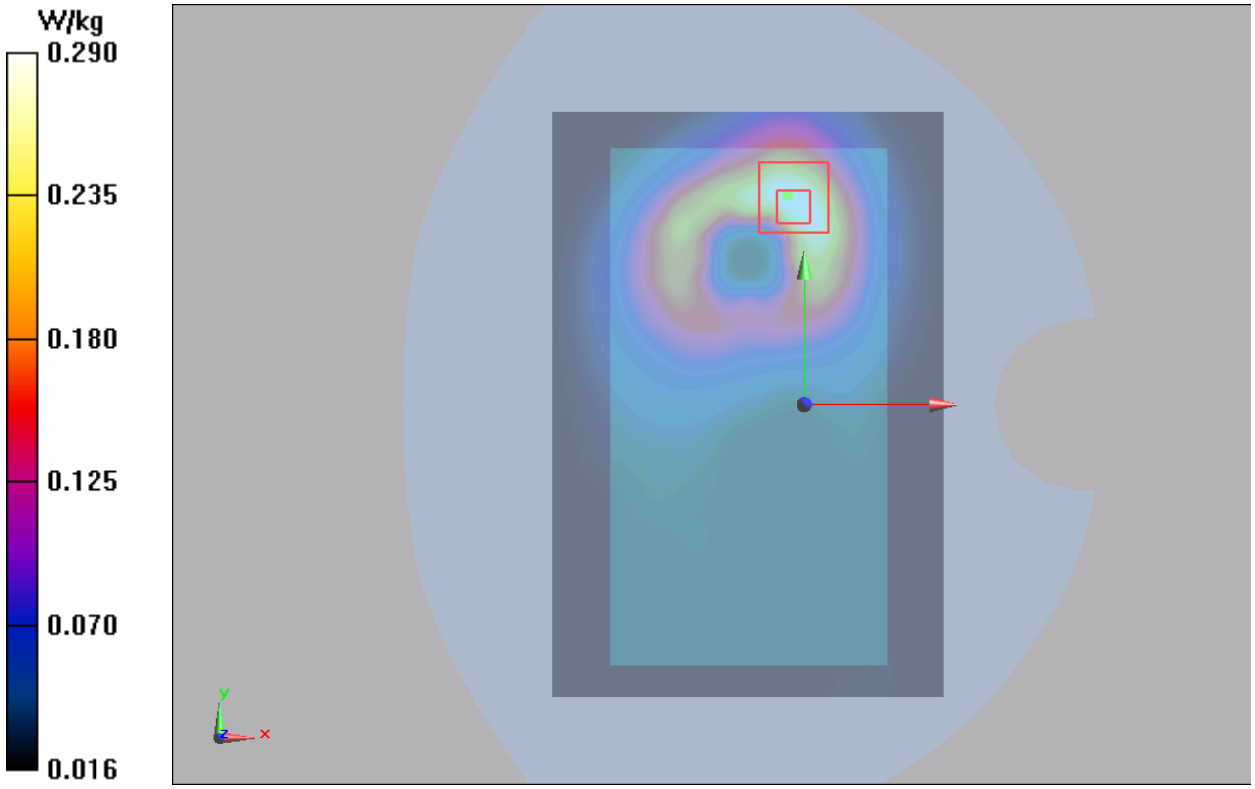


Figure 60 Body, Back Side, LTE Band 17 50%RB Channel 23780

LTE Band 25 1RB Right Cheek High (Battery 1)

Date: 7/13/2015
Communication System: UID 0, LTE (0); Frequency: 1905 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1905 MHz; σ = 1.417 S/m; ε_r = 40.774; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Cheek High/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.12 W/kg

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.76 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.559 W/kg
Maximum value of SAR (measured) = 1.11 W/kg

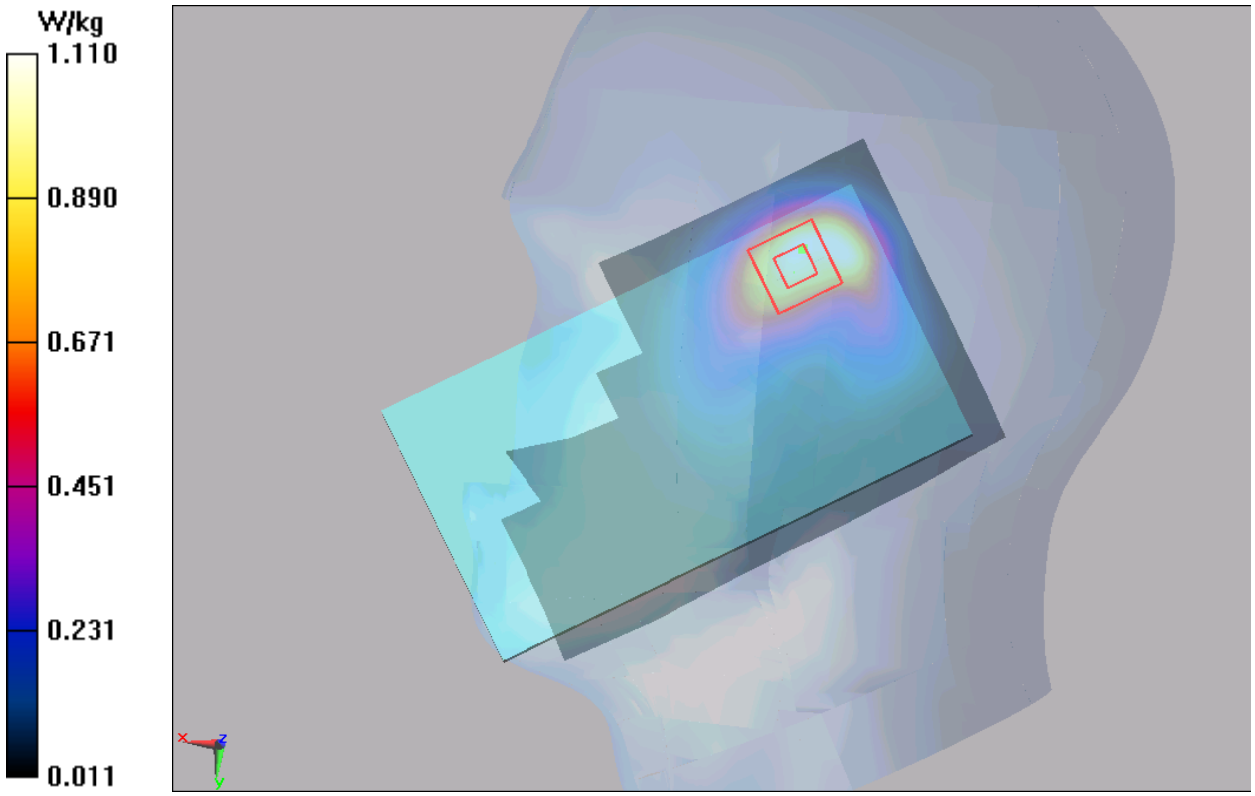


Figure 61 Right Hand Touch Cheek LTE Band 25 1RB Channel 26590

LTE Band 25 50%RB Back Side Middle (Battery 1, Distance 15mm)

Date: 7/15/2015

Communication System: LTE Band 25; Frequency: 1882.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.5 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.083 mW/g

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

Reference Value = 5.39 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.112 W/kg

SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.083 mW/g

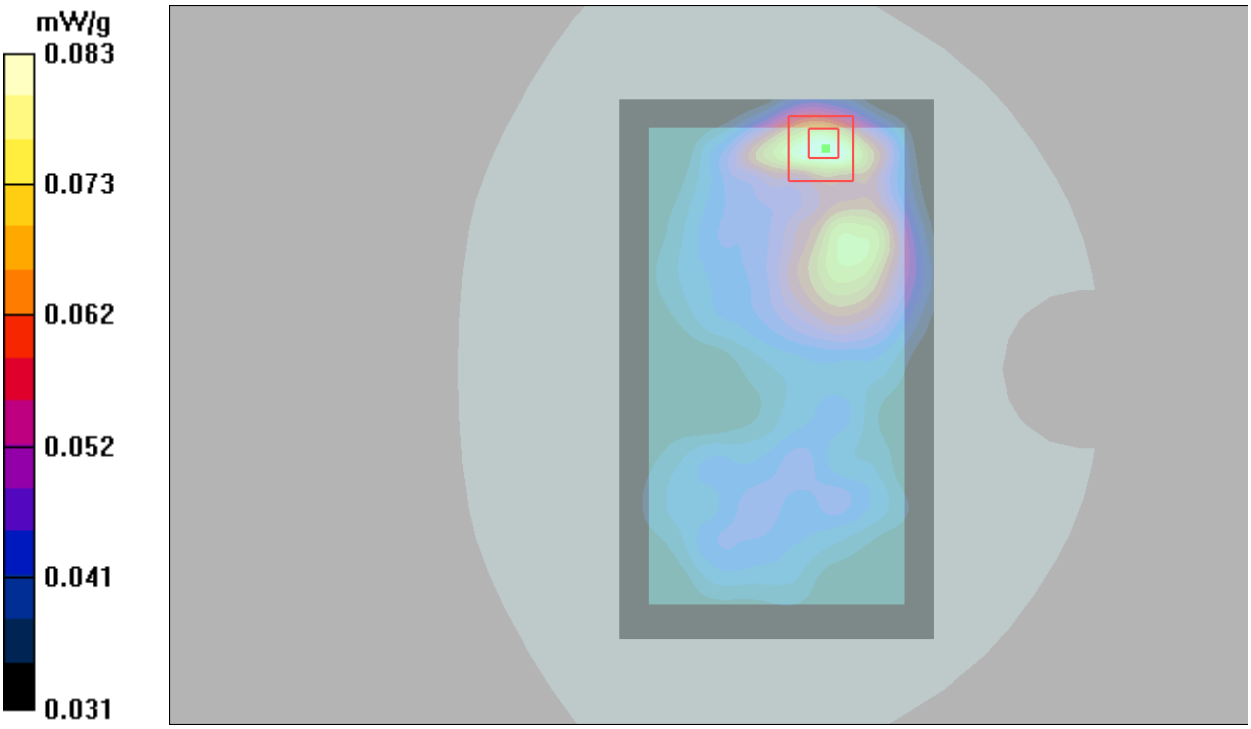


Figure 62 Body, Back Side, LTE Band 25 50%RB Channel 26365

LTE Band 25 1RB Back Side Middle (Battery 1, Distance 10mm)

Date: 7/15/2015

Communication System: UID 0, LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.496 S/m; ε_r = 52.607; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 7.091 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.314 W/kg; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.333 W/kg

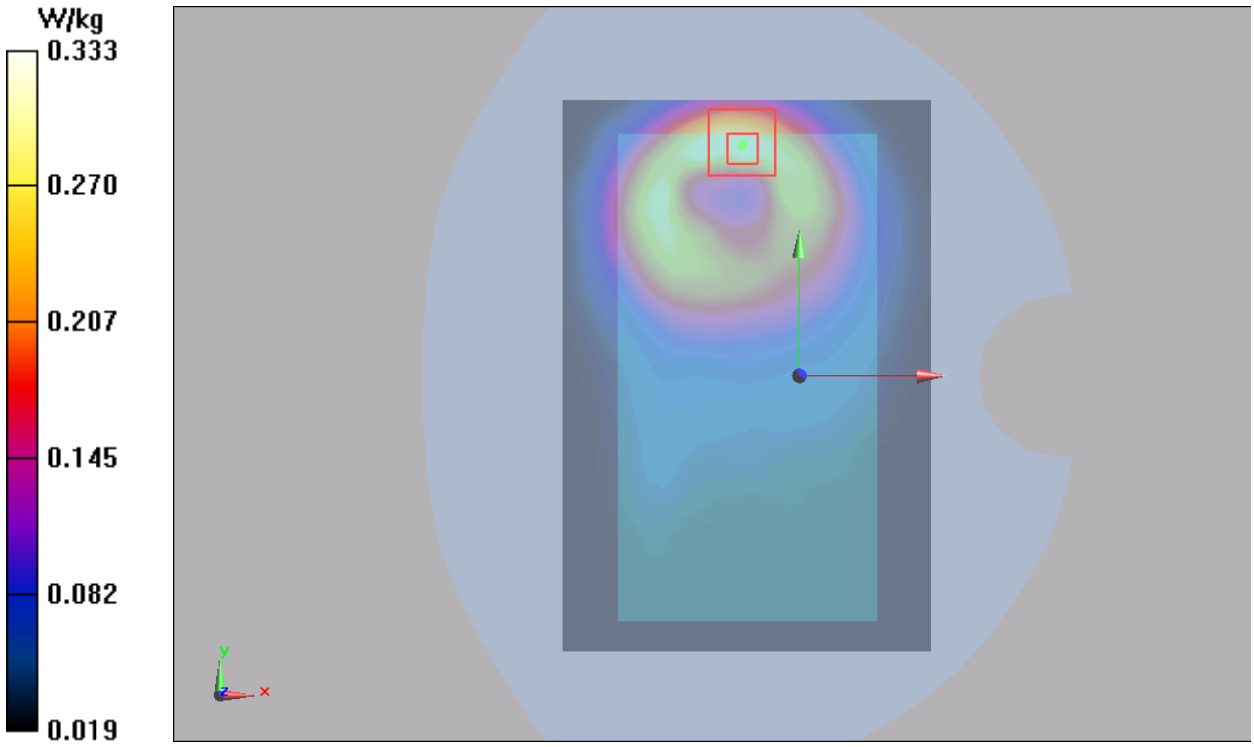


Figure 63 Body, Back Side, LTE Band 25 1RB Channel 26365

LTE Band 26 1RB Right Cheek Low (Battery 2)

Date: 7/2/2015
Communication System: UID 0, LTE (0); Frequency: 822.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.87 S/m; ε_r = 41.547; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.893 W/kg

Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.37 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.79 W/kg
SAR(1 g) = 0.886 W/kg; SAR(10 g) = 0.472 W/kg
Maximum value of SAR (measured) = 0.963 W/kg

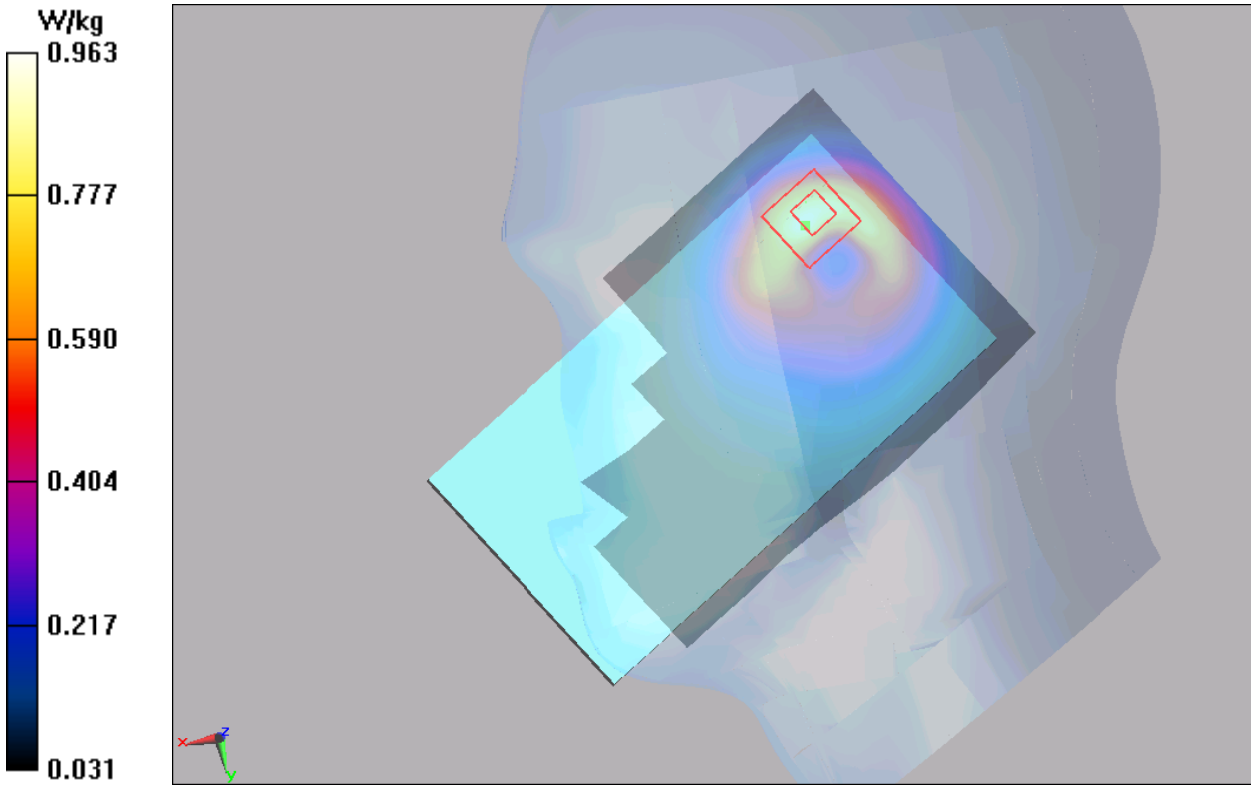


Figure 64 Right Hand Touch Cheek LTE Band 26 1RB Channel 26775

LTE Band 26 1RB Back Side High (Battery 1, Distance 15mm)

Date: 7/4/2015

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

Medium parameters used (interpolated): f = 841.5 MHz; σ = 1.017 S/m; ε_r = 54.485; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.179 W/kg

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

Reference Value = 11.17 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.220 W/kg

SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.120 W/kg

Maximum value of SAR (measured) = 0.177 W/kg

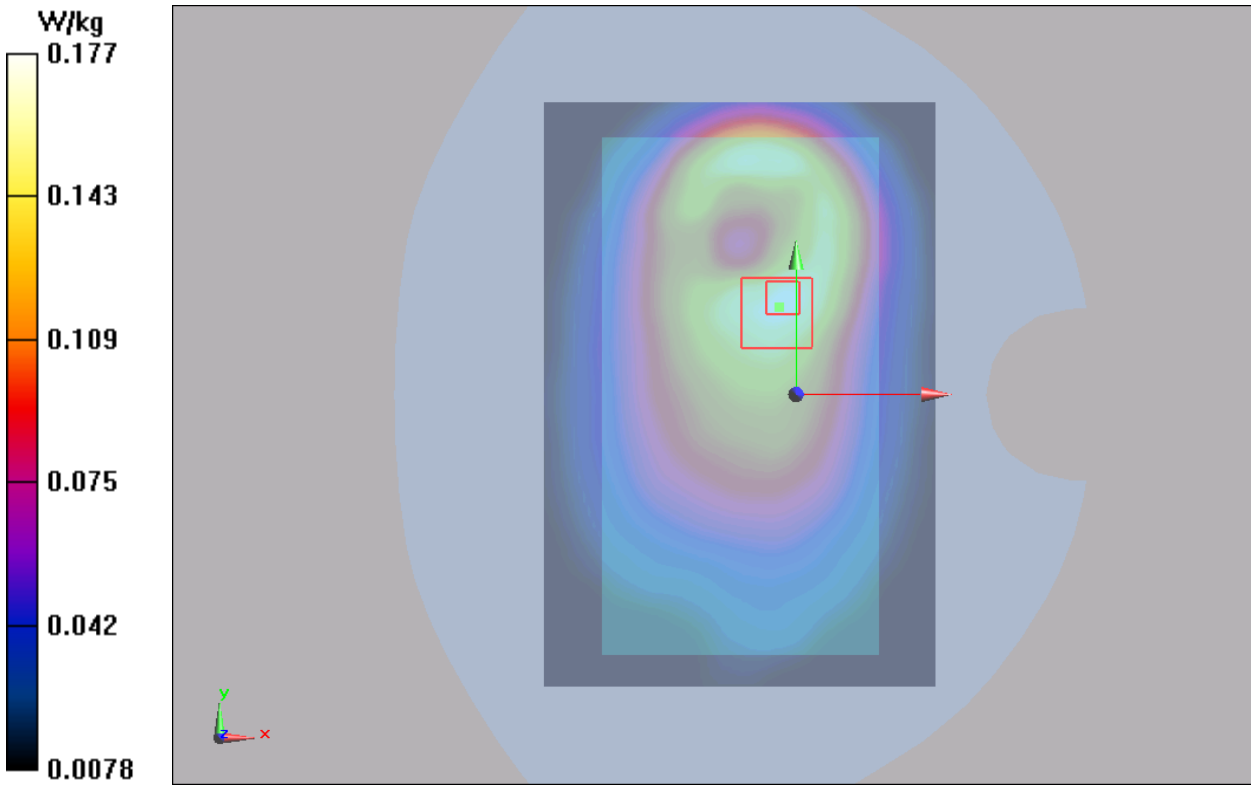


Figure 65 Body, Back Side, LTE Band 26 1RB Channel 26965

LTE Band 26 1RB Back Side High (Battery 2, Distance 10mm)

Date: 7/4/2015

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

Medium parameters used (interpolated): f = 841.5 MHz; σ = 1.017 S/m; ε_r = 54.485; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.515 W/kg

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

Reference Value = 11.67 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.249 W/kg

Maximum value of SAR (measured) = 0.440 W/kg

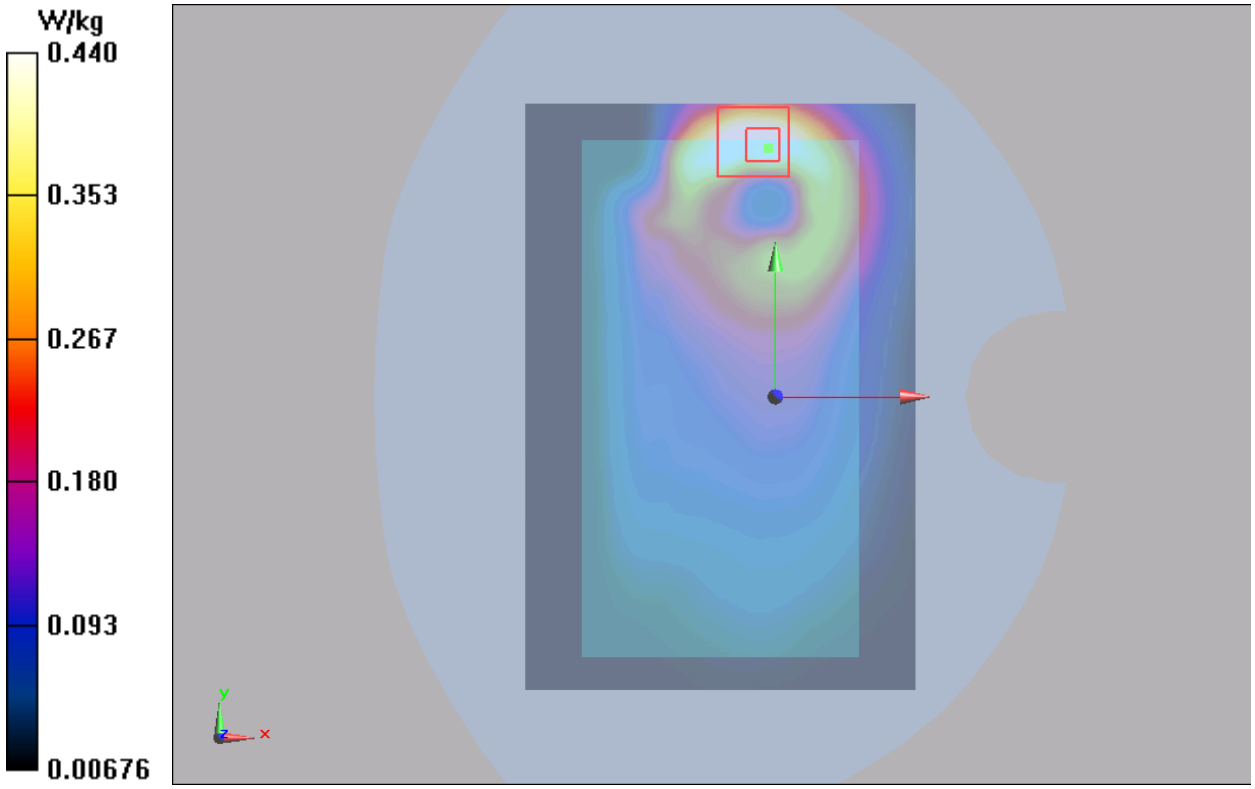


Figure 66 Body, Back Side, LTE Band 26 1RB Channel 26965

ANNEX C2: Antenna 2
GSM 850 Right Cheek Middle (Battery 1)

Date: 6/30/2015
Communication System: UID 0, GSM (0); Frequency: 836.6 MHz;Duty Cycle: 1:8.30042
Medium parameters used: f = 837 MHz; σ = 0.885 S/m; ε_r = 41.372; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.166 W/kg

Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.175 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.193 W/kg
SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.124 W/kg
Maximum value of SAR (measured) = 0.164 W/kg

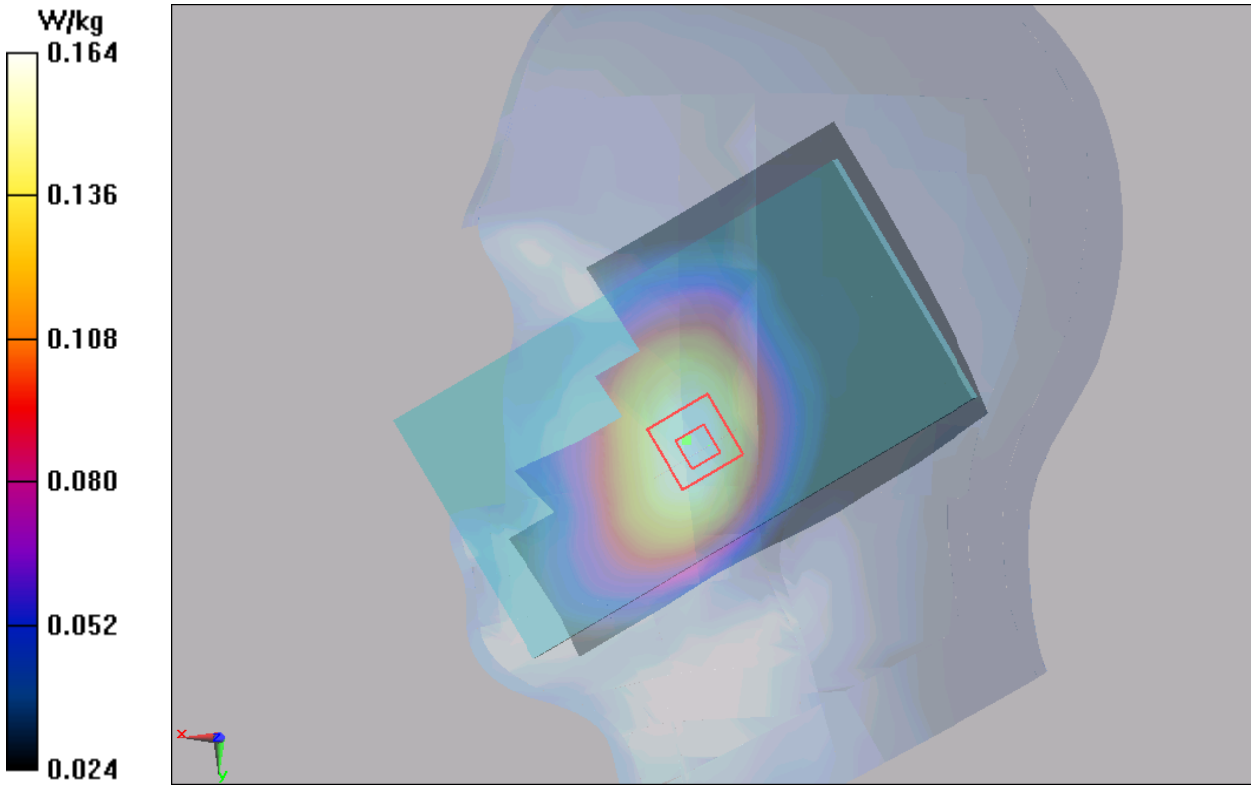


Figure 67 Right Hand Touch Cheek GSM 850 Channel 190

GSM 850 Back Side Middle (Battery 1, Distance 15mm)

Date: 7/1/2015

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

Medium parameters used: f = 837 MHz; σ = 1.013 S/m; ε_r = 54.534; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.249 W/kg

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

Reference Value = 16.42 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.295 W/kg

SAR(1 g) = 0.239 W/kg; SAR(10 g) = 0.184 W/kg

Maximum value of SAR (measured) = 0.249 W/kg

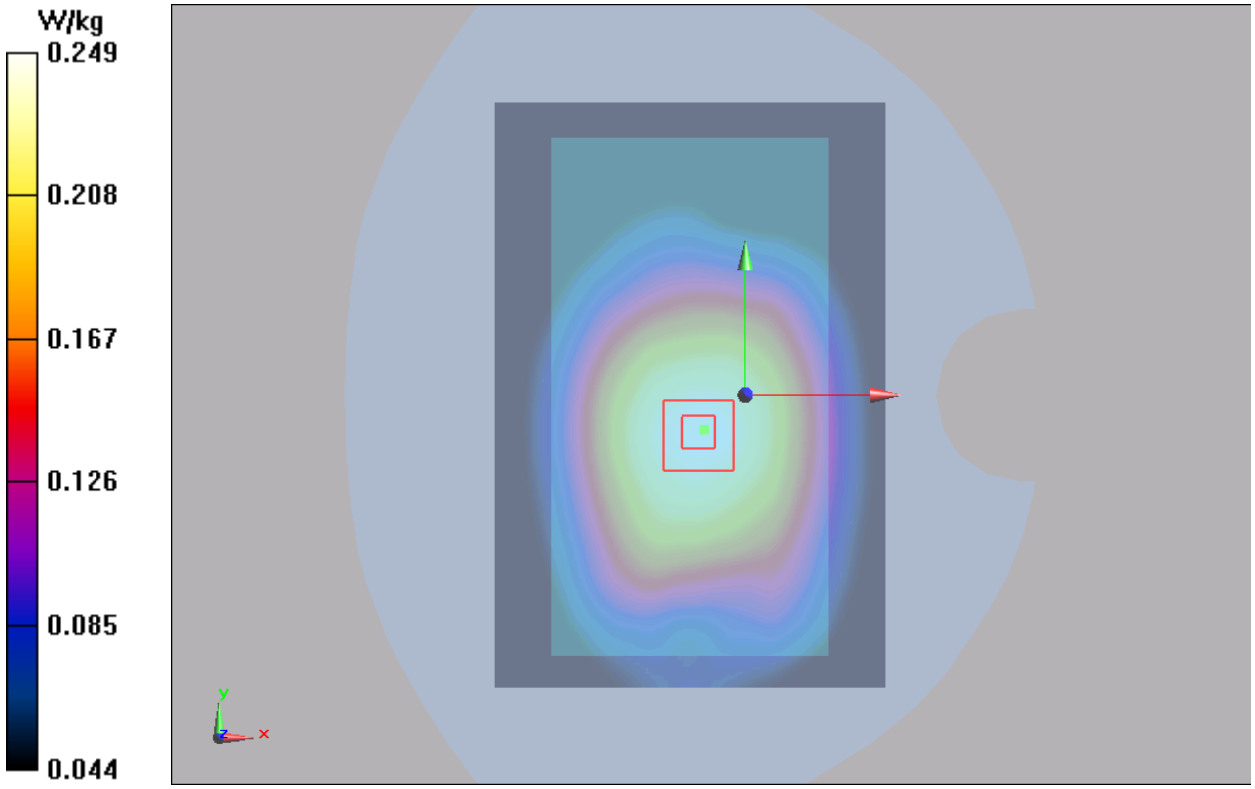


Figure 68 Body, Back Side, GSM 850 Channel 190

GSM 850 GPRS (2Txslots) Front Side Middle (Battery 2, Distance 10mm)

Date: 7/1/2015

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz;Duty Cycle: 1:4.15

Medium parameters used: f = 837 MHz; σ = 1.01 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.266 mW/g

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

Reference Value = 13.3 V/m; Power Drift = 0.020dB

Peak SAR (extrapolated) = 0.335 W/kg

SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.197 mW/g

Maximum value of SAR (measured) = 0.284 mW/g

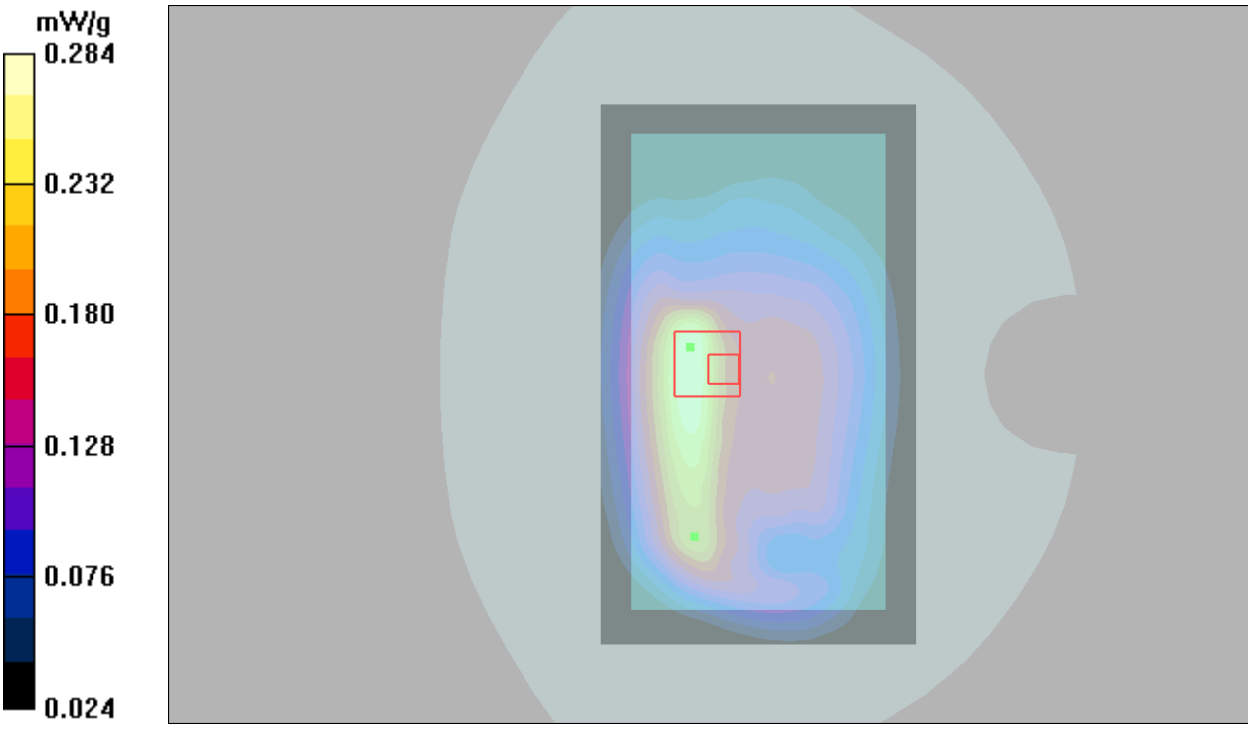


Figure 69 Body, Front Side, GSM 850 GPRS (2Txslots) Channel 190

GSM 1900 Left Cheek Middle (Battery 1)

Date: 7/16/2015

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

Medium parameters used: f = 1880 MHz; σ = 1.386 S/m; ε_r = 40.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Cheek Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.181 W/kg

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

Reference Value = 1.693 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.262 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.104 W/kg

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

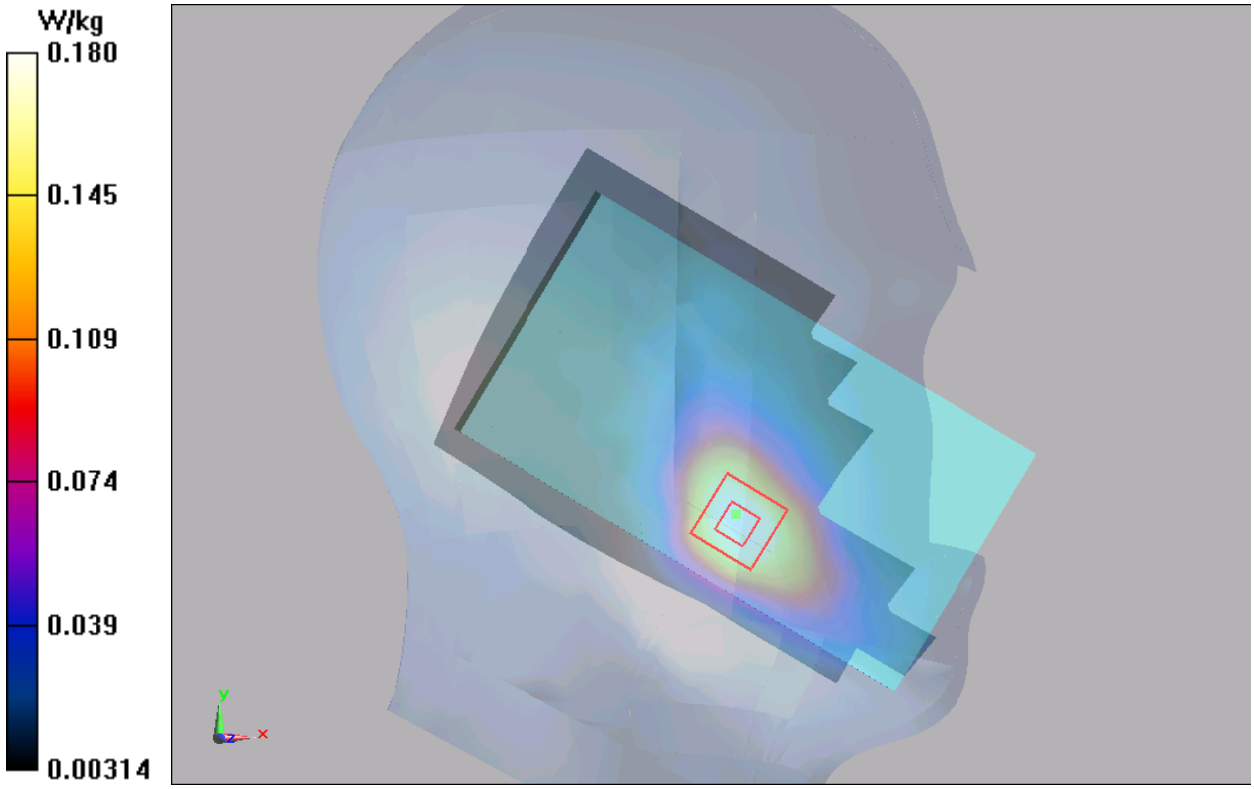


Figure 70 Left Hand Touch Cheek GSM 1900 Channel 661

GSM 1900 Back Side Middle (Battery 1, Distance 15mm)

Date: 7/8/2015

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

Medium parameters used: f = 1880 MHz; σ = 1.5 S/m; ε_r = 52.509; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0871 W/kg

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

Reference Value = 2.633 V/m; Power Drift = 0.138 dB

Peak SAR (extrapolated) = 0.171 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.053 W/kg

Maximum value of SAR (measured) = 0.0988 W/kg

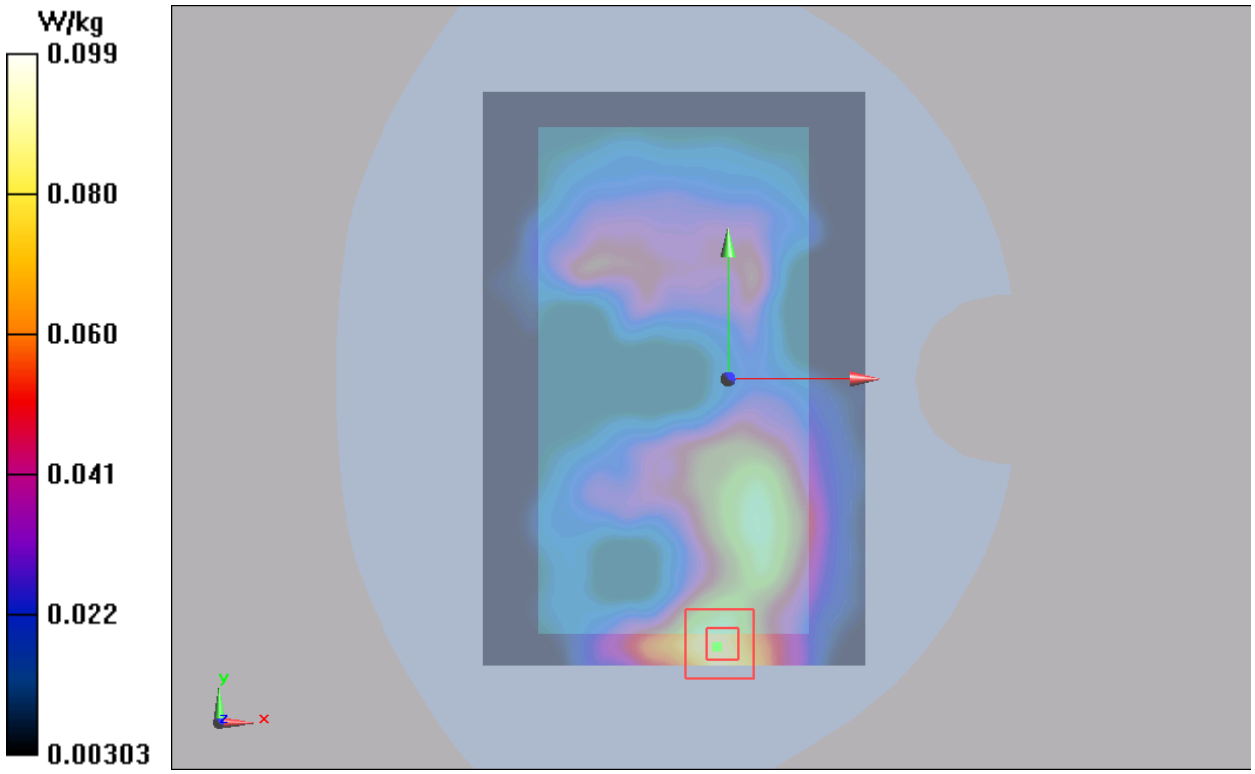


Figure 71 Body, Back Side, GSM 1900 Channel 661

GSM 1900 GPRS (2Txslots) Left Edge Middle (Battery 1, Distance 10mm)

Date: 7/8/2015

Communication System: UID 0, GPRS 2TX (0); Frequency: 1880 MHz;Duty Cycle: 1:4.14954

Medium parameters used: f = 1880 MHz; σ = 1.5 S/m; ε_r = 52.509; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (51x181x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 13.50 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.714 W/kg

SAR(1 g) = 0.447 W/kg; SAR(10 g) = 0.261 W/kg

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

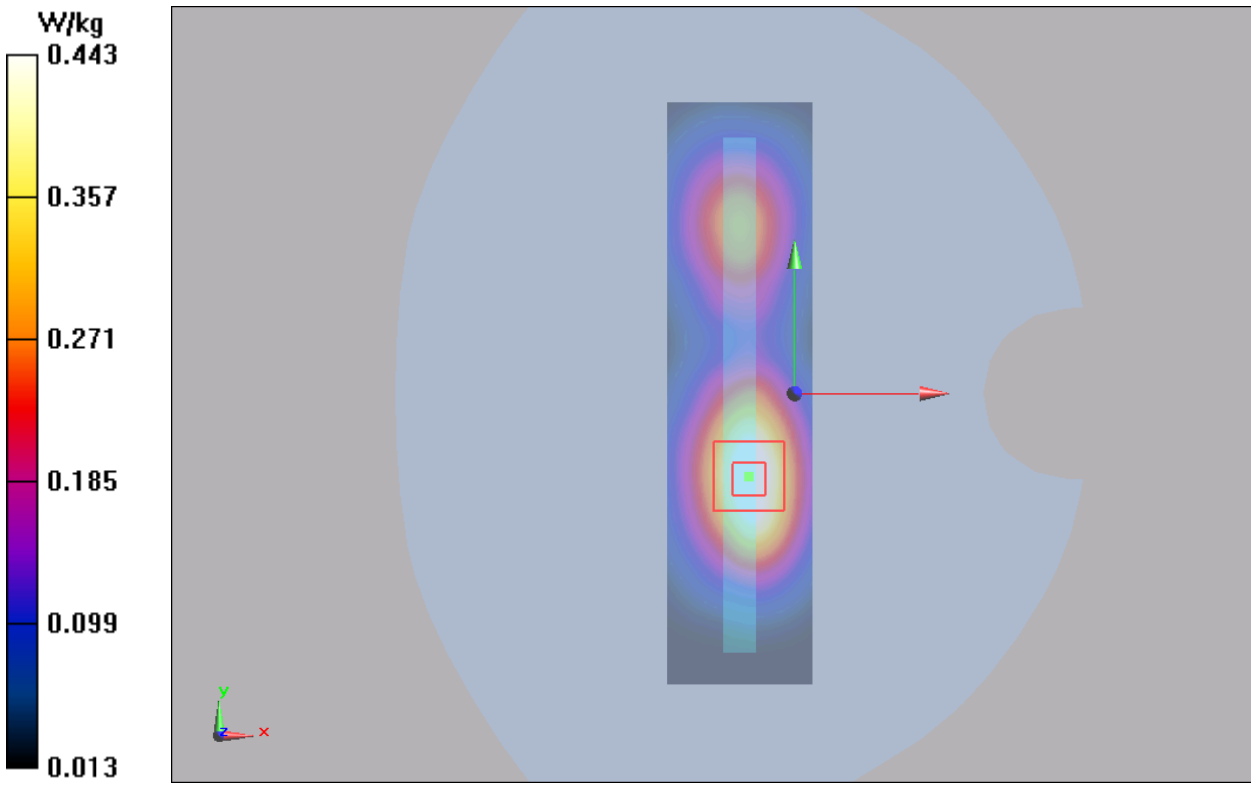


Figure 72 Body, Left Edge, GSM 1900 GPRS (2Txslots) Channel 661

UMTS Band II Left Cheek Middle (Battery 2)

Date: 7/16/2015

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

Medium parameters used: f = 1880 MHz; σ = 1.386 S/m; ε_r = 40.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Measurement grid: dx=10mm, dy=10mm, dz=5mm

Reference Value = 3.438 V/m; Power Drift = 0.062 dB

Peak SAR (extrapolated) = 0.685 W/kg

SAR(1 g) = 0.420 W/kg; SAR(10 g) = 0.250 W/kg

Maximum value of SAR (measured) = 0.431 W/kg

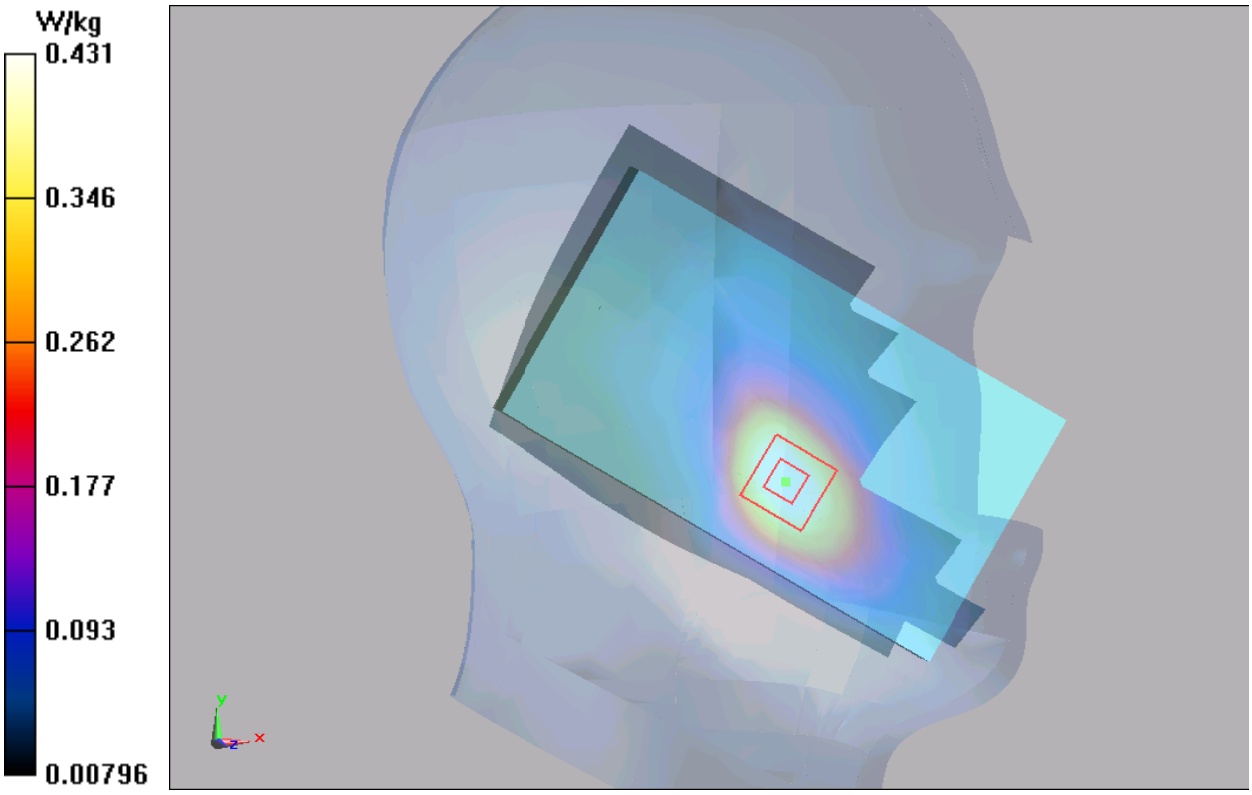


Figure 73 Left Hand Touch Cheek UMTS Band II Channel 9400

UMTS Band II Front Side Middle (Battery 1, Distance 15mm)

Date: 7/8/2015

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

Medium parameters used: f = 1880 MHz; σ = 1.5 S/m; ε_r = 52.509; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.167 W/kg

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

Reference Value = 4.500 V/m; Power Drift = 0.077 dB

Peak SAR (extrapolated) = 0.296 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.094 W/kg

Maximum value of SAR (measured) = 0.174 W/kg

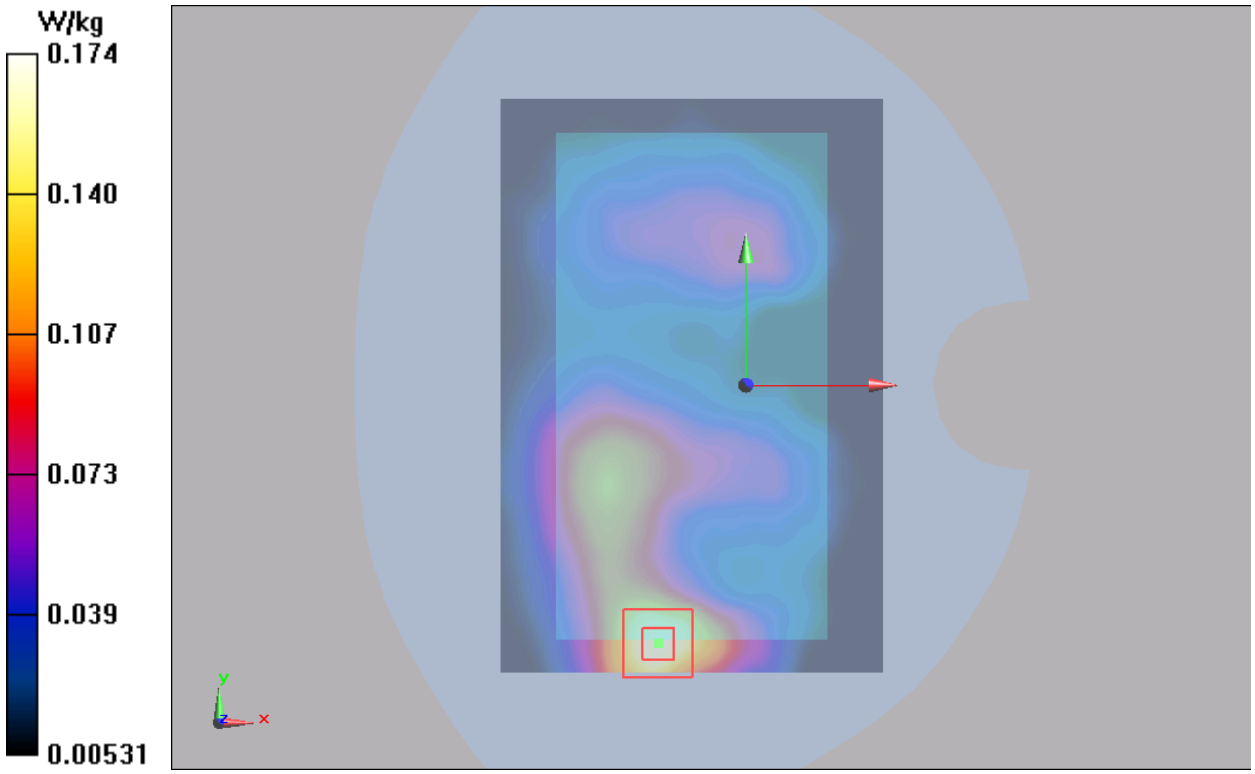


Figure 74 Body, Front Side, UMTS Band II Channel 9400

UMTS Band II Back Side Middle (Battery 1, Distance 10mm)

Date: 7/8/2015

Communication System: WCDMA Band II; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle /Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.632 mW/g

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

Reference Value = 4.84 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.537 mW/g; SAR(10 g) = 0.261 mW/g

Maximum value of SAR (measured) = 0.587 mW/g

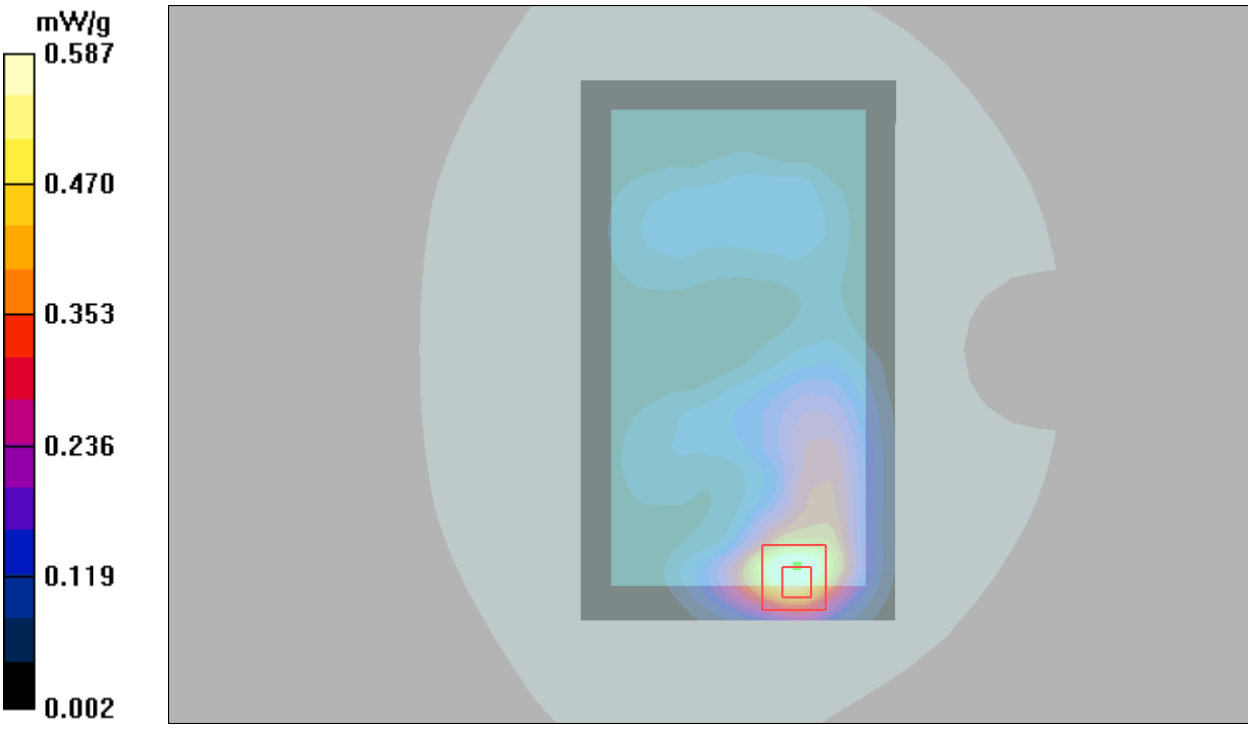


Figure 75 Body, Back Side, UMTS Band II Channel 9400

UMTS Band IV Left Cheek Middle (Battery 2)

Date: 7/10/2015

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

Medium parameters used: f = 1733 MHz; σ = 1.322 S/m; ε_r = 40.269; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.02, 8.02, 8.02); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Measurement grid: dx=10mm, dy=10mm, dz=5mm

Reference Value = 3.880 V/m; Power Drift = 0.067 dB

Peak SAR (extrapolated) = 0.546 W/kg

SAR(1 g) = 0.358 W/kg; SAR(10 g) = 0.222 W/kg

Maximum value of SAR (measured) = 0.375 W/kg

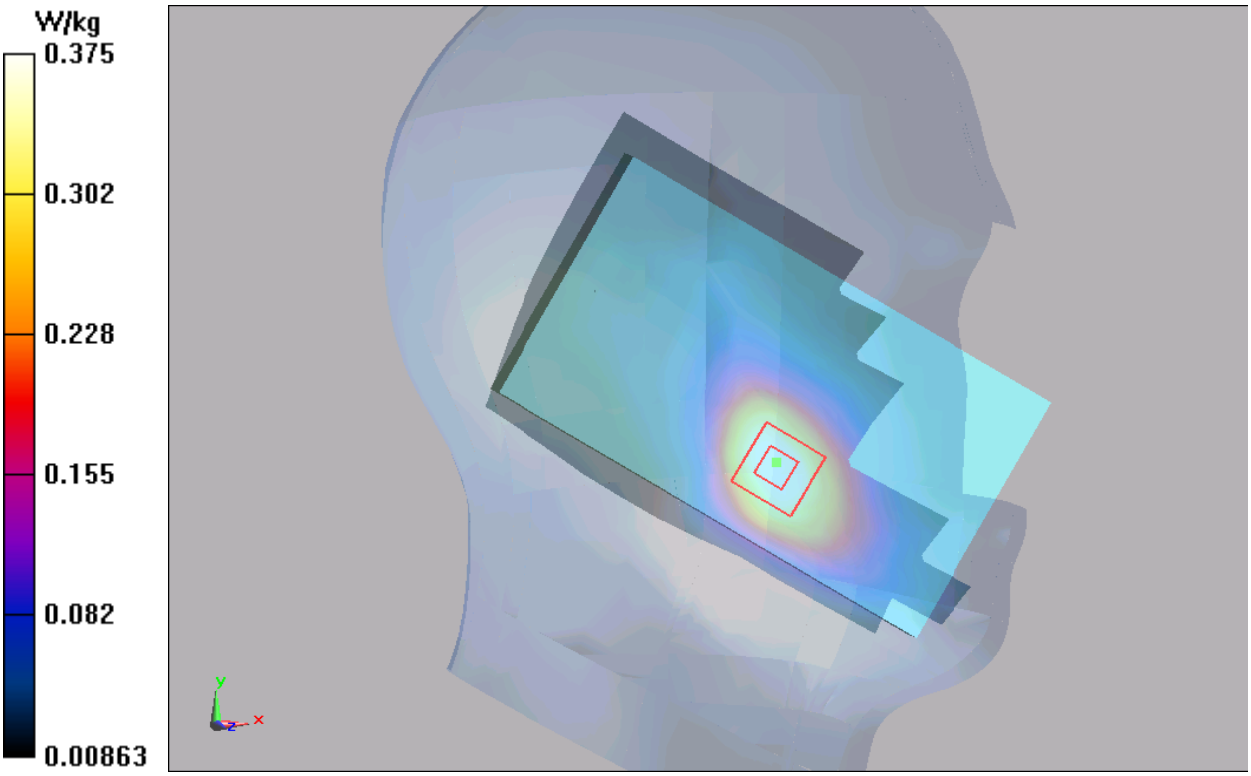


Figure 76 Left Hand Touch Cheek UMTS Band IV Channel 1413

UMTS Band IV Back Side Middle (Battery 1, Distance 15mm)

Date: 7/7/2015

Communication System: UID 0, WCDMA Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1733 MHz; σ = 1.443 S/m; ε_r = 51.909; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.435 W/kg

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

Reference Value = 6.384 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 0.628 W/kg

SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.409 W/kg

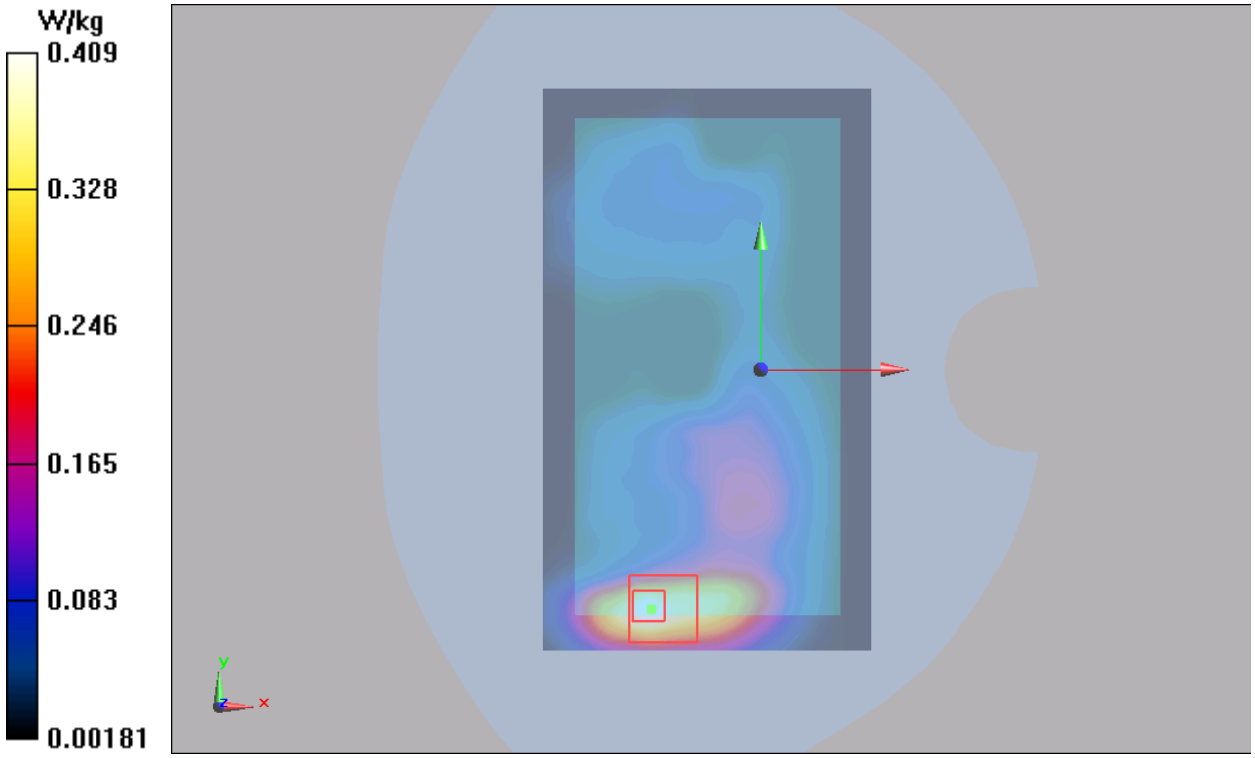


Figure 77 Body, Back Side, UMTS Band IV Channel 1413

UMTS Band IV Bottom Edge Middle (Battery 2, Distance 10mm)

Date: 8/3/2015

Communication System: WCDMA Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1733 MHz; σ = 1.44 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (51x111x1): Measurement grid: dx=1.000mm, dy=1.000mm

Maximum value of SAR (interpolated) = 0.718 W/kg

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

Reference Value = 20.23 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.628 W/kg; SAR(10 g) = 0.343 W/kg

Maximum value of SAR (measured) = 0.627 W/kg

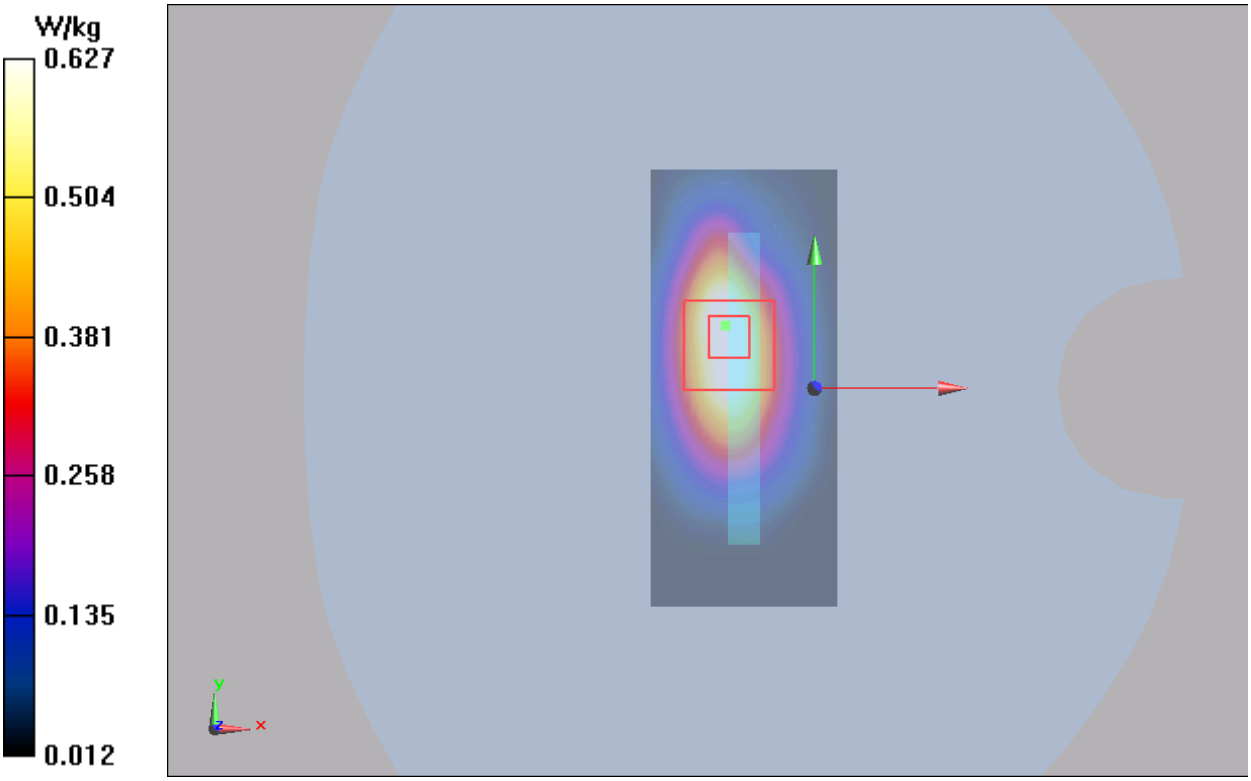


Figure 78 Body, Bottom Edge, UMTS Band IV Channel 1413

UMTS Band V Right Cheek Middle (Battery 1)

Date: 6/30/2015
Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.885 S/m; ε_r = 41.372; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Cheek Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.175 W/kg

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.672 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.202 W/kg
SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.129 W/kg
Maximum value of SAR (measured) = 0.172 W/kg

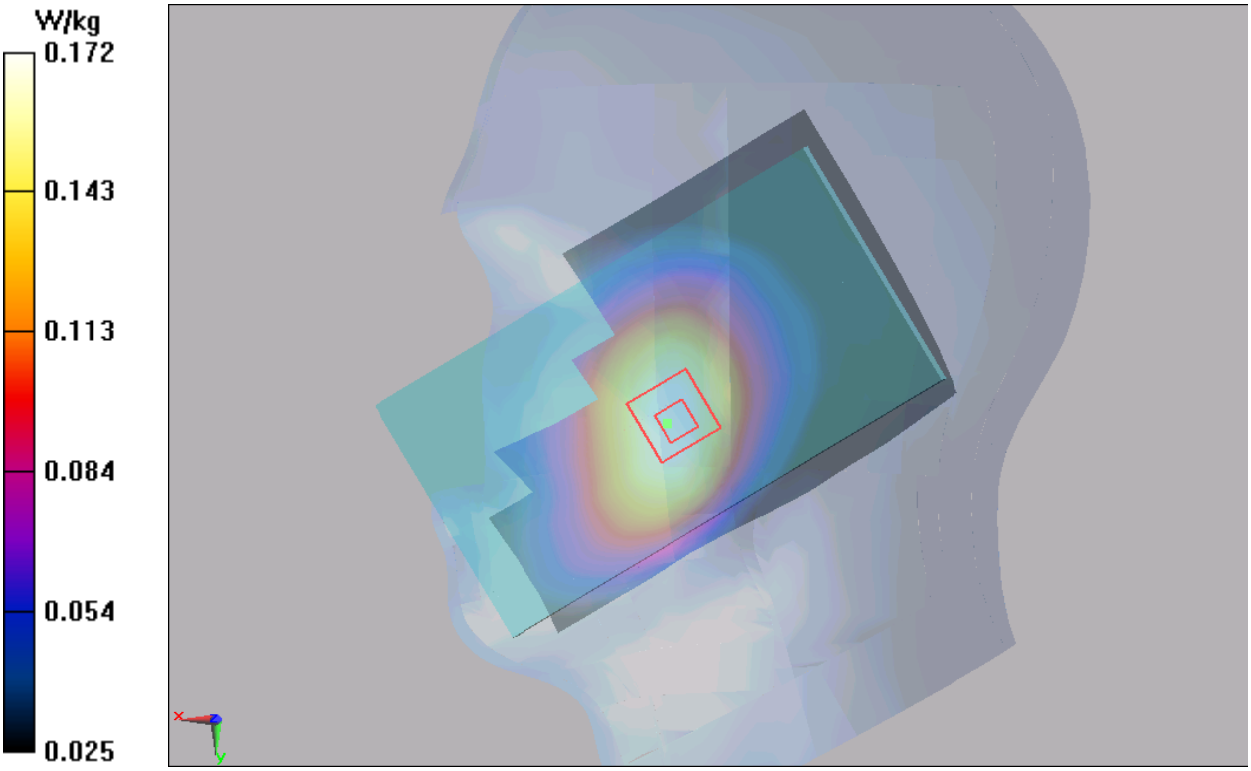


Figure 79 Right Hand Touch Cheek UMTS Band V Channel 4183

UMTS Band V Back Side Middle (Battery 1, Distance 15mm)

Date: 7/1/2015

Communication System: UID 0, WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 1.013 S/m; ε_r = 54.534; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.230 W/kg

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

Reference Value = 14.98 V/m; Power Drift = 0.065 dB

Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.223 W/kg; SAR(10 g) = 0.168 W/kg

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

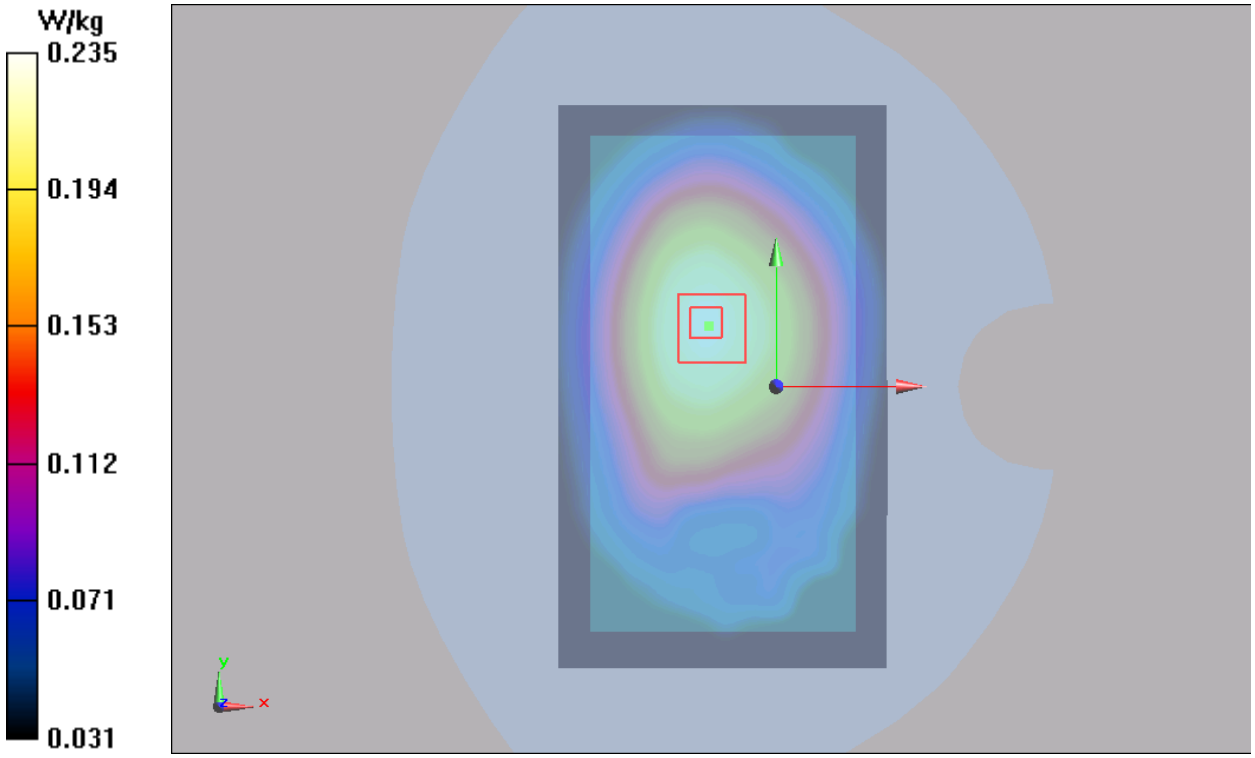


Figure 80 Body, Back Side, UMTS Band V Channel 4183

UMTS Band V Back Side Middle (Battery 1, Distance 10mm)

Date: 7/1/2015

Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 1.01 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Measurement grid: dx=1.500mm, dy=1.500mm

Maximum value of SAR (interpolated) = 0.254 mW/g

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

Reference Value = 15.1 V/m; Power Drift = 0.164 dB

Peak SAR (extrapolated) = 0.291 W/kg

SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.174 mW/g

Maximum value of SAR (measured) = 0.245 mW/g

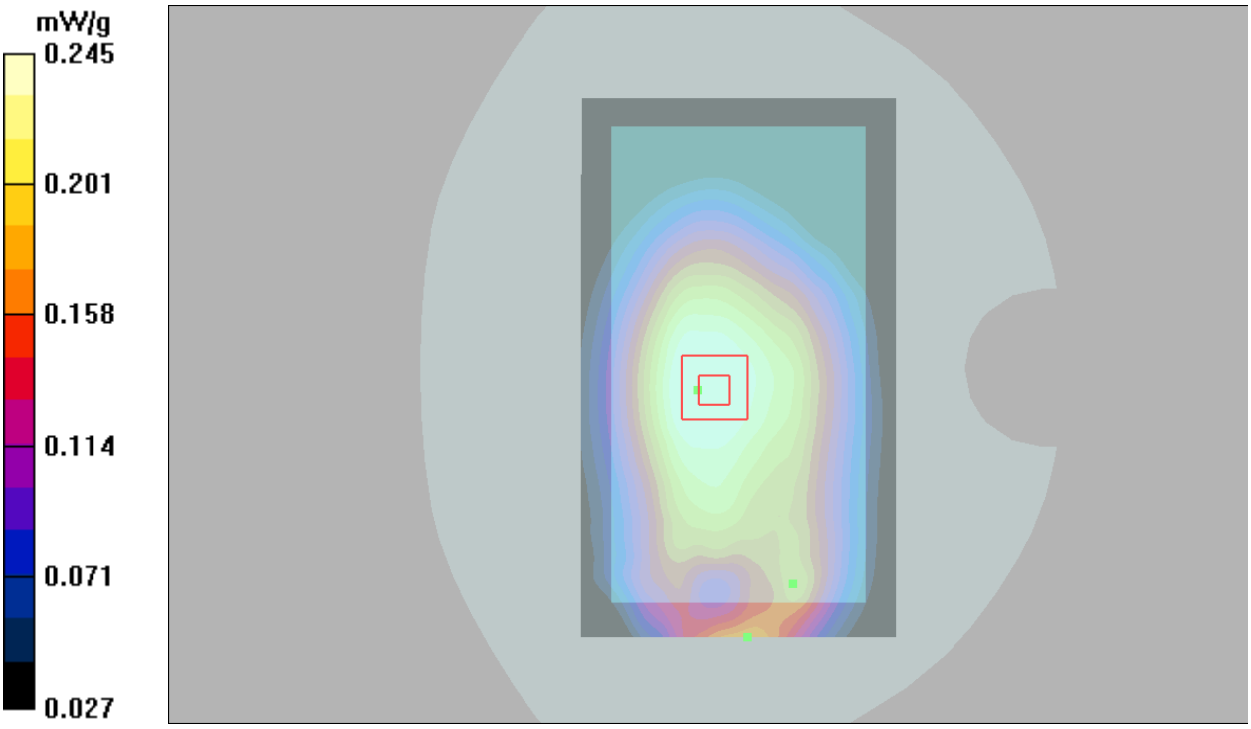


Figure 81 Body, Back Side, UMTS Band V Channel 4183

LTE Band 2 50%RB Left Cheek High (Battery 1)

Date: 7/13/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.41 S/m; ε_r = 40.718; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.413 W/kg

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

Reference Value = 3.033 V/m; Power Drift = 0.156 dB

Peak SAR (extrapolated) = 0.653 W/kg

SAR(1 g) = 0.409 W/kg; SAR(10 g) = 0.242 W/kg

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

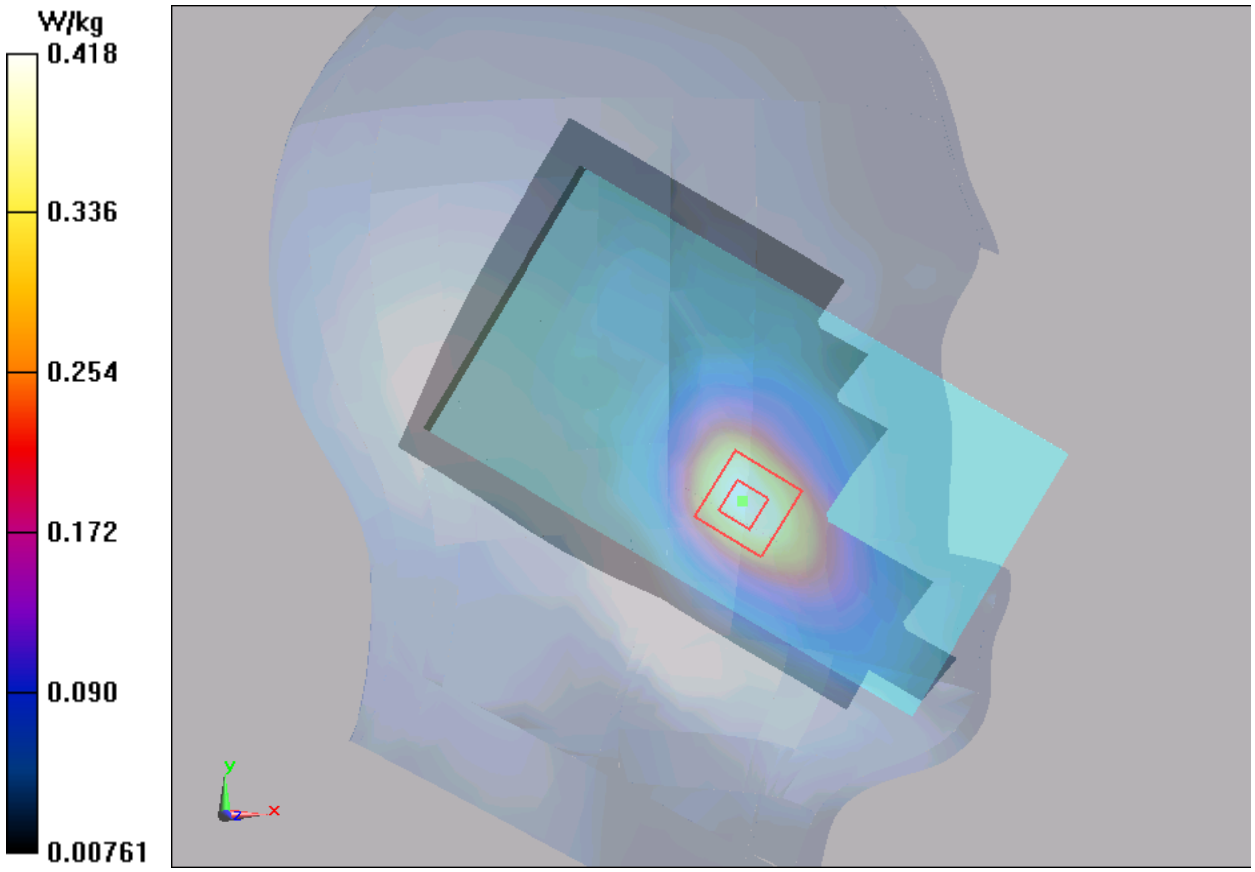


Figure 82 Left Hand Touch Cheek LTE Band 2 50%RB Channel 19100

LTE Band 2 50%RB Back Side High (Battery 1, Distance 15mm)

Date: 7/14/2015

Communication System: UID 0, LTE Band 2; Frequency: 1900 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1900 MHz; σ = 1.513 S/m; ε_r = 52.567; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 5.339 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.423 W/kg

SAR(1 g) = 0.230 W/kg; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.260 W/kg

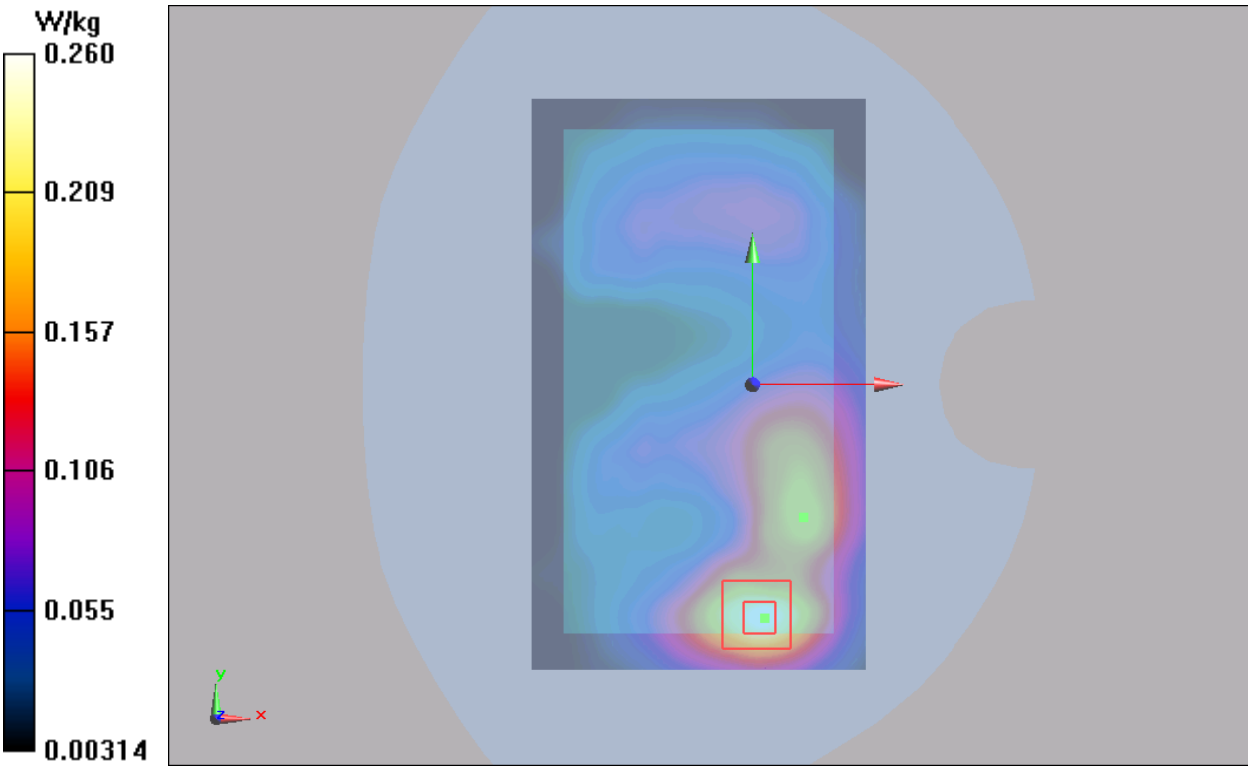


Figure 83 Body, Back Side, LTE Band 2 50%RB Channel 19100

LTE Band 2 50%RB Left Edge High (Battery 1, Distance 10mm)

Date: 7/14/2015

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

Medium parameters used: f = 1900 MHz; σ = 1.522 S/m; ε_r = 52.463; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (51x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

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

Reference Value = 14.75 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.709 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 0.448 W/kg

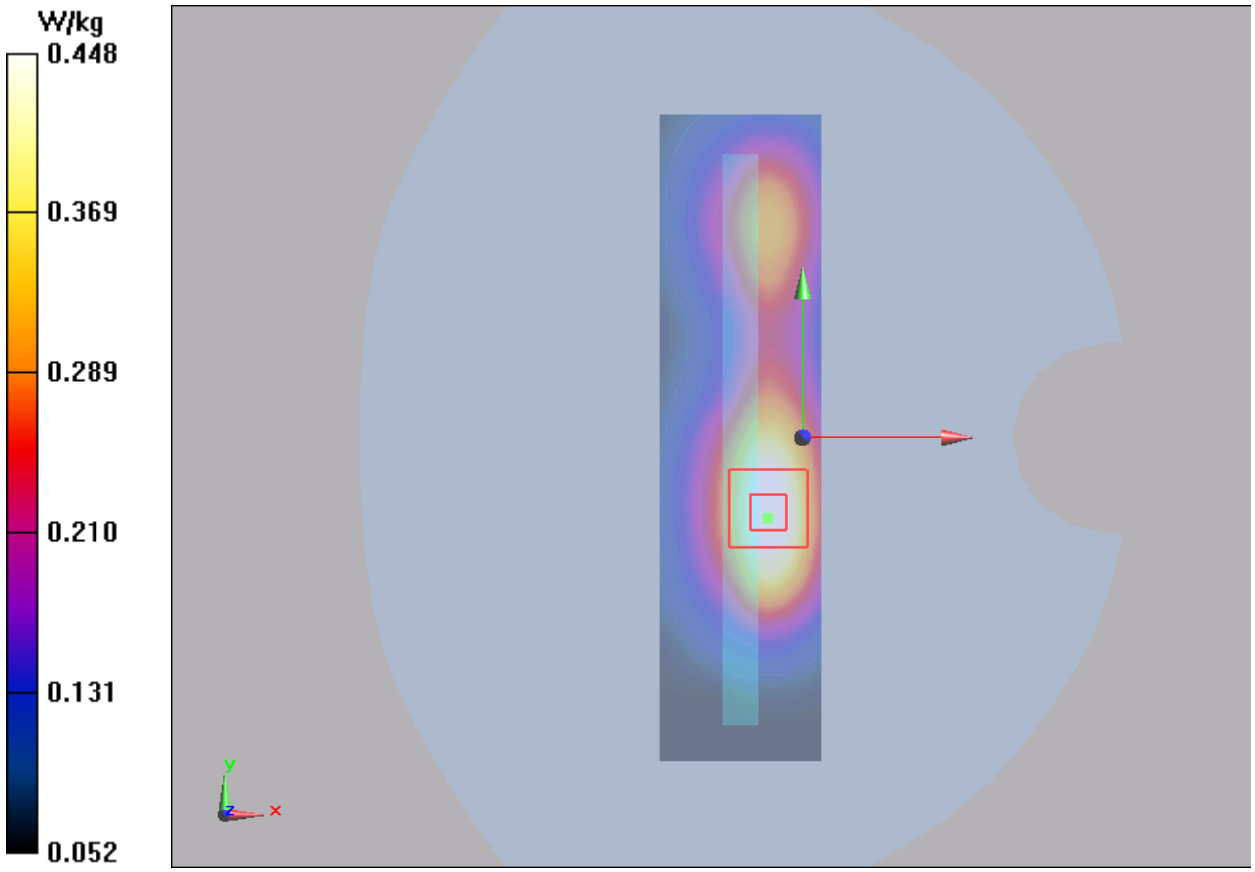


Figure 84 Body, Left Edge, LTE Band 2 50%RB Channel 19100

LTE Band 4 1RB Left Cheek High (Battery 2)

Date: 7/10/2015
Communication System: UID 0, LTE Band 4; Frequency: 1745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1745 MHz; σ = 1.333 S/m; ε_r = 40.236; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(8.02, 8.02, 8.02); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Cheek High/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.457 W/kg

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.383 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 0.575 W/kg
SAR(1 g) = 0.395 W/kg; SAR(10 g) = 0.251 W/kg
Maximum value of SAR (measured) = 0.432 W/kg

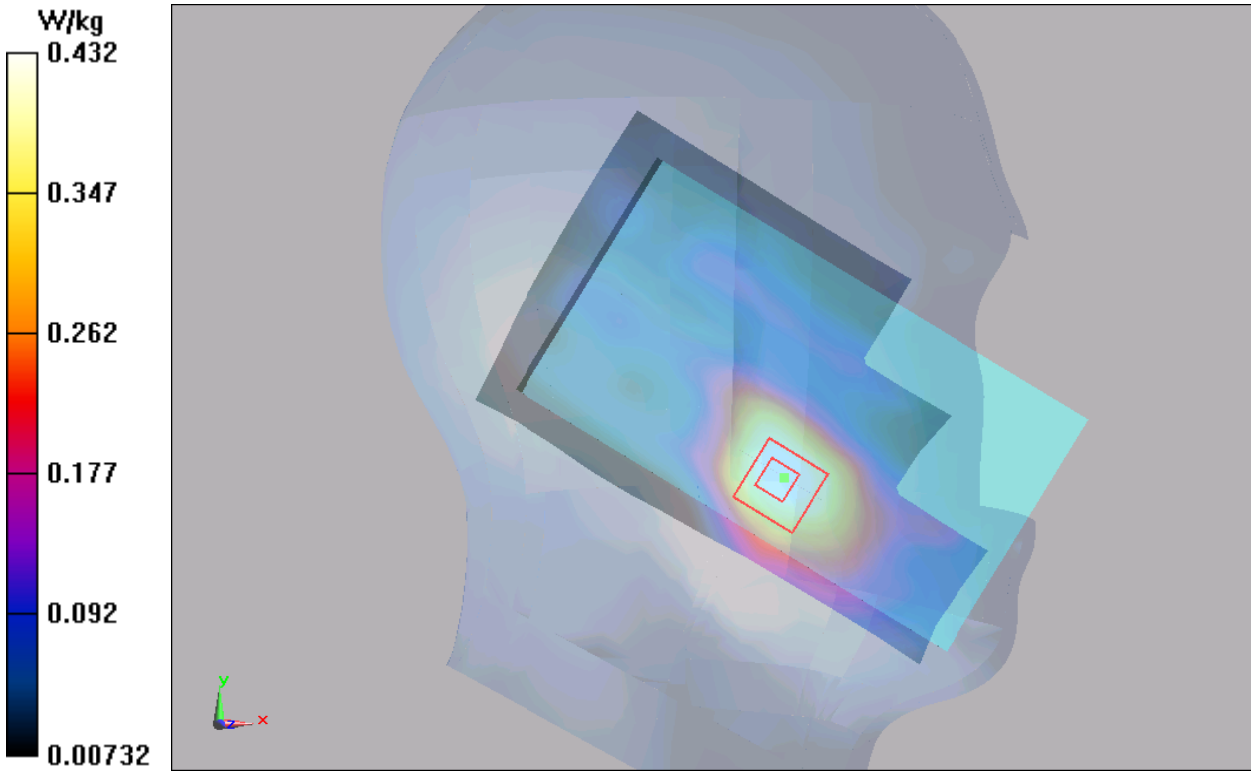


Figure 85 Left Hand Touch Cheek LTE Band 4 1RB Channel 20300

LTE Band 4 1RB Back Side High (Battery 1, Distance 15mm)

Date: 7/9/2015

Communication System: UID 0, LTE Band 4; Frequency: 1745 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1745 MHz; σ = 1.454 S/m; ε_r = 51.891; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.361 W/kg

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

Reference Value = 6.586 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 0.582 W/kg

SAR(1 g) = 0.336 W/kg; SAR(10 g) = 0.183 W/kg

Maximum value of SAR (measured) = 0.370 W/kg

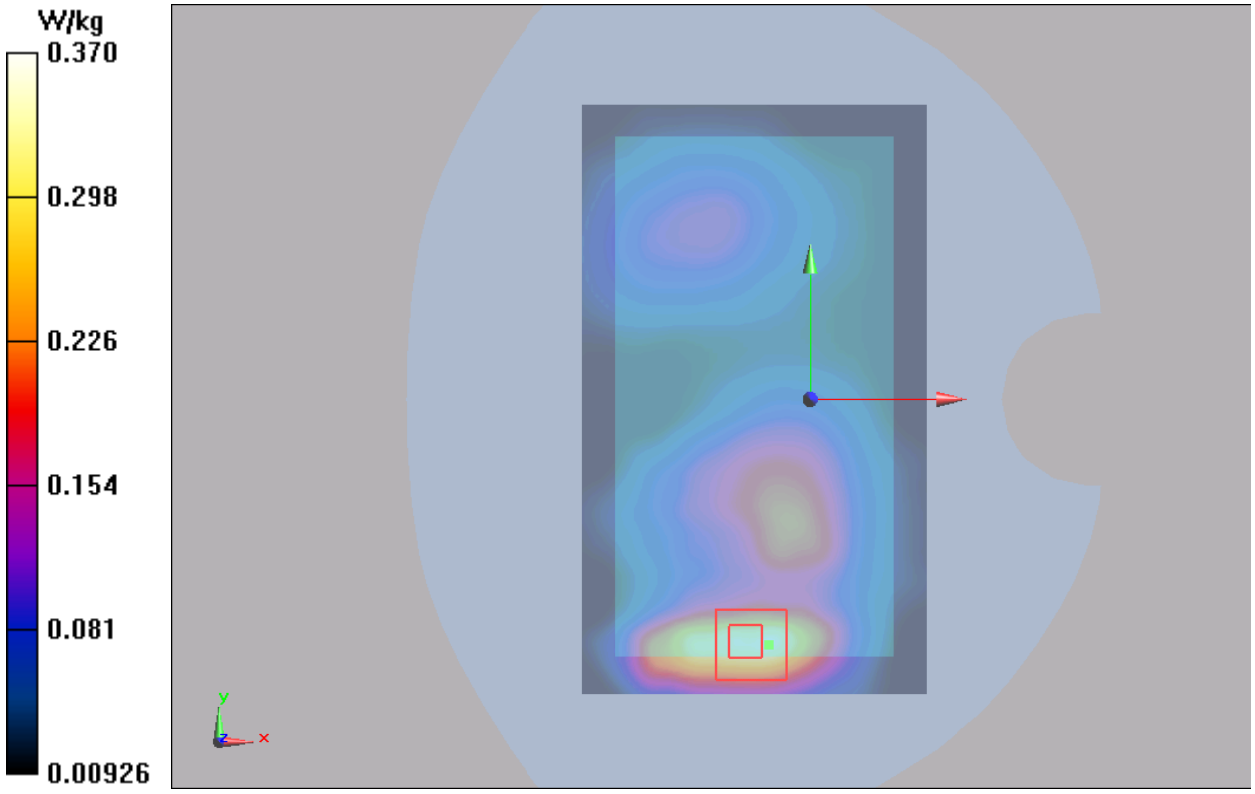


Figure 86 Body, Back Side, LTE Band 4 1RB Channel 20300

LTE Band 4 1RB Bottom Edge High (Battery 1, Distance 10mm)

Date: 8/3/2015

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

Medium parameters used: f = 1745 MHz; σ = 1.454 S/m; ε_r = 51.891; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.74, 7.74, 7.74); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High /Area Scan (51x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.600 W/kg

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

Reference Value = 18.62 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.902 W/kg

SAR(1 g) = 0.532 W/kg; SAR(10 g) = 0.293 W/kg

Maximum value of SAR (measured) = 0.512 W/kg

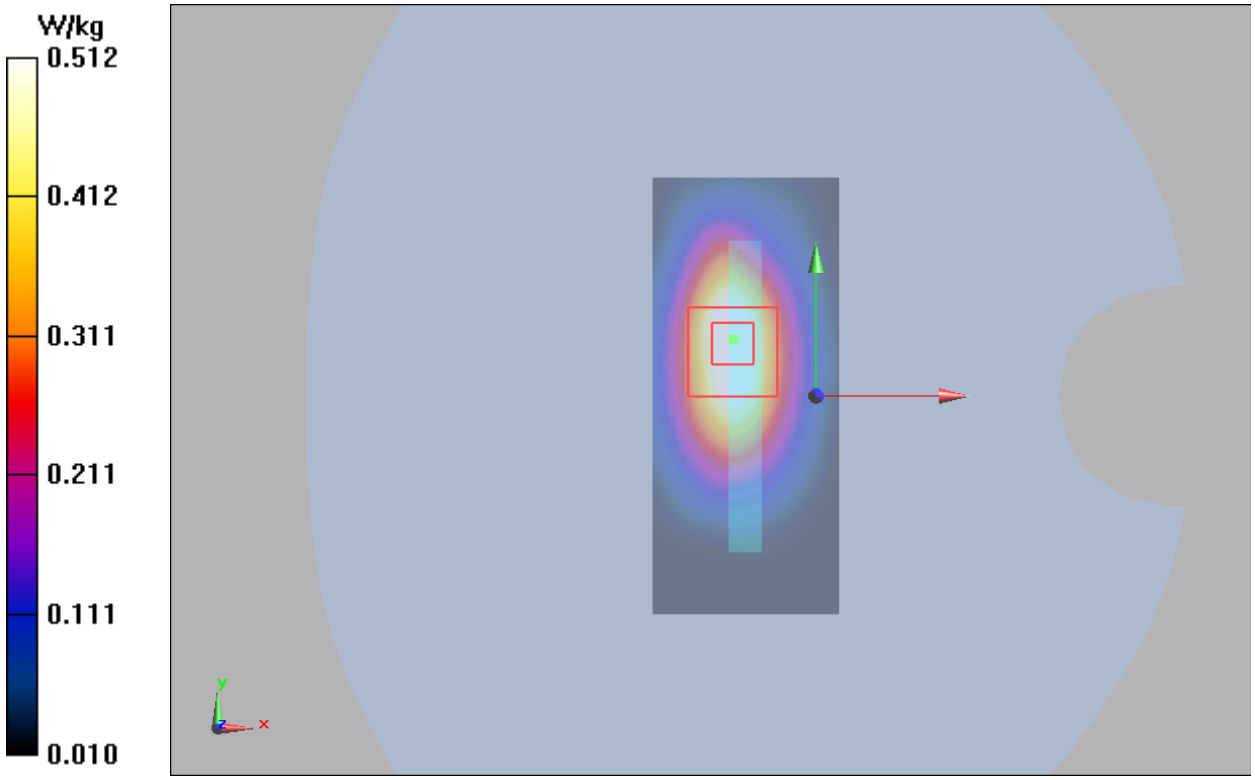


Figure 87 Body, Bottom Edge, LTE Band 4 1RB Channel 20300

LTE Band 5 1RB Right Cheek Middle (Battery 2)

Date: 7/2/2015
Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 836.5 MHz; σ = 0.885 S/m; ε_r = 41.403; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Cheek Middle/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.237 W/kg

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.196 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 0.288 W/kg
SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.176 W/kg
Maximum value of SAR (measured) = 0.238 W/kg

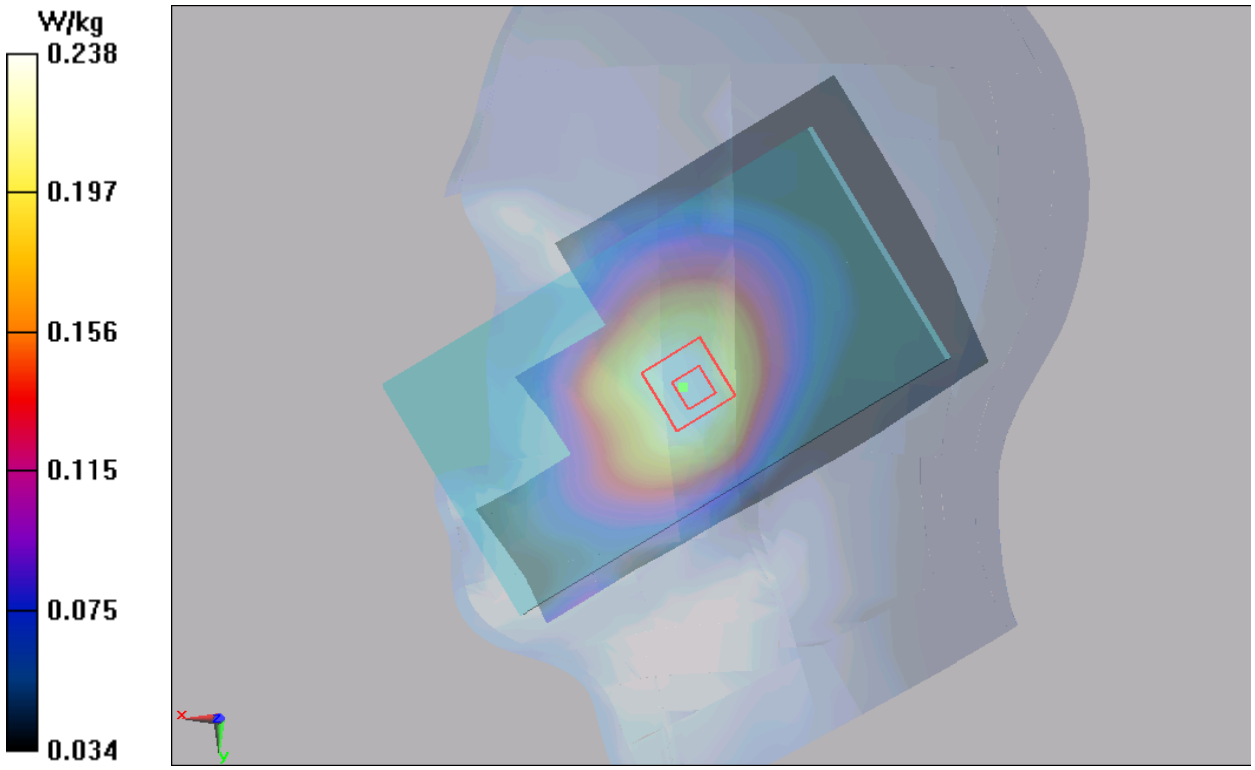


Figure 88 Right Hand Touch Cheek LTE Band 5 1RB Channel 20525

LTE Band 5 1RB Back Side Middle (Battery 1, Distance 15mm)

Date: 7/3/2015

Communication System: UID 0, LTE Band 5; Frequency: 836.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.5 MHz; σ = 1.012 S/m; ε_r = 54.539; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.243 W/kg

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

Reference Value = 14.93 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.164 W/kg

Maximum value of SAR (measured) = 0.225 W/kg

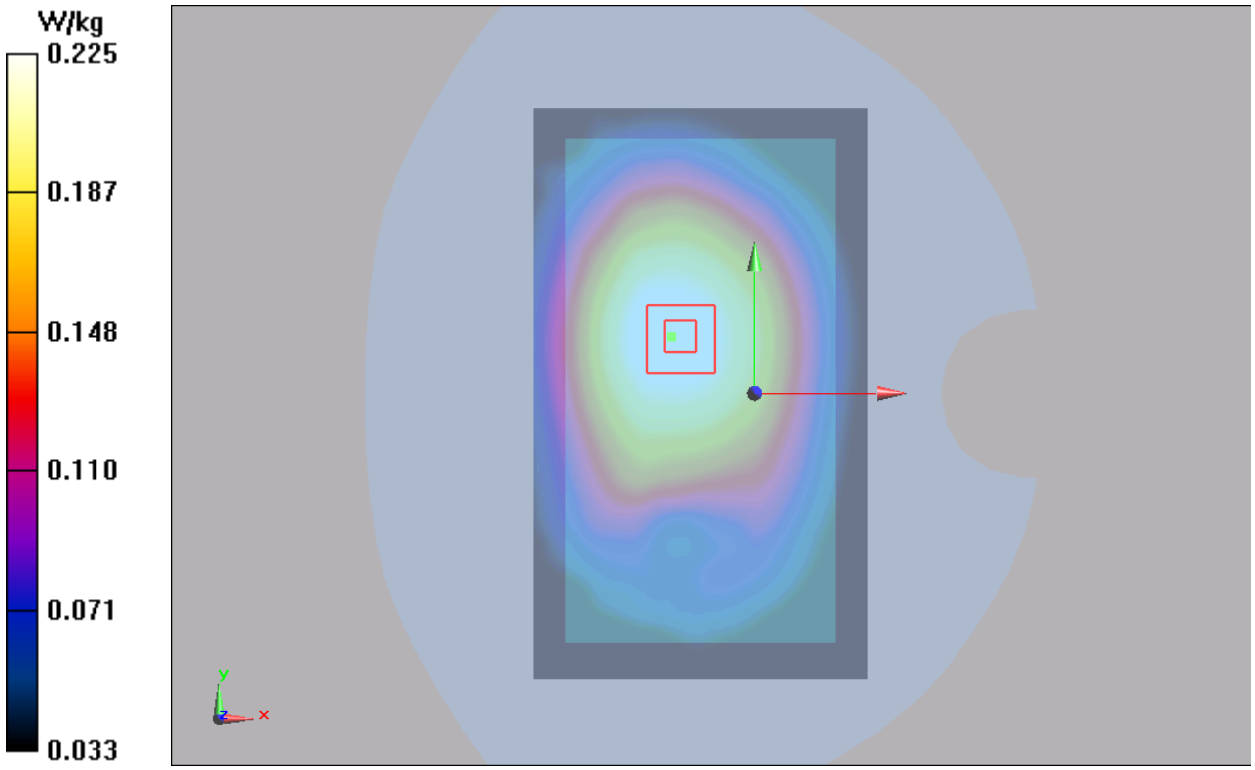


Figure 89 Body, Back Side, LTE Band 5 1RB Channel 20525

LTE Band 5 1RB Back Side Middle (Battery 1, Distance 10mm)

Date: 7/3/2015

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

Medium parameters used (interpolated): f = 836.5 MHz; σ = 1.012 S/m; ε_r = 54.539; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.285 W/kg

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

Reference Value = 15.85 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.437 W/kg

SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.144 W/kg

Maximum value of SAR (measured) = 0.285 W/kg

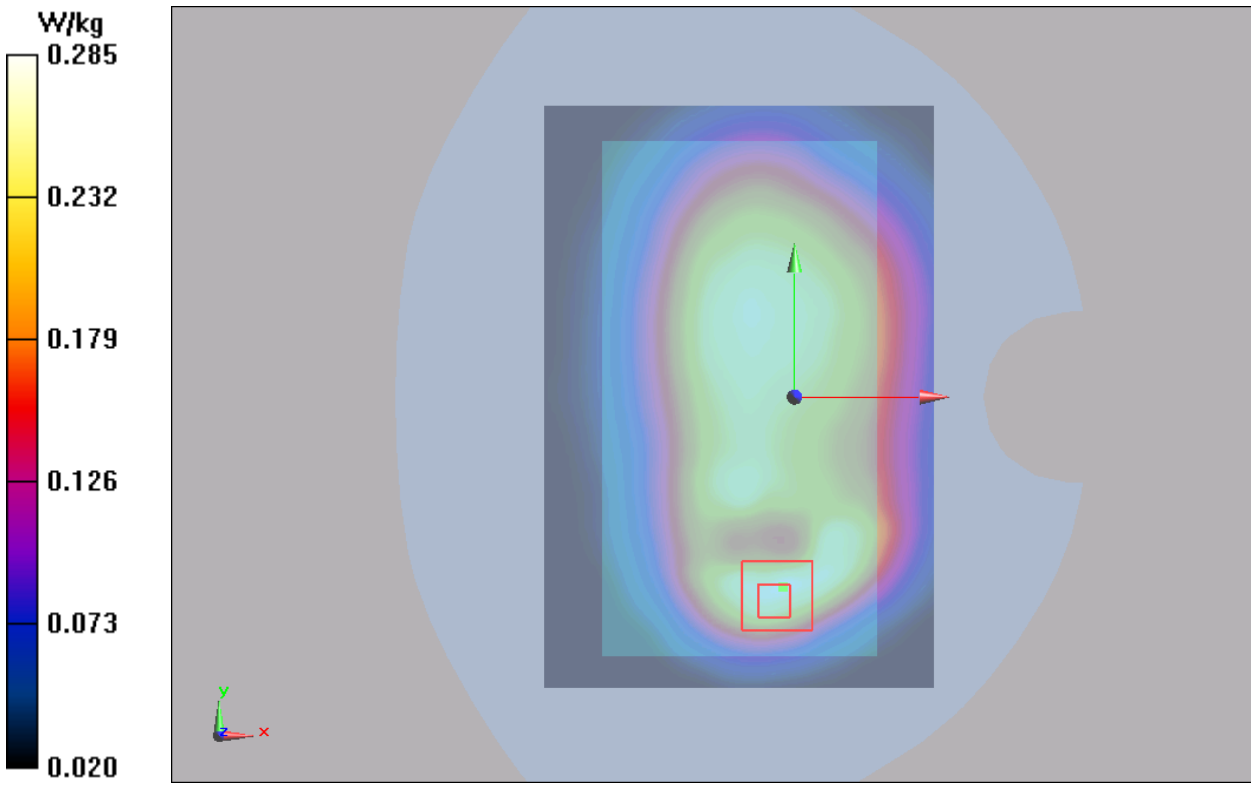


Figure 90 Body, Back Side, LTE Band 5 1RB Channel 20525

LTE Band 7 1RB Left Cheek High (Battery 2)

Date: 7/17/2015
Communication System: UID 0, LTE (0); Frequency: 2560 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2560 MHz; σ = 1.967 S/m; ε_r = 38.3; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(6.94, 6.94, 6.94); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High /Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 0.398 W/kg

High /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.353 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 0.661 W/kg
SAR(1 g) = 0.373 W/kg; SAR(10 g) = 0.200 W/kg
Maximum value of SAR (measured) = 0.378 W/kg

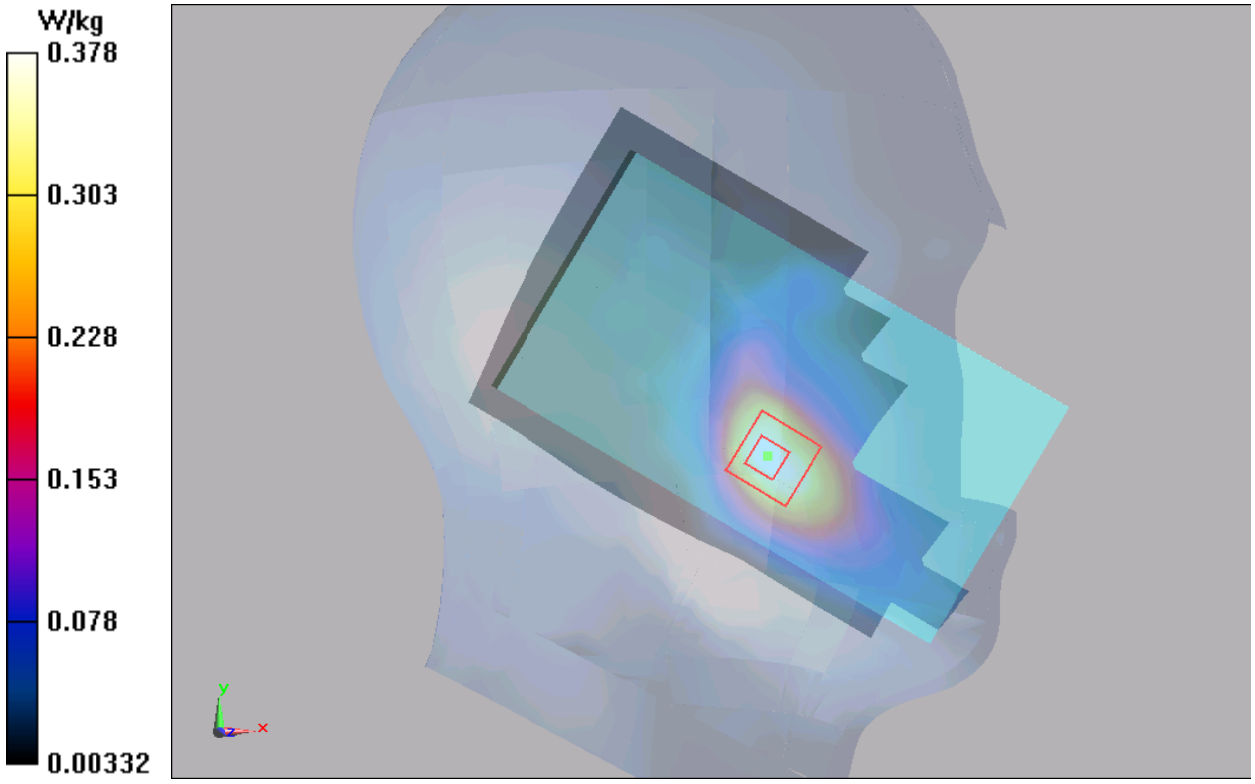


Figure 91 Left Hand Touch Cheek LTE Band 7 1RB Channel 21350

LTE Band 7 1RB Back Side High (Battery 1, Distance 15mm)

Date: 7/18/2015

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

Medium parameters used: f = 2560 MHz; σ = 2.189 S/m; ε_r = 51.629; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.29, 7.29, 7.29); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High /Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

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

Reference Value = 4.616 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.111 W/kg

Maximum value of SAR (measured) = 0.219 W/kg

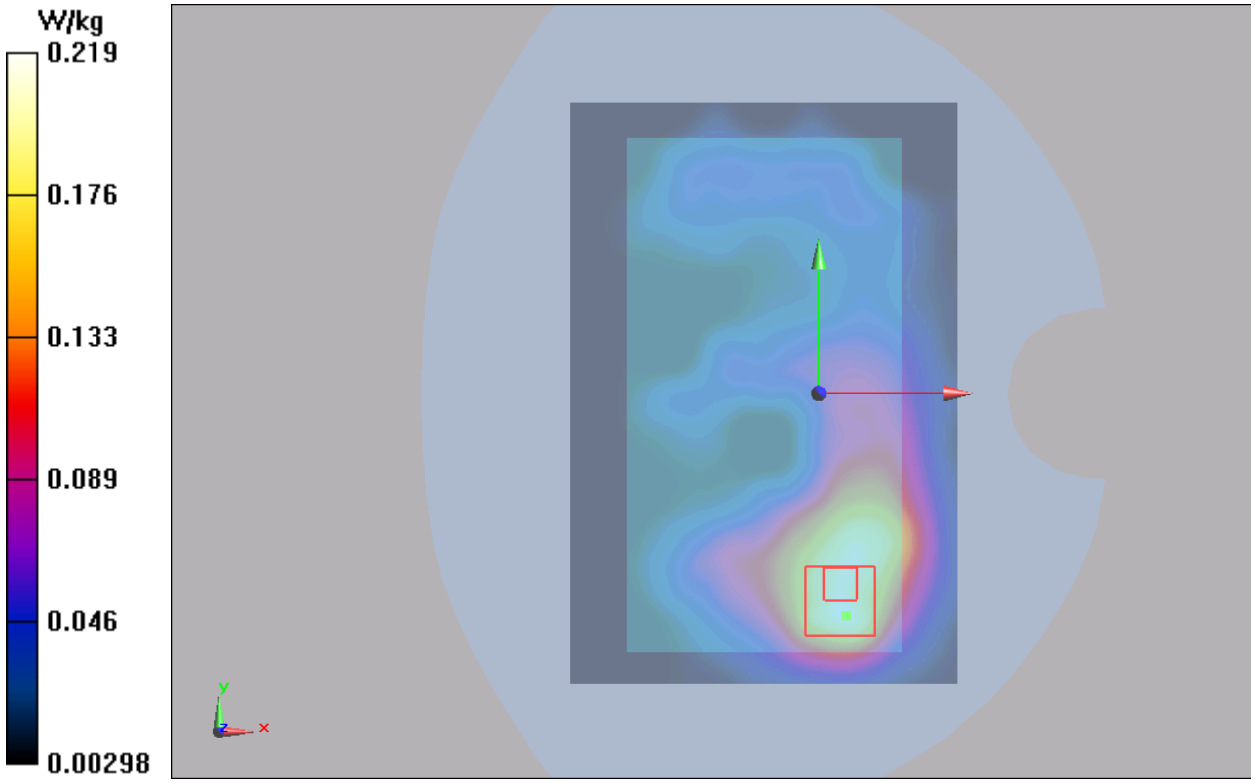


Figure 92 Body, Back Side, LTE Band 7 1RB Channel 21350

LTE Band 7 1RB Back Side High (Battery 2, Distance 10mm)

Date: 7/18/2015

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

Medium parameters used: f = 2560 MHz; σ = 2.189 S/m; ε_r = 51.629; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.29, 7.29, 7.29); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.361 W/kg

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

Reference Value = 4.363 V/m; Power Drift = 0.074 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.328 W/kg; SAR(10 g) = 0.173 W/kg

Maximum value of SAR (measured) = 0.344 W/kg

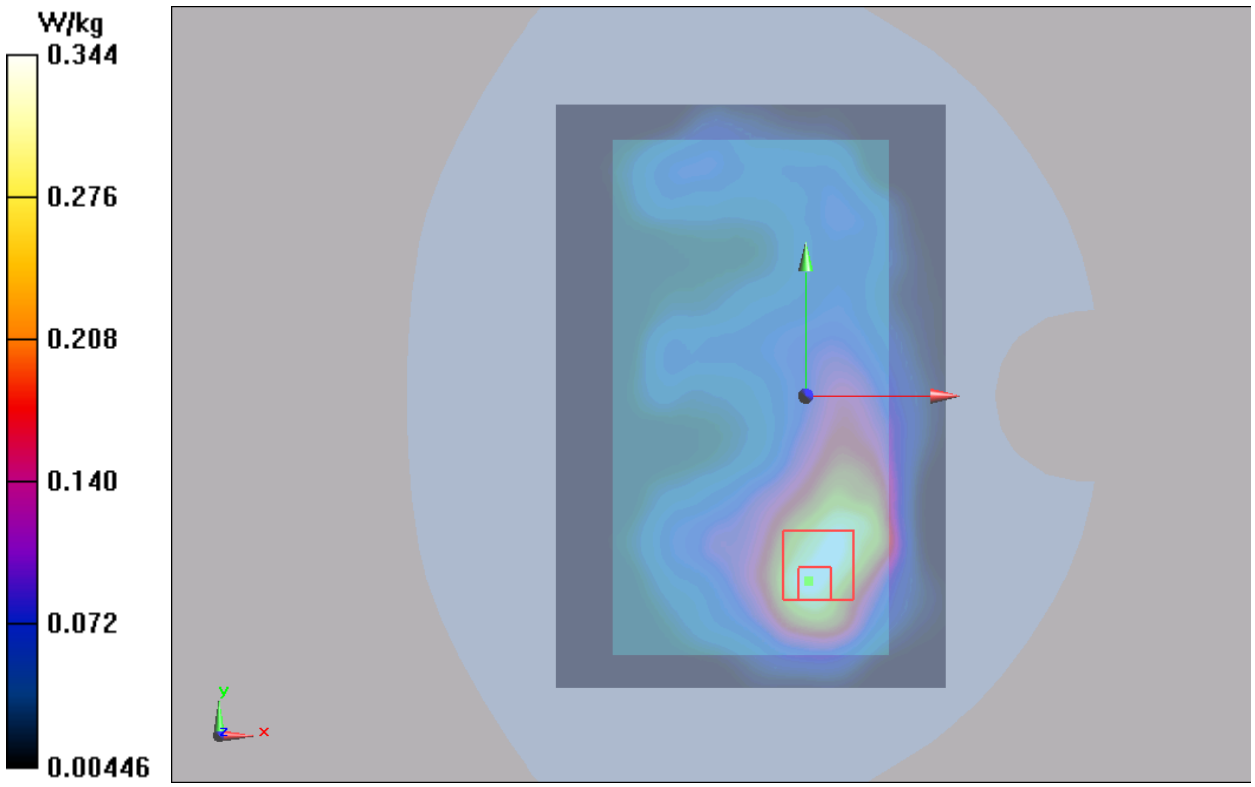


Figure 93 Body, Back Side, LTE Band 7 1RB Channel 21350

LTE Band 12 1RB Left Cheek High (Battery 1)

Date: 6/25/2015
Communication System: UID 0, LTE Band 12; Frequency: 711 MHz;Duty Cycle: 1:1
Medium parameters used: f = 711 MHz; σ = 0.839 S/m; ε_r = 42.812; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.183 W/kg

High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.622 V/m; Power Drift =0.072 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.157 W/kg
Maximum value of SAR (measured) = 0.214 W/kg

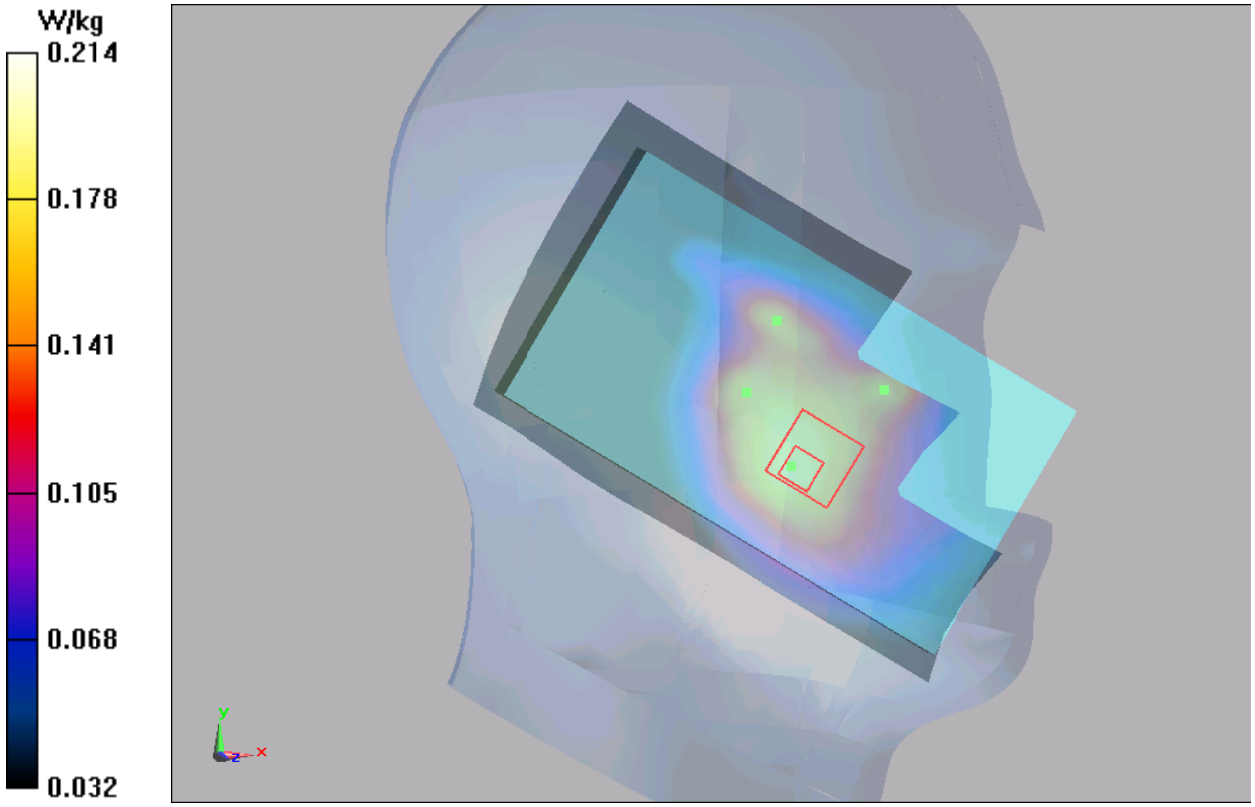


Figure 94 Left Hand Touch Cheek LTE Band 12 1RB Channel 23130

LTE Band 12 1RB Back Side High (Battery 1, Distance 15mm)

Date: 6/27/2015

Communication System: UID 0, LTE Band 12; Frequency: 711 MHz;Duty Cycle: 1:1

Medium parameters used: f = 711 MHz; σ = 0.915 S/m; ε_r = 57.243; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 14.45 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.218 W/kg

SAR(1 g) = 0.179 W/kg; SAR(10 g) = 0.139 W/kg

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

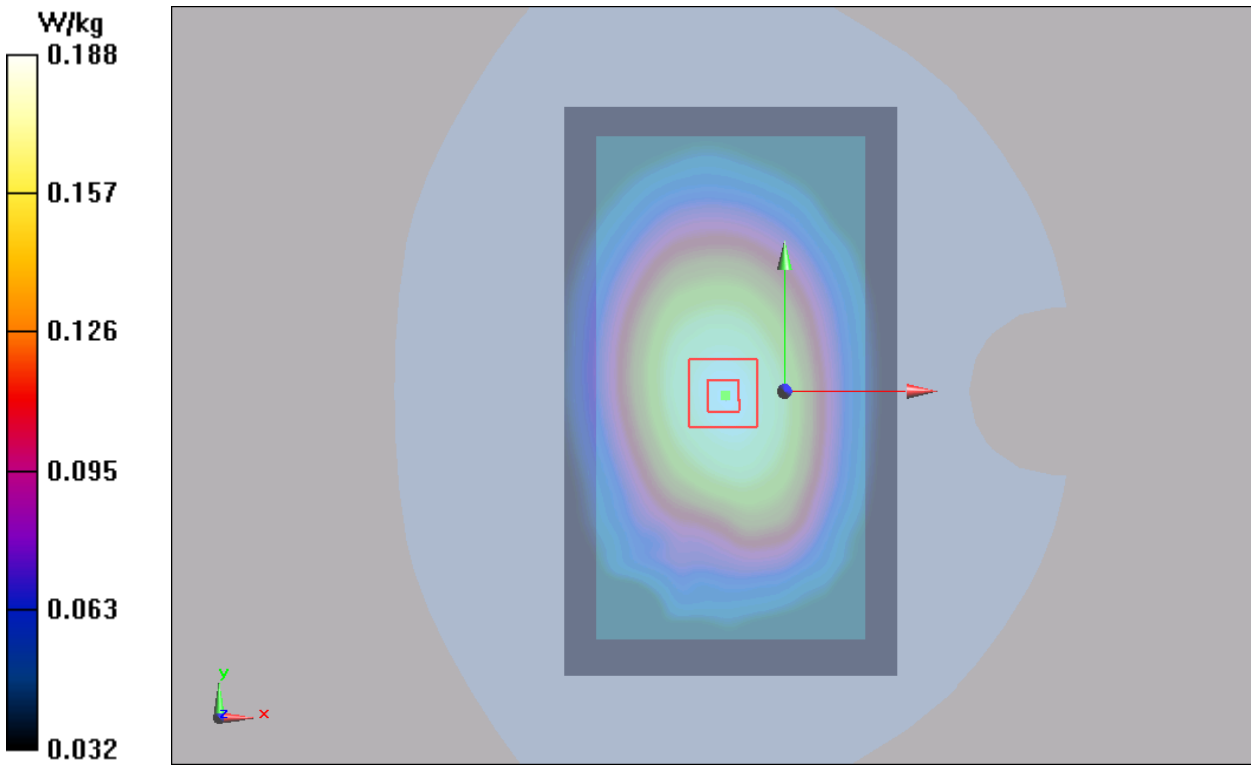


Figure 95 Body, Back Side, LTE Band 12 1RB Channel 23130

LTE Band 12 1RB Front Side High (Battery 2, Distance 10mm)

Date: 6/27/2015

Communication System: UID 0, LTE (0); Frequency: 711 MHz;Duty Cycle: 1:1

Medium parameters used: f = 711 MHz; σ = 0.915 S/m; ε_r = 57.243; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.186 W/kg

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

Reference Value = 13.91 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.204 W/kg

SAR(1 g) = 0.176 W/kg; SAR(10 g) = 0.144 W/kg

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

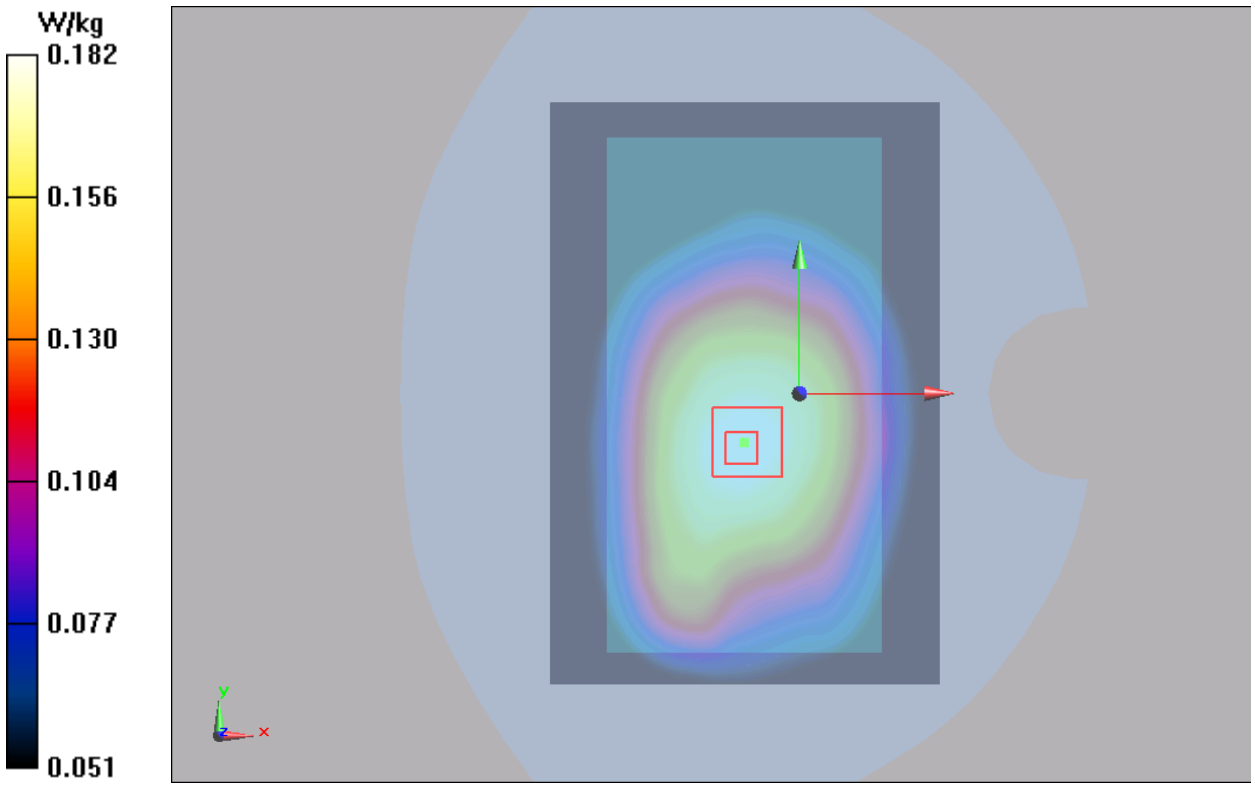


Figure 96 Body, Front Side, LTE Band 12 1RB Channel 23130

LTE Band 17 50%RB Left Cheek Middle (Battery 1)

Date: 6/25/2015
Communication System: UID 0, LTE Band 17; Frequency: 710 MHz;Duty Cycle: 1:1
Medium parameters used: f = 710 MHz; σ = 0.838 S/m; ε_r = 42.825; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Cheek Middle/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.208 W/kg

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.261 V/m; Power Drift = 0.069 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.159 W/kg
Maximum value of SAR (measured) = 0.207 W/kg

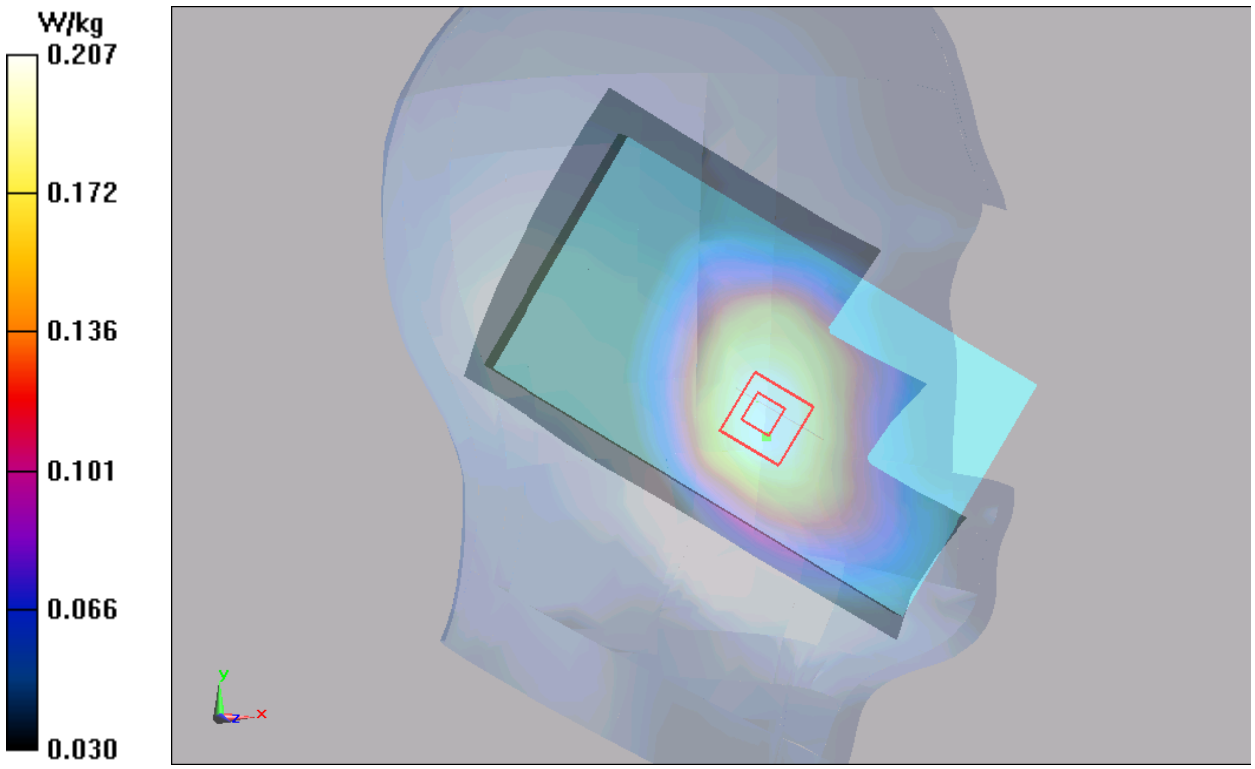


Figure 97 Left Hand Touch Cheek LTE Band 17 50%RB Channel 23790

LTE Band 17 50%RB Back Side Middle (Battery1, Distance 15mm)

Date: 6/26/2015

Communication System: UID 0, LTE Band 17; Frequency: 710 MHz;Duty Cycle: 1:1

Medium parameters used: f = 710 MHz; σ = 0.914 S/m; ε_r = 57.247; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.237 W/kg

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

Reference Value = 16.48 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.281 W/kg

SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.182 W/kg

Maximum value of SAR (measured) = 0.244 W/kg

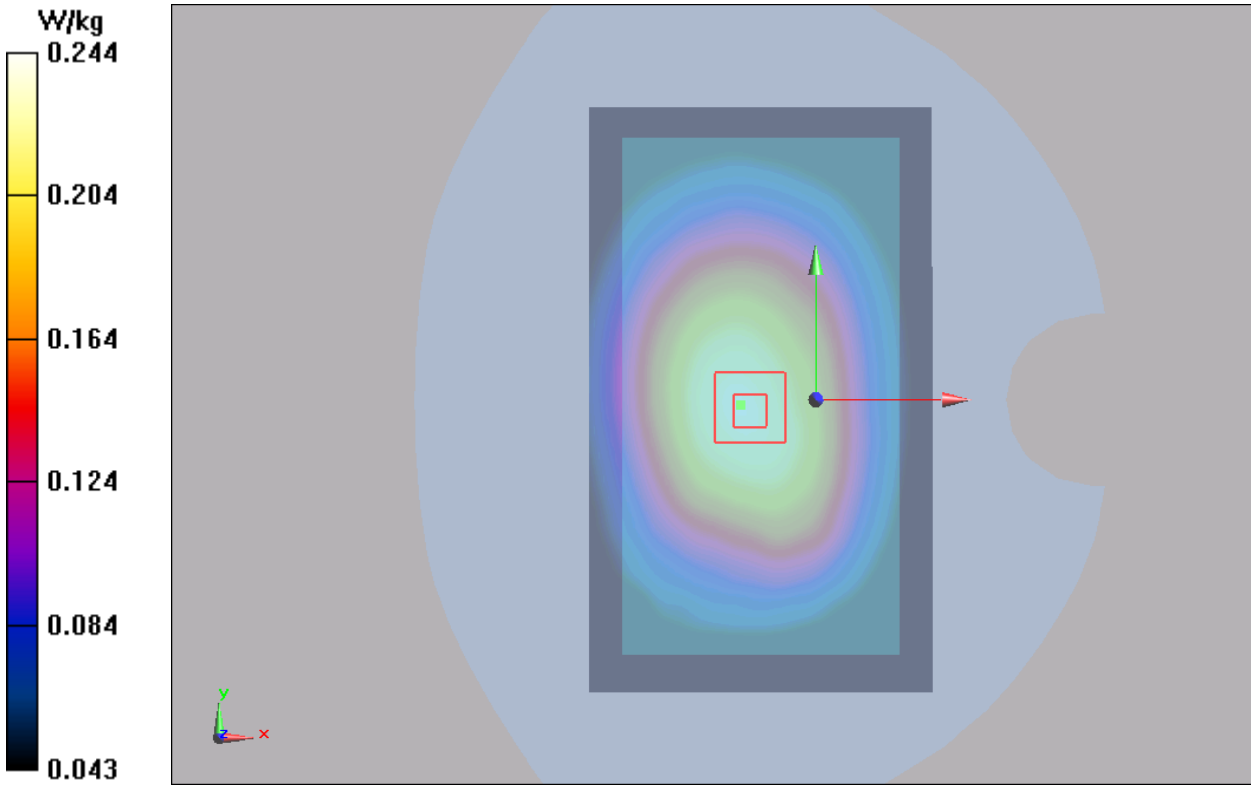


Figure 98 Body, Back Side, LTE Band 17 50%RB Channel 23790

LTE Band 17 1RB Back Side Low (Battery 1, Distance 10mm)

Date: 6/26/2015

Communication System: UID 0, LTE (0); Frequency: 709 MHz;Duty Cycle: 1:1

Medium parameters used: f = 709 MHz; σ = 0.914 S/m; ε_r = 57.25; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.53, 9.53, 9.53); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.318 W/kg

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

Reference Value = 18.11 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.361 W/kg

SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.249 W/kg

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

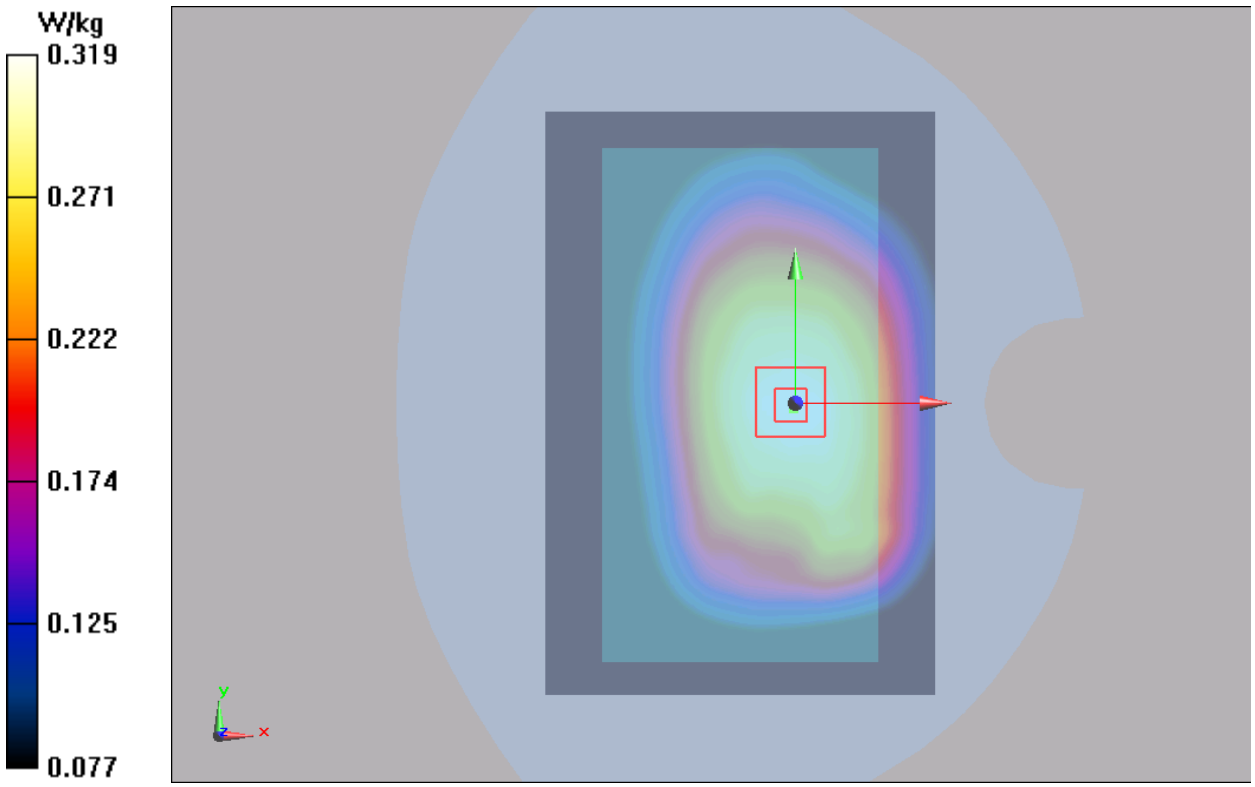


Figure 99 Body, Back Side, LTE Band 17 1RB Channel 23780

LTE Band 25 1RB Left Cheek Middle (Battery 2)

Date: 7/13/2015
Communication System: UID 0, LTE Band 25; Frequency: 1882.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.44 S/m; ε_r = 39.194; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.94, 7.94, 7.94); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.478 W/kg

Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.068 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 0.649 W/kg
SAR(1 g) = 0.424 W/kg; SAR(10 g) = 0.264 W/kg
Maximum value of SAR (measured) = 0.462 W/kg

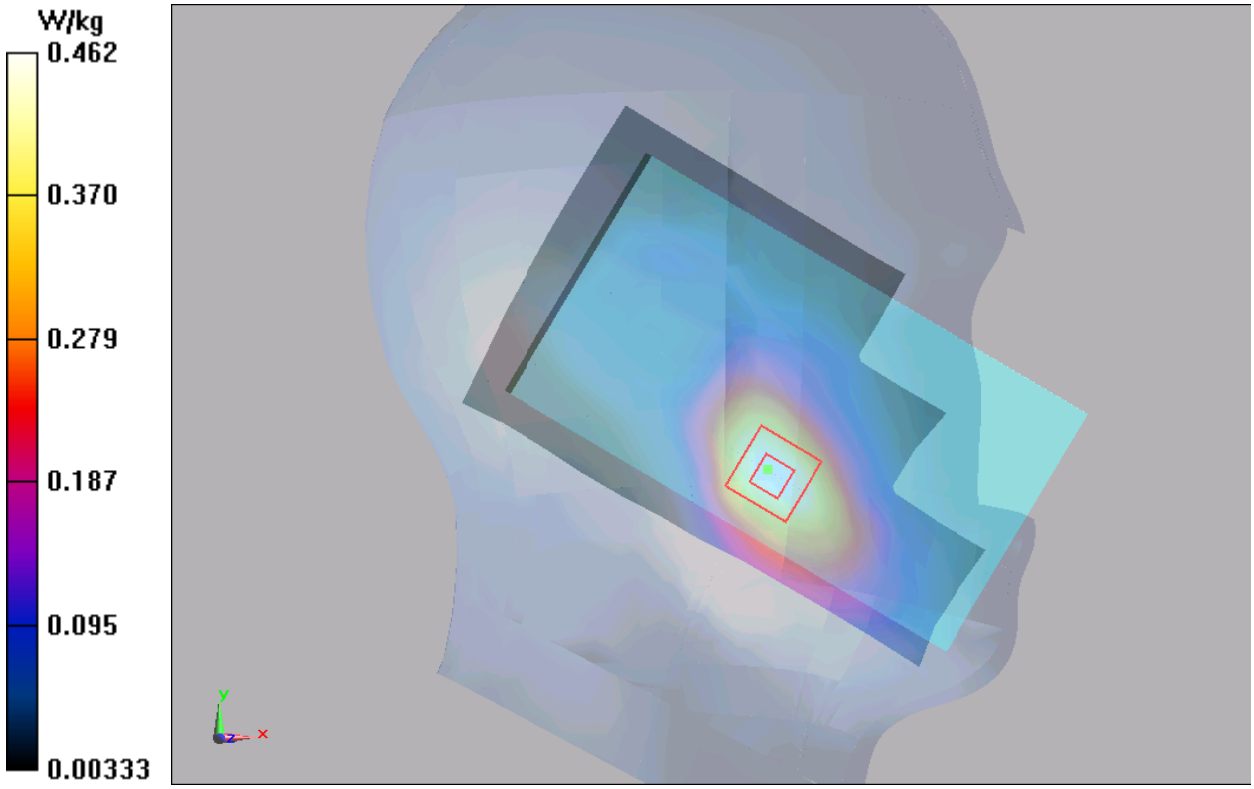


Figure 100 Left Hand Touch Cheek LTE Band 25 1RB Channel 26365

LTE Band 25 50%RB Back Side Middle (Battery 1, Distance 15mm)

Date: 7/15/2015

Communication System: UID 0, LTE Band 25; Frequency: 1882.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.496 S/m; ε_r = 52.607; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.363 W/kg

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

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.663 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.337 W/kg; SAR(10 g) = 0.177 W/kg

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

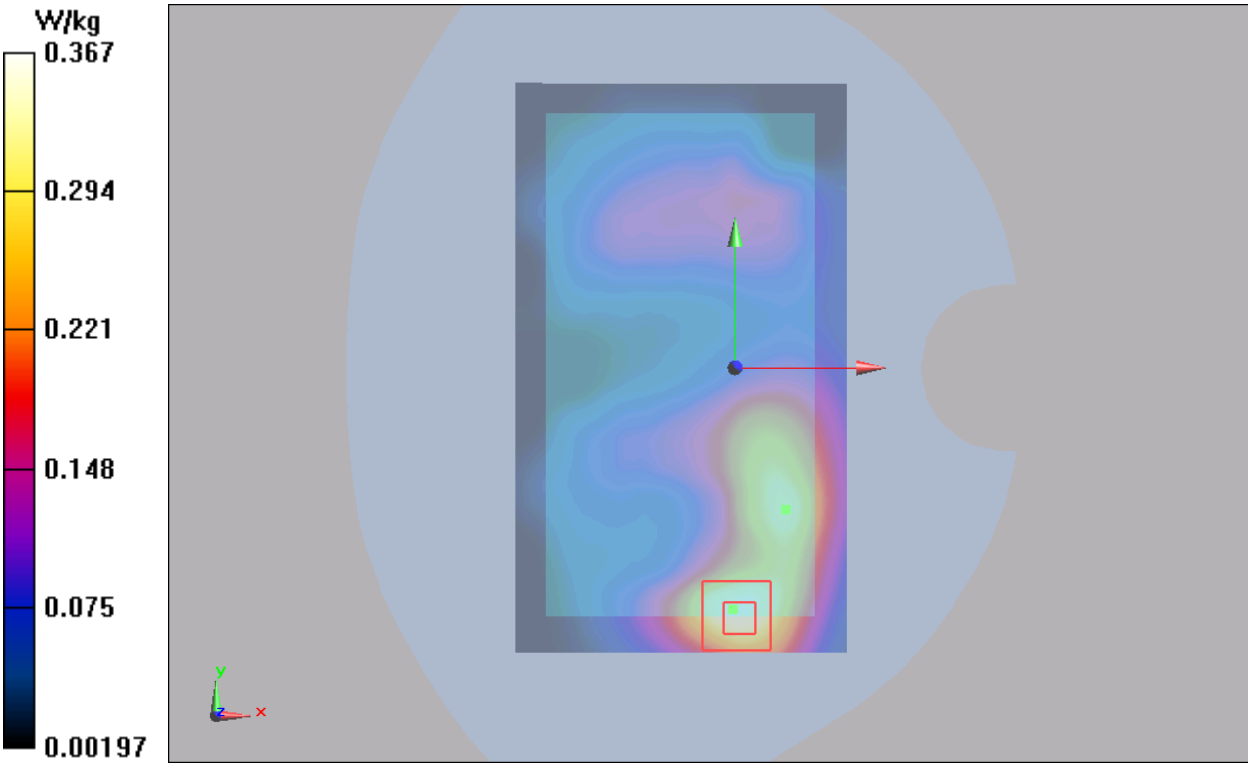


Figure 101 Body, Back Side, LTE Band 25 50%RB Channel 26365

LTE Band 25 50%RB Back Side Middle (Battery 1, Distance 10mm)

Date: 7/15/2015

Communication System: UID 0, LTE (0); Frequency: 1882.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1882.5 MHz; σ = 1.503 S/m; ε_r = 52.516; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.57, 7.57, 7.57); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Middle/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.767 W/kg

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

Measurement grid: dx=10mm, dy=10mm, dz=5mm

Reference Value = 9.060 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.762 W/kg; SAR(10 g) = 0.389 W/kg

Maximum value of SAR (measured) = 0.904 W/kg

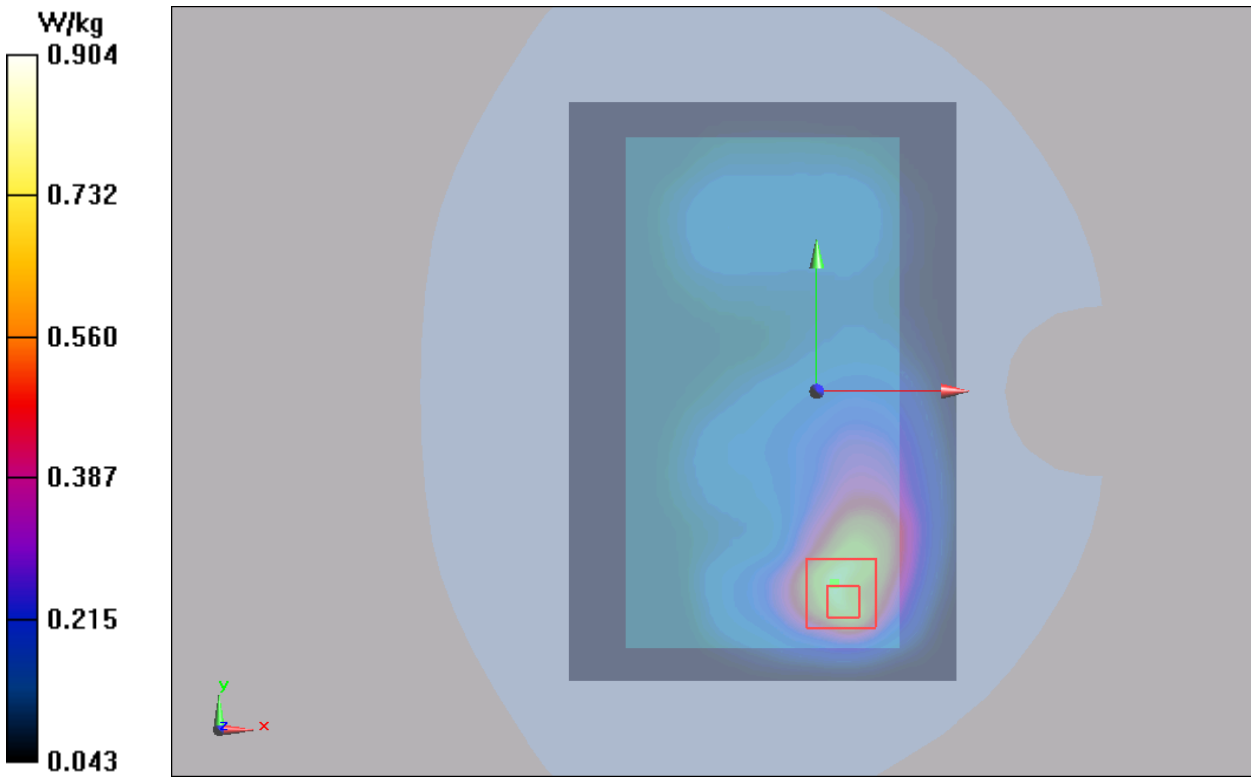


Figure 102 Body, Back Side, LTE Band 25 50%RB Channel 26365

LTE Band 26 50%RB Right Cheek Low (Battery 1)

Date: 7/2/2015
Communication System: UID 0, LTE Band 26; Frequency: 822.5 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.87 S/m; ε_r = 41.547; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Right Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(9.30, 9.30, 9.30); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (71x131x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 0.166 W/kg

Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.005 V/m; Power Drift = 0.169 dB
Peak SAR (extrapolated) = 0.204 W/kg
SAR(1 g) = 0.164 W/kg; SAR(10 g) = 0.126 W/kg
Maximum value of SAR (measured) = 0.171 W/kg

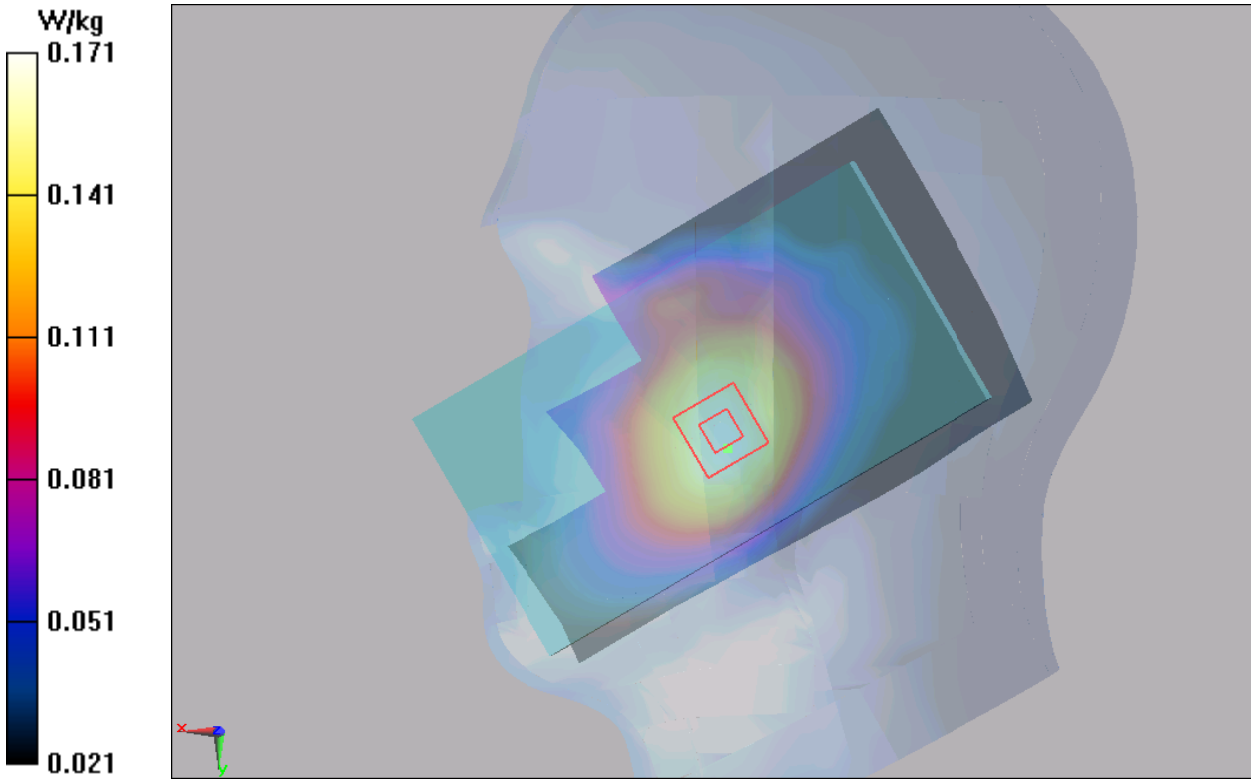


Figure 103 Right Hand Touch Cheek LTE Band 26 50%RB Channel 26775

LTE Band 26 50%RB Back Side Low (Battery 1, Distance 15mm)

Date: 7/4/2015

Communication System: UID 0, LTE Band 26; Frequency: 822.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.999 S/m; ε_r = 54.674; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY5, Version 4.7 (80); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (71x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

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

Reference Value = 14.73 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.268 W/kg

SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.165 W/kg

Maximum value of SAR (measured) = 0.227 W/kg

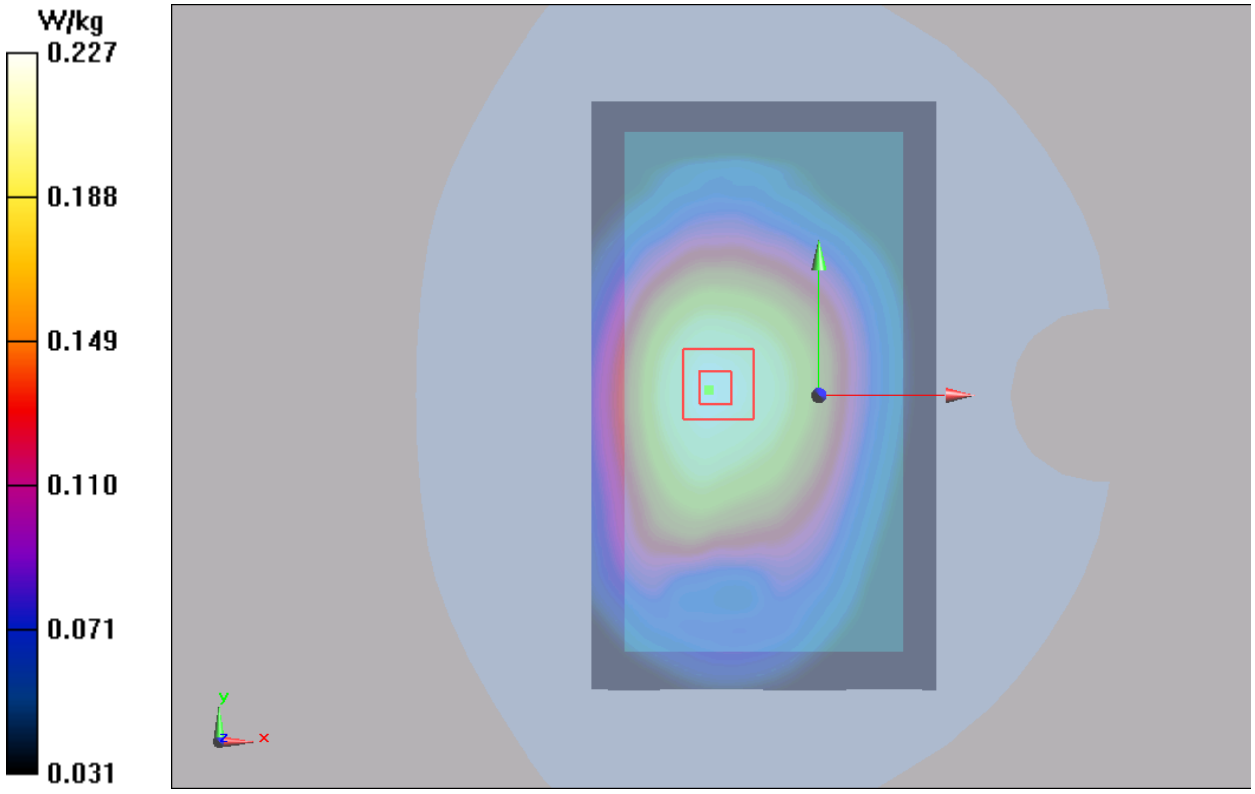


Figure 104 Body, Back Side, LTE Band 26 1RB Channel 26775

LTE Band 26 50%RB Back Side Low (Battery 2, Distance 10mm)

Date: 7/4/2015

Communication System: UID 0, LTE (0); Frequency: 822.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 822.5 MHz; σ = 0.999 S/m; ε_r = 54.674; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.45, 9.45, 9.45); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Low/Area Scan (81x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.219 W/kg

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

Reference Value = 14.67 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.255 W/kg

SAR(1 g) = 0.209 W/kg; SAR(10 g) = 0.167 W/kg

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

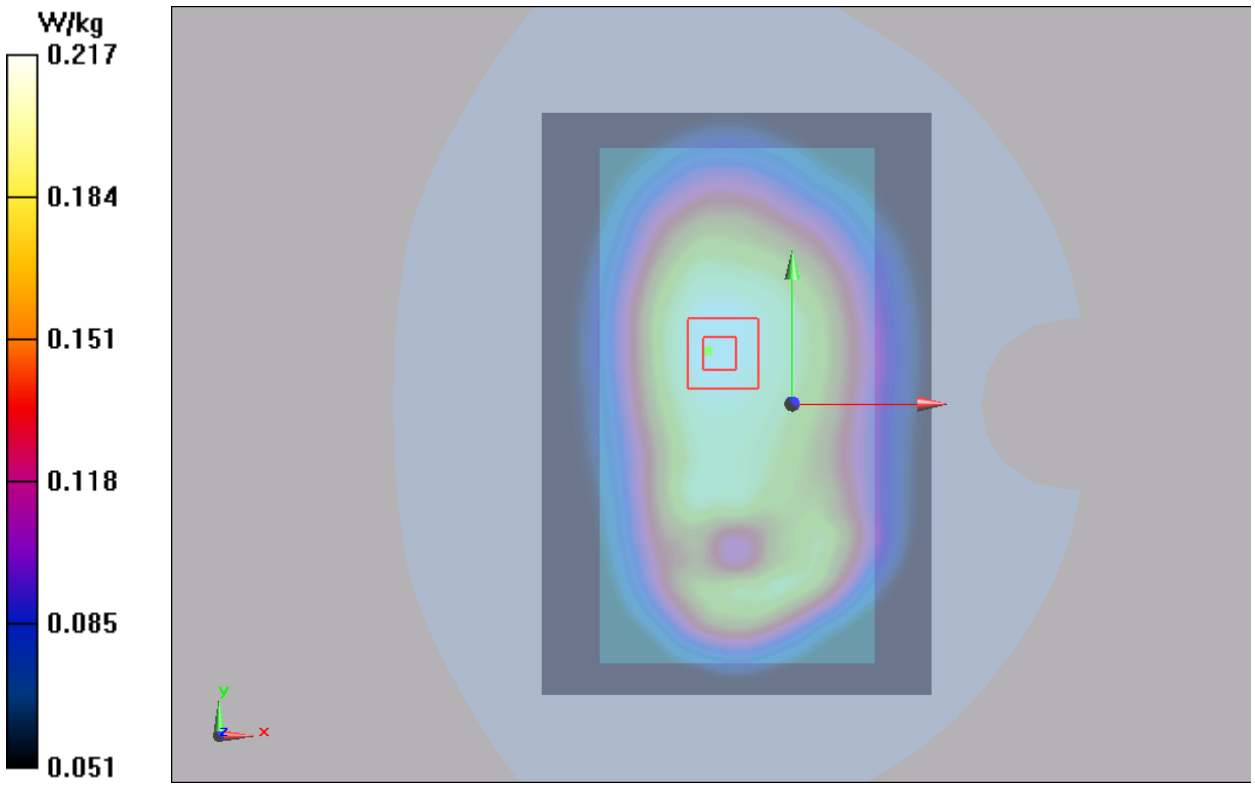


Figure 105 Body, Back Side, LTE Band 26 50%RB Channel 26775

ANNEX C3: WiFi Antenna
802.11b Left Cheek High (Battery 2, WiFi Off)

Date: 7/5/2015
Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.837 S/m; ε_r = 38.274; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃
Phantom section: Left Section
DASY5 Configuration:
Sensor-Surface: 4mm (Mechanical Surface Detection)
Probe: EX3DV4 - SN3677; ConvF(7.22, 7.22, 7.22); Calibrated: 1/30/2015;
Electronics: DAE4 Sn1291; Calibrated: 11/14/2014
Phantom: SAM1; Type: SAM; Serial: TP-1534
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 1.46 W/kg

High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.735 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 2.64 W/kg
SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.527 W/kg
Maximum value of SAR (measured) = 1.26 W/kg

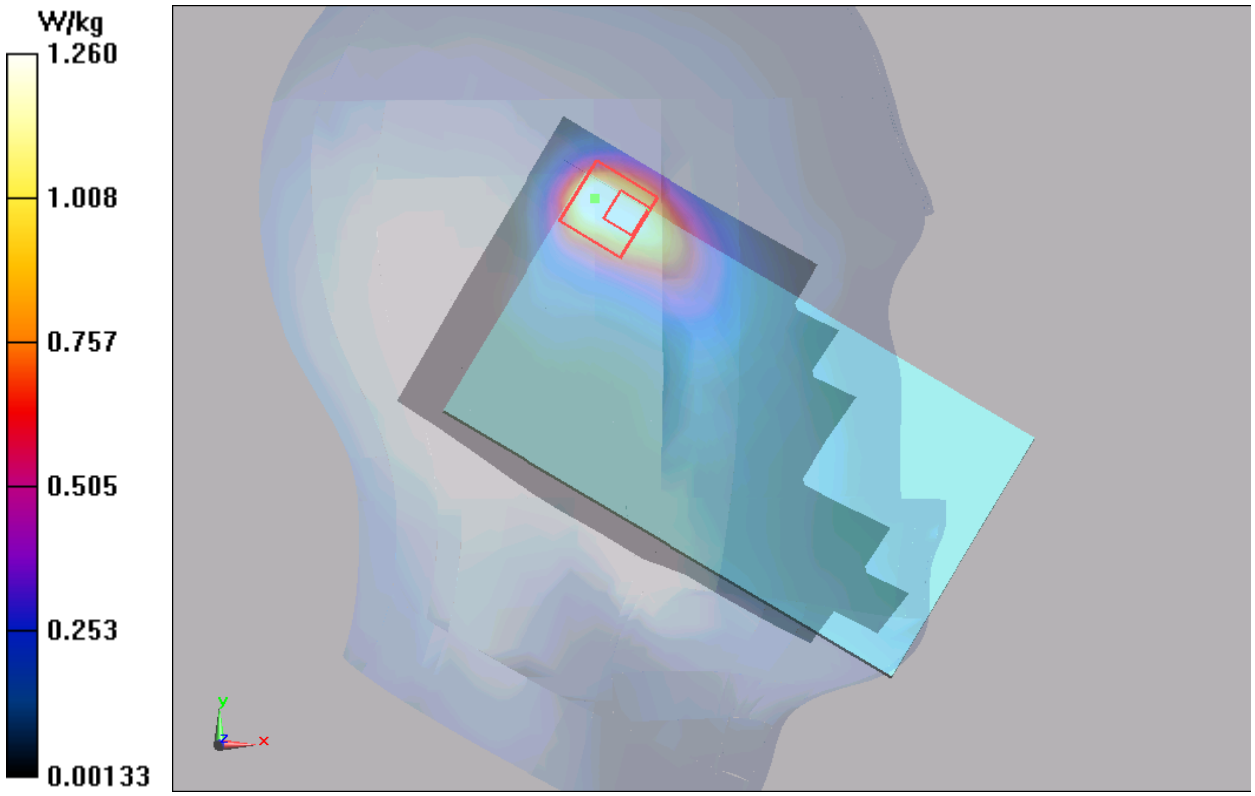


Figure 106 Left Hand Touch Cheek 802.11b Channel 11

802.11b Front Side High (Battery 1, Distance 15mm, WiFi Off)

Date: 7/11/2015

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2462 MHz; σ = 1.993 S/m; ε_r = 52.463; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.42, 7.42, 7.42); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High /Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0938 W/kg

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

Reference Value = 4.317 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.167 W/kg

SAR(1 g) = 0.096 W/kg; SAR(10 g) = 0.055 W/kg

Maximum value of SAR (measured) = 0.104 W/kg

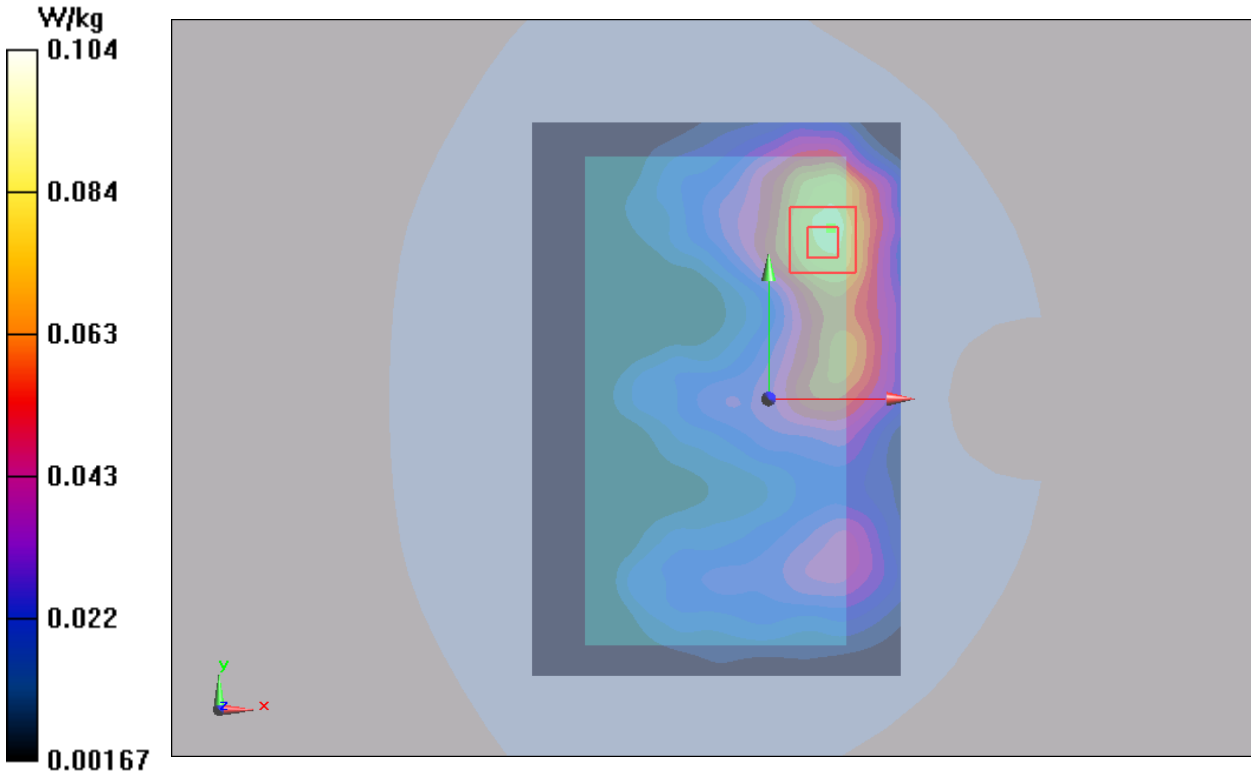


Figure 107 Body, Back Side, 802.11b Channel 11

802.11b Front Side High (Battery 2, Distance 10mm, WiFi Off)

Date: 7/11/2015

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2462 MHz; σ = 1.993 S/m; ε_r = 52.463; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.42, 7.42, 7.42); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (101x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

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

Measurement grid: dx=10mm, dy=10mm, dz=5mm

Reference Value = 2.562 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.237 W/kg; SAR(10 g) = 0.126 W/kg

Maximum value of SAR (measured) = 0.268 W/kg

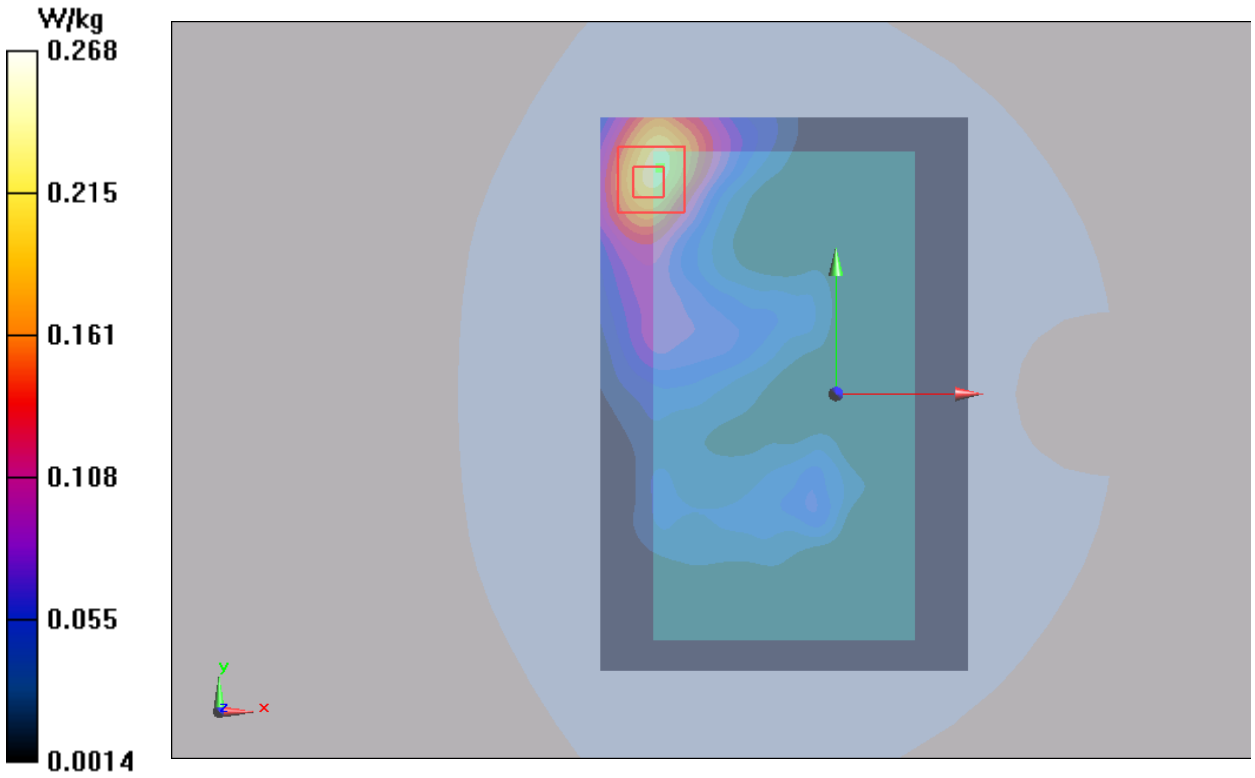


Figure 108 Body, Front Side, 802.11b Channel 11

802.11b Left Cheek High (Battery 1, WiFi On)

Date: 7/5/2015

Communication System: UID 0, 802.11b (0); Frequency: 2462 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2462 MHz; σ = 1.837 S/m; ε_r = 38.274; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃ Liquid Temperature: 21.5℃

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.22, 7.22, 7.22); Calibrated: 1/30/2015;

Electronics: DAE4 Sn1291; Calibrated: 11/14/2014

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

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

High/Area Scan (91x151x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.35 W/kg

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

Reference Value = 7.989 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 2.51 W/kg

SAR(1 g) = 1.12 W/kg; SAR(10 g) = 0.532 W/kg

Maximum value of SAR (measured) = 1.10 W/kg

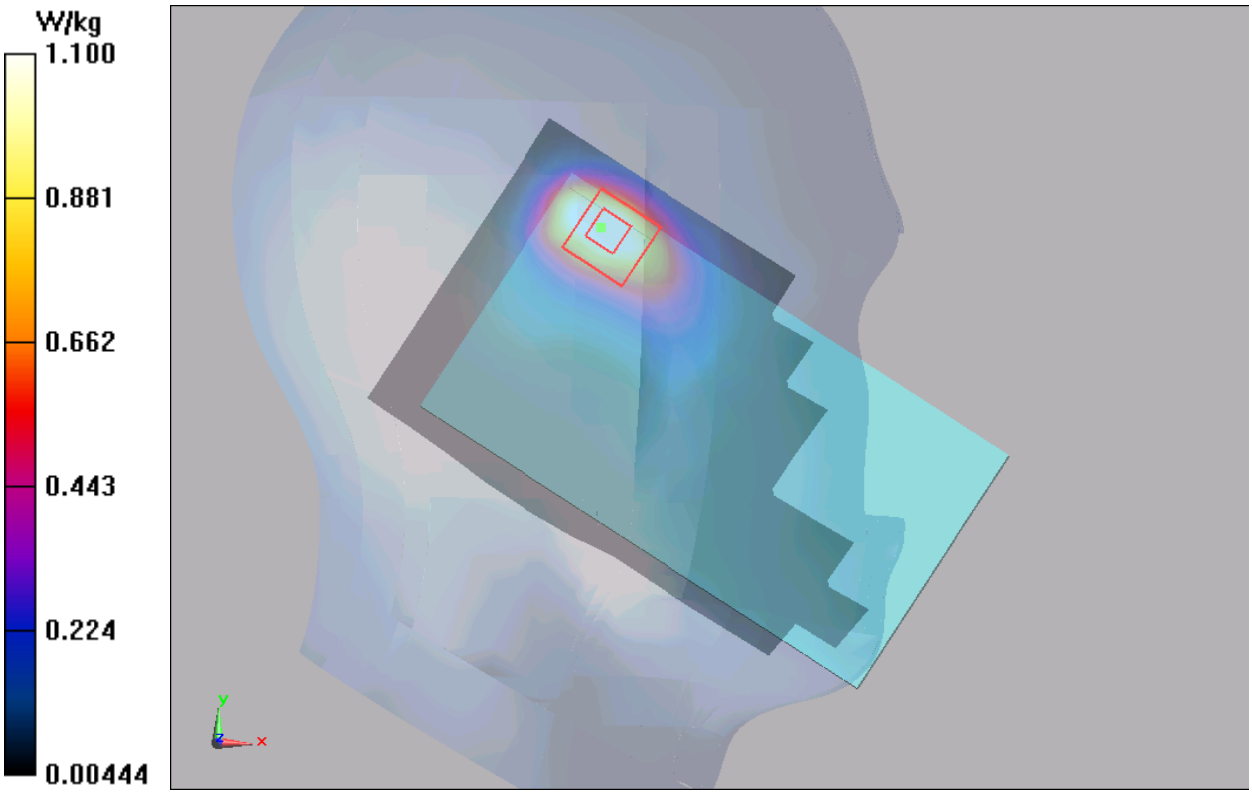


Figure 109 Left Hand Touch Cheek 802.11b Channel 11